



Partially confidential

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FROM ENGIE - ELECTRABEL SA

TO ELIA

SUBJECT Observations of ENGIE- Electrabel SA to the public consultation organized by Elia on scenario, sensitivities and data for the CRM parameter calculation for the Y-4 Auction with DP 27-28

1. Preliminary remark

ENGIE thanks Elia for the organization of a consultation on scenario, sensitivities, and data for the CRM parameter calculation for the Y-4 Auction with DP 27-28. Such a consultation is particularly important in the current context and given the unprecedented low availability of the French nuclear fleet. Belgium is a highly interconnected country and therefore can be very vulnerable to sudden policy changes or unexpected changes in the available capacity across the country.

With this note, ENGIE would like to share its observations on the documents being consulted.

2. Observations and remarks on the input data - Generation & Storage

- **Saint-Ghislain:** The value of 378 MW published on the NordPool Platform should be used in the reference scenario.

4. Observations and remarks on the sensitivities:

ENGIE strongly recommends Elia and the Belgian Authorities to integrate, in the reference scenario, at least two sensitivities:

- **Lower availability of the French nuclear availability based on historical values:** according to ENGIE, based on the past performance of the French nuclear units and recent issues encountered by the French nuclear parc, **at least 8 units should be considered unavailable on average during a winter (on top of planned maintenances announced).**

Most adequacy studies, whether national or European, rely on modelling of power plants availabilities based on transparency platforms (REMIT obligations) declarations from

operators. The French TSO (RTE) studies consider some drift, notably for the longest outages related to 10-year checks, but experience shows us that recurring “generic” issues have kept EDF from reaching the declared availability levels essentially every year in the recent past, whether due to steel defects, earthquake safety issues, pipe cracks or the impact of Covid on maintenance.

The below graph shows that these unavailabilities are assessed on the basis of published shutdown forecasts for each nuclear unit. These unit-by-unit forecasts are always optimistic, with a lot of drift and almost never a shortening (except for work delays).

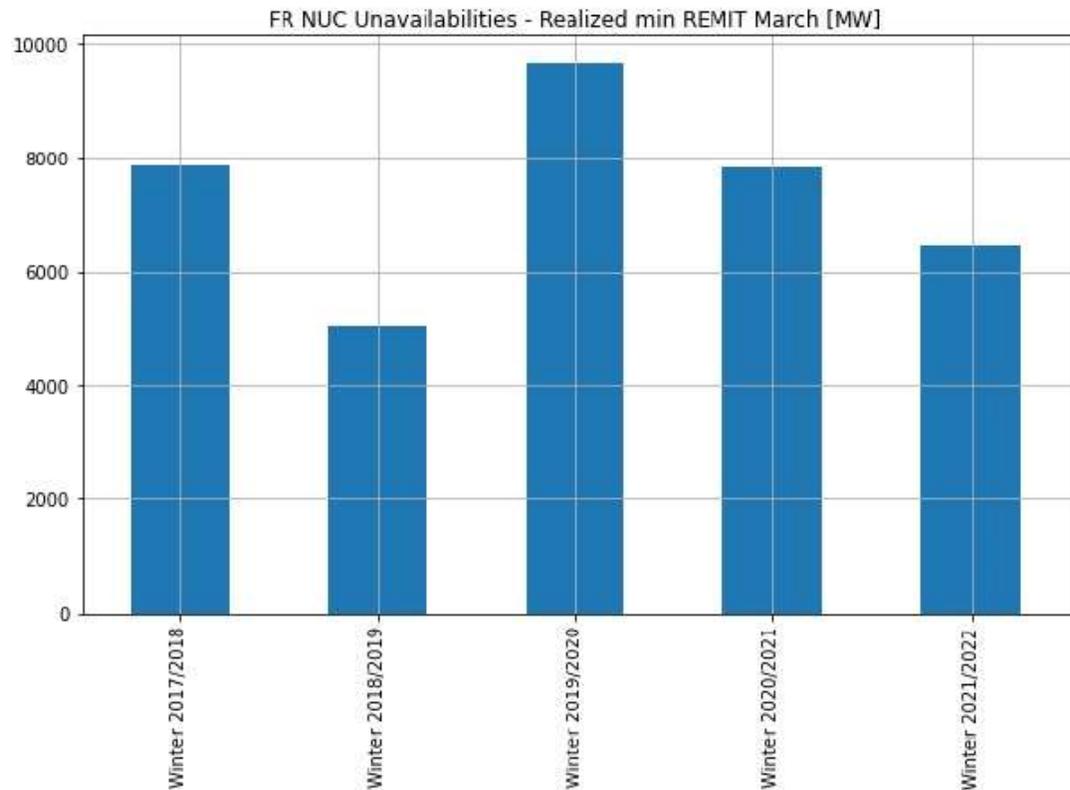


Figure 1 - Actual winter unavailabilities of the French nuclear fleet vs declared the previous March - data from RTE¹

What is shown for the past on the figure above is very likely to be repeated in the future: **the guaranteed nuclear capacity, for every delivery year of the French capacity market, has always been lower than initially forecasted by EDF, with very low numbers expected in the next few years.** EDF's reactors have historically produced more than 400 TWh per year, but the recent very low targets suggest a low availability for the coming years. In addition, we have observed, in the last months, announcements for the unavailability of plants during the same year or year to come (cf. press release 7/2/22: “EDF ajuste son estimation de production nucléaire en France pour 2022” and press release 11/02/22: “EDF ajuste son estimation de production nucléaire en France pour 2023”). Indeed, the recent issues faced by the nuclear parc in France linked to the corrosion checks on the nuclear reactors have a big impact on their future availability (at least in the short term but with no certainty for the medium term): currently there is 12 reactors stopped due to the abnormal corrosion phenomena, which affect the safety injection circuits (supposed to allow the injection of boron water to cool the reactor in case of a leak). The group EDF also said recently in the press it was "adjusting its nuclear production estimate for 2022 to 280-300 TWh from the previous 295-315 TWh announced in February 2022 (which was already a reduction from 300-330 TWh). At this stage, and pending the completion of checks and repairs, the nuclear production estimate for 2023,

¹ <https://www.services-rte.com/fr/visualisez-les-donnees-publiees-par-rte/indisponibilites-des-moyens-deproduction.html>

i.e. 300-330 TWh, is not modified² but those units could be at risk in at least both 2023-2024 and possibly beyond. Given the impact that the capacity available (MW) in our neighboring countries has on a highly interconnected country such as Belgium, this risk is certainly not to be underestimated as our country could be subject on other evolutions in neighboring countries and changing energy politics in these countries.

- **The non-achievement of the CEP rules for 2027 to reflect uncertainty on capacity calculation**

2025 is the target year for reaching the so-called CEP rule of “minRAM70%” on EU network elements. However, ENGIE considers that it is complicated to assess the compliance with this rule by 2027. Germany is currently following its action plan towards the 70% by 2025, but we observe that it goes slowly, and this is clearly not given they will succeed on time.

As explained by Elia in its consultation document, there exist several exit doors to not apply the 70% in order to consider internal network element in DA capacity calculation. Therefore, a sensitivity on the non-achievement of this CEP rule should be integrated in the reference scenario.

However, defining the level to be used across Europe is complicated. Therefore, using some differentiation amongst TSO could be a better approach than defining a general sensitivity across Europe. We suggest for instance that Elia looks at the TSOs that are today not respecting the 70% requirement and define a specific sensitivity for those ones and have a fixed RAM at 70% for those TSO that are on the good track already today (rather than a minRAM70%). Of course, these elements should be integrated in the reference scenario to reflect the risks linked to this rule.

In addition, Elia assumption on a complete transmission grid availability in the winter period is also risky according to ENGIE. A non-complete grid will increase internal flows on network elements which will put under pressure the compliance with the so-called CEP rule of minRAM 70%. This is also a reason to use a sensitivity that is more pessimistic by using RAM values lower than 70% rather than fixed RAM 70%.

6. Observations and remarks on the parameters to compute the IPC

ENGIE insists on the need that all costs supported by capacities are considered for the computation of the IPC. From the recent decision of CREG with regards to the template to be used for the derogations to the IPC, it appears that some costs would not have been fully considered by AFRY (including local taxes, electricity offtake costs, rental fees, ...). The AFRY report does not currently provide sufficiently transparency on which cost components are actually integrated in the computations and on the details of the hypothesis behind cost blocs. In this respect, ENGIE pleads for an update of the cost evaluation for the thermal units.

With regards to the revenues for the provision of balancing services, ENGIE considers that Elia should definitely include, in its estimates, a projection of the future market share of the different technologies in those markets. Historical revenues are, for those markets, not representative for future revenues.

² <https://www.reuters.com/markets/europe/edf-issues-another-warning-about-earnings-hit-nuclear-plantoutages-2022-05-19/>