

# WG Adequacy #11 - Meeting report

## Tuesday 13<sup>th</sup> October 2022

Meeting	
<b>Date</b>	13.10.2022
<b>Organiser</b>	James Matthys-Donnadieu

Participants		Attended
Arch Alexander	AFRY	<input checked="" type="checkbox"/>
Anciaux Pauline	FOD Economy	<input checked="" type="checkbox"/>
Baugnet Christopher	ENGIE	<input checked="" type="checkbox"/>
Benquey Romain	Centrica Business Solutions	<input checked="" type="checkbox"/>
Catrycke Mathilde	ENGIE Benelux	<input checked="" type="checkbox"/>
Celis Chris	ODE	<input checked="" type="checkbox"/>
Chafaqi Laïla	LUMINUS	<input checked="" type="checkbox"/>
Coppin Xavier	ENGIE	<input checked="" type="checkbox"/>
Debrigode Patricia	CREG	<input checked="" type="checkbox"/>
De Changy Maxime	Fluxys	<input checked="" type="checkbox"/>
De Waele Bart	CREG	<input checked="" type="checkbox"/>
Gerkens Benoit	CREG	<input checked="" type="checkbox"/>
Harlem Steven	LUMINUS	<input checked="" type="checkbox"/>
Herman Sofie	STORM	<input checked="" type="checkbox"/>
Kormoss Aymeric	EOLY Energy	<input checked="" type="checkbox"/>
Rkiouak Laylla	FOD Economy	<input checked="" type="checkbox"/>
Strosse Tom	ENECO	<input checked="" type="checkbox"/>
Van Bossuyt Michaël	FEBELIEC	<input checked="" type="checkbox"/>
Van de Keer Lieven	T-POWER	<input checked="" type="checkbox"/>
Van der Biest Piet	SIEMENS	<input checked="" type="checkbox"/>
Van den Bosch Sven	Fluvius	<input checked="" type="checkbox"/>
Van Vlaenderen Emiel	Flexcity	<input checked="" type="checkbox"/>
Verrydt Eric	BASF	<input checked="" type="checkbox"/>
Voorspools Kris	COGEN Vlaanderen	<input checked="" type="checkbox"/>
Wagnier Jean-François	FEBEG	<input checked="" type="checkbox"/>

Report	
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## 1. Agenda

- Welcome
- Minutes of Meeting WG Adequacy #10 (13.09.2022)
- Presentation Results Afry study
- Presentation study on the quantification of Belgian residential and tertiary future consumer flexibility
- CRM design changes
- LCT design note
- Next meetings

## 2. Minutes of Meetings

*Disclaimer: The slides used as a support of the presentation are available [online](#). The minutes of meetings only cover the discussions that took place during the Working Group.*

### **Minutes of Meeting**

No comments were received on the Minutes of Meeting of previous WG.

Kris Voorspools notes that he is interacting in the context of the WG Adequacy under the name of COGEN Vlaanderen and not 70GigaWatt Consulting. The change will be adopted in the minutes, which then are considered as approved.

### **Presentation Results Afry study**

Matthieu Mollard and Sean Daly from AFRY are presenting the study.

CREG asks a question with regards to CCGT and specifically with regards to the difference between the figures presented on slide 16 and slide 17. AFRY answers that the difference comes from excluding the electricity network charge.

CREG also asks if AFRY can elaborate on the evolution between the operating hours and fixed cost, or if AFRY has separate numbers for different components. AFRY answers that similar to the 2020 review, fixed O&M costs have been provided on a baseload (8,000h) and mid-merit (4,000h) operating assumption to illustrate the potential change in total fixed O&M through reduced need for major maintenance. AFRY also specifies that in the annexes of the study they are also considering different operating hours and different levels, on aggregate level. A detailed breakdown is only given as an example for one particular plant.

Finally, CREG asks when the Report will be published. Elia answers that it can be included as part of the Public Consultation of AdeqFlex. There will not be any modifications of AFR's report following the consultation, but Elia can choose for the most relevant scenario based on stakeholders' feedback.

SIEMENS observes that there is one steam power plant in the list, which has other O&M elements than an OCGT/CCGT.

ENGIE states that it is difficult to discuss the different figures, as it is mostly confidential, but look forward to the public consultation to be able to respond and comment on the study, especially with regards to the reduced fixed O&M in running hours.

ENGIE asks a question on the grid costs – that AFRY presents as incurred on a variable cost basis; therefore, such costs can be considered as variable and recoverable from the energy market – and asks how they are recovered from the energy market, since when they occur you are not running, neither producing nor selling electricity. AFRY agrees that part of the exercise was to clarify what is included or not in the fixed O&M calculation; and clearly stated in the updated report what are the elements not included in the fixed O&M costs calculation. ENGIE will have a look at the report.

Besides, ENGIE does not share the view on some variable costs (taxes as one example need to be paid independently of the unit is running or not). AFRY is using a standard way of categorization in order to enable to have comparable basis. LUMINUS agrees with ENGIE's comment that the goal of the study is not to give a general benchmark, but to provide specific data suitable to Belgian units (in the context of the CRM). Elia will analyze the comment as part of the public consultation.

CREG asks if it is possible to have a deeper discussion with AFRY after the report is known. Elia does not see any objection and will see if AFRY would be available to have such a discussion.

Elia thanks AFRY for the presentation and the report.

#### ***Presentation study on the quantification of Belgian residential and tertiary future consumer flexibility***

Elia introduces the presentation of the study on the quantification of Belgian residential and tertiary future consumer flexibility that is given by DELTA-EE.

#### Overview of technologies reviewed

COGEN Vlaanderen asks why also not looking at district heating in the context of flexibility. DELTA-EE agrees district heating was not considered in this study, because this study focuses on electric heating. Elia considers heat pumps that will be installed in homes, but district heating is not up to Elia knowledge based on electricity consumption today. Besides the fact that district heating can be used to provide both electricity and heat but comparing the potential against the installed capacity of heat pump in 2025 and capacity of EV, electric based district heating is marginal. Elia also adds that CHP are considered in the study (indeed some CHP are used to provide heat for district heating), hence the flexibility it brings will be considered. Elia asks the question whether district heatings are electrically based or not but notes that It should be investigated in the future for district heating that function on electricity.

CREG asks a question with regards to DELTA-EE's conclusion that the capacity accessible for flexibility amounts to less than 15% of peak load at 17:40 and asks whether this capacity accessible for flexibility can be found in a larger range of time. DELTA-EE answers they have not investigated how long the 15% can be maintained.

SIEMENS is asking what the unit of the Y axis on slide 36 is. DELTA-EE answers that it is the demand of the houses in W.

#### Focus on Electric Vehicles

T-POWER asks for which year, and for which amount of EV's is this? DELTA-EE answers that is for year 2021, for 100k EV's, considering that hybrids are considered half charging.

T-POWER also asks to what level of charging and discharging DELTA-EE is counting on, and precisely The state of charge of the battery taken into account. DELTA-EE answers that the state of charge of the battery is not modelled. The modelling of the load profile was based on charge points usage frequency and an average electricity demand for each EV. All assumptions will be in either the final report, or the Excel file of the public consultation for AdeFlex23. T-POWER asks the question again with regards to slide 47. DELTA-EE answers that the state on charge relies on an average export of 10kWh.

FEBELIEC is asking how many vehicles are taken in each category and how they will split them up in the future. DELTA-EE explains that the split is based on the number of vehicles in Belgium, a forecasted penetration of enablers (connectivity of assets, smart meters deployments, consumer engagements). These factors and methodology for the split will be explicitly detailed in the final report. FEBELIEC asks how DELTA-EE will make the difference between the levels of home charging points. The first step is to look at the type of chargers by capabilities. According to FEBELIEC looking at the capabilities now is not a good indicator since the charger can be changed in smart technologies really easily (by adding a smart box in between, not on the capabilities, but in between). Elia proposes to postpone the discussion to the public consultations when the hypothesis/assumptions will be on the table.

#### Focus on Heat Pumps

T-POWER asks whether it is correct that DELTA-EE is not considering a storage buffer for tap water. Elia confirms that a storage buffer is considered in the hot water flexibility. DELTA-EE also adds that the amount of flexibility from that source is limited because of the volume of energy needed.

Fluxys asks the type of heat pump that is considered in the study (i.e., only air-water or also air-air heat pumps). Specifically, Fluxys asks what type of flexibility is considered for air-air heat pumps. DELTA-EE answers that they have not done a separate explicit look into that category; the flexibility expected from air-to-air heat pump will be much lower for two reasons: (i) it encompasses only space heating flex (and not hot water flex), and (ii) most air-to-air heat pumps are used for cooling, only a small percentage of them as primary heating. Besides, Elia answers that the technologies considered will be listed in the study: air source, ground source, hybrid & direct electric heating.

COGEN Vlaanderen comes back on the comment that leaving district heating might not be a good idea since with centralized heat source (CHP, for instance) with buffer there are different setups and completely different potentials for flexibility. COGEN Vlaanderen thus insists that leaving out district heating is according to them not the best way to look at flexibility for residential heating. Again, Elia asks whether COGEN Vlaanderen knows how many districts heating are heat-pumps driven in Belgium today. COGEN does not know. Elia comments that if district heating is not heat pump driven, it also does not consume electricity, while the goal of the study is to look at the flexibility that can be generated by electricity consumption, in other words, how much flexibility would be available on the electricity demand in the future. Besides, if the district heating is CHP driven (which produces electricity), this is considered by Elia as a byproduct, and it is already considered in the modelling of CHP with assumptions on the amount of CHPs in the future.

CREG asks a question with regards to the flexibility delivered by heat pump, especially the blue line on graph slide 51. DELTA-EE explains that the set points for the assumptions are 17° in the morning and 21° in the afternoon and in the evening. DELTA-EE precises that it is an average of several archetypes, but the curve is representative for Belgium. An annex presents the calculation of the blue curve. Elia invites the CREG to look at it before the discussion.

Fluxys asks Elia if it is possible (soon or later) to present the park of heat pumps that will be used for the Adequacy and Flexibility study (I.e., the shares of air-water, air-air, ground-water HP, ...). Elia answers that the forecast will be available in the Excel of the public consultation for the AdFlex study.

#### Focus on residential Batteries

No questions were raised on this section.

#### Next steps

Flexibility penetration forecast & typical profiles will be available for public consultation.

FEBELIEC asks whether DELTA-EE will also model industry. Elia will also model demand response for industry but not based on this study. Then FEBELIEC asks how Elia will model demand response for industry. Elia refers to the public consultation that will be presented on WG Adequacy on October 28th.

Elia thanks DELTA-EE for the study and the presentation.

#### **CRM design changes**

##### Battery degradation

FEBELIEC requires some specifications on how the battery degradation will be set. Elia proposes not to change the rules, meaning the battery degradation is linear and chosen by the market parties for multiyear contracts. This solution will be proposed in public consultation, market parties are welcome to respond if they have comments on that.

##### Payback obligation

FEBELIEC asks how the split is done between the calibration with fixed part and variable part. Elia answers that this question will be answered to in the presentation.

FEBELIEC then asks whether it is aimed to be retroactive. Elia repeats that the goal of this presentation is not to cover the topic of retroactivity but to discuss the current design proposal. Elia ensures that the question of retroactivity will be addressed in a next Working Group when Elia has performed the necessary work to make a proposal.

FEBELIEC is making a general comment on the calibration proposal: acceptable if that means that in the future, risk exposure is diminishing and this is taken into account (i.e., prices are low because the risk exposure is lower), and not just because it is only meant to reduce pay-back obligations. FEBELIEC is in favor of it, if it is going to change candidate's business cases and influence the bid in the CRM.

Centrica Business Solutions is asking why a high number of pay-back obligations is an issue. Elia says that the goal behind the pay-back obligation is initially to capture extra profits from participating in the CRM. Besides Elia recalls that strike price is basically the tipping point between windfall and a normal infra-marginal rent. Currently, the strike price does not do the trick because it is lower than the marginal costs of many technologies. Centrica Business Solutions highlights that the issue is not the occurrence of payback and the number of hours but the fact that the strike price is below the marginal cost.

FEBELIEC says that each strike price should be different for every technology or even for each asset. This discussion was held at the beginning and would have resolved the issue. Elia answers that there is a single strike price but the number of technologies to which it applies is not really diverse, when considering the technologies that can set the strike price themselves (CMUs without a daily schedule) or are non-eligible (nuclear). CREG specifies that some wind-technologies are not eligible (because they already receive aid) but are going to be in the future. FEBELIEC specifies that cogeneration also applies.

ENGIE agrees that looking at the past years, the proposal is going in the right direction, better following the market evolution. However, in the examples, there are still cases where CCS will be higher than the payback amount. On this basis ENGIE recommends further refining the formula. Elia answers that it is a proposal and is happy to welcome any comments, with the objective to come at FR public consultation with a proposal that Elia's hope respond to common expectations.

FEBELIEC agrees that it is a new interesting solution to consider, however does not agree with the formula "Max(0;average DA price for month m)" (slide 65) because it should include a negative average DA price, even though it might be exceptional. Elia agrees with this comment and is happy to refine the formula on that point bilaterally or via the next WG.

FEBEG thanks Elia for looking into the topic and making a proposal, and highlights that the topic of retroactivity will be key.

Elia concludes by saying that the public consultation on the Functioning Rules will be launched on November 25<sup>th</sup> and then expects to conclude the discussion by then, with a forthcoming WG on November 17<sup>th</sup>.

### ***LCT design note***

Elia will present the last changes in design on the LCT and particularly on the eligibility criteria, with the objective of launching the public consultation on the LCT design note on October 14<sup>th</sup>.

### Timeline

LUMINUS highlights there are still waiting for insights on the CO2 emission. FOD answers that this parameter is still under discussion with the Cabinet. LUMINUS then remarks that it will not be the subject of the public consultation. FOD responses that given the timeline of the public consultation it seems difficult to have a proposal by October 14<sup>th</sup>, however, suggest that it might be integrated somehow in a public consultation. The WG agrees that there is a need to have a view on that upfront.

LUMINUS also asks the status of the process with the EU notification. Elia also explains that the process with EC is expected with DGCOM to start by the end of the year.

#### Eligibility criteria

LUMINUS remarks that the mechanism is limited to batteries and demand response. Besides LUMINUS is challenging the definition of newly built batteries with FR current rules, understanding that projects that are currently building a battery could participate in LCT. Elia agrees that the check is whether the unit is “existing” at Auction or not.

FEBELIEC asks questions about the logic that current sites or current units that are ready to do the necessary investment to be more flexible, cannot be eligible according to the rules. Elia agrees that this discussion was also made internally; unfortunately, Elia has no way to check.

T-POWER asks Elia to provide concrete examples on this case to understand what the added value in terms of Adequacy if you allow demand responses to determine themselves the designated market price for which they will leave the market. Elia will contact T-POWER off meeting.

FEBELIEC says that if there is really an adequacy issue, it is of Elia moral obligations to go to the government and say that the mandate given to Elia should be enlarged to include more volume than new capacities.

Centrica Business Solutions suggests not having an automatic check but a case-by-case check, allowing us to include MW that are present physically but are not counted at the moment for mostly administrative reasons. Elia asks Centrica Business Solutions to come up with really concrete propositions and examples. Centrica Business Solutions first proposes at the starting point to give the capacity holder burden to come with the justification (administrative burden on capacity holder) and validation before the Auction (not as was the case for IPC derogations). Elia takes the point.

Elia will come back to the different stakeholders to build use-cases and to consolidate general rules and discuss whether it can be improved with qualitative content.

### **3. Next Meetings**

The next meetings are currently foreseen on:

- Friday 28th October 2022 **pm**
- Thursday 17th November 2022 **pm**
- Friday 16th December 2022 **pm**
- NEW Friday 27th January 2023 **am**
- NEW Friday 17th February 2023 **am**