

# WG Adequacy #17

23 March 2023

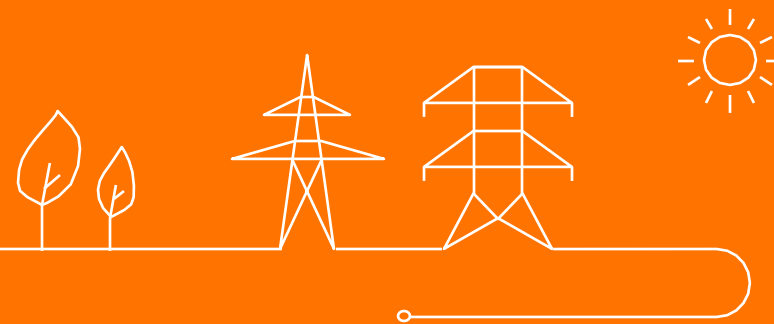


# Agenda

- Welcome
- Minutes of Meetings
- Capacity Contract : Feedback Public Consultation
- LCT
  - Functioning Rules : Feedback Public Consultation
  - Deep dive: LCT versus CRM
  - Update on LCT qualitative assessment
- CRM Functioning Rules philosophy :
  - Opt-OUT Classification Rules
- External studies
- CO2 Approach [FOD]
- AOB & Next Meetings



# Minutes of meetings

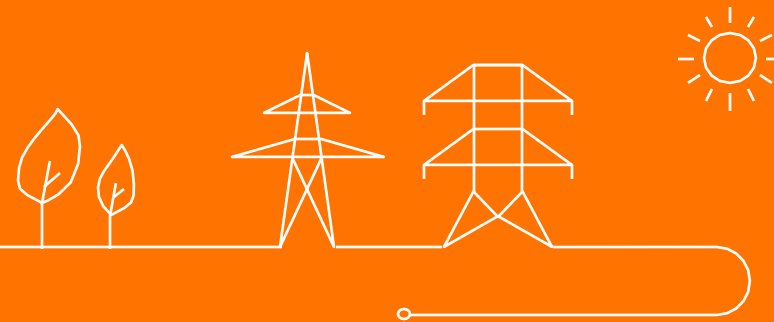


## MoM WG Adequacy#15 27.01.2023 & #16 17.02.2023

1 comment was received (clarification) on the MoM from 17/02.



# Capacity Contract : Feedback Public Consultation



## Elia received feedback from two parties during the public consultation on the contract

- In total 2 parties (non-confidential) have provided feedback on the public consultation for the LCT and CRM capacity contract:
  - FEBEG
  - Febeliec
- The remainder of this presentation presents **a high-level overview** of the main feedback received during the public consultation.
- It represents **a non-exhaustive overview** as all the **detailed comments will be covered in the public consultation report**, which will be published by 3<sup>rd</sup> of April 2023.



## Elia received feedback from two parties during the public consultation on the contract

- Febeliec does not provide any comment on specific articles of the capacity contracts, although this should not be interpreted as an agreement with the content of the contracts. Febeliec mainly repeats its concerns on the lack of a legal and regulatory framework for the LCT.
- FEBEG urges Elia to strive towards a stable capacity contract and to foresee a sufficient transition period in case of proposed changes, given the impact on other contracts that were negotiated (e.g. tolling agreements, service agreements, etc.)
  - Elia understands FEBEG's concern and indeed strives towards a stable capacity contract. The proposed changes in the operational process relate to some process improvements that were identified during the internal implementation phase of the capacity contract. However, now that these processes are becoming more mature, Elia expects the capacity contract and related processes to become more stable.
- FEBEG emphasizes that the CRM Functioning Rules have a significant impact on the costs, risk and liabilities of a capacity provider and concludes that no modification should apply retroactively without prior agreement with the concerned stakeholders.
  - Elia understands FEBEG's concern. The retroactive application of a modification to the CRM Functioning Rules is settled via Annex G of the Functioning Rules and article 11 of the Capacity Contract and is always subject to approval of the regulator.



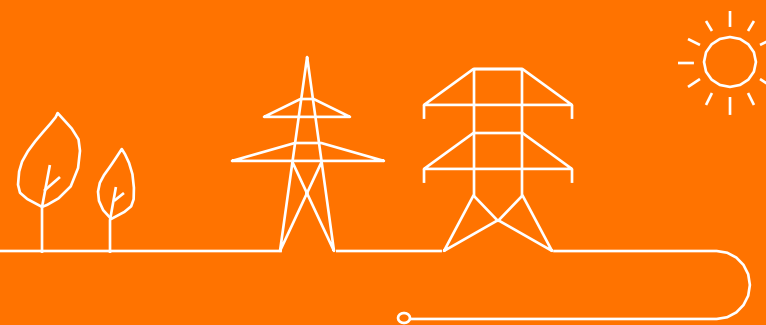
## Elia received feedback from two parties during the public consultation on the contract

- FEBEG asks whether two ex-ante invoices can be sent, for example one ten working days before the end of the month and a second one in case a new transaction is made.
  - In order to avoid an overly complex process, only 1 ex-ante invoice can be sent each month. Transactions that are made at a later stage can be covered via the monthly statement.
- FEBEG request whether the modification of Annex A to present the contracted capacity (MW) per Delivery Year relates to the integration of the technology degradation parameter in the Functioning Rules V3.
  - Elia confirms that this is indeed the case.





# LCT Functioning Rules : Feedback Public Consultation



## Elia received feedback from four parties during the public consultation on the contract

- In total 4 parties (non-confidential) have provided feedback on the public consultation for the LCT Functioning Rules:
  - FEBEG
  - Febeliec
  - Fluvius
  - Centrica Business Solutions
- The remainder of this presentation presents **a high-level overview** of the main feedback received during the public consultation. Focus of the presentation is on the LCT-specific topics and on the **proposed changes to the rules** following the public consultation.
- Many comments were similar to those received during the public consultation on the LCT design note.
- It represents **a non-exhaustive overview** as all the **detailed comments were covered in the public consultation report** (published on 7 March 2023).



## Some feedback from the public consultation relates to the regulatory framework of the LCT

- In line with the feedback received on the LCT design note, Elia has received **several comments on the general LCT framework set by the Belgian Authorities**. Elia takes note of these comments, but continues the design and implementation works within the current framework.
- **FEBEG** reiterates its comment on the short lead time of 12 months for the development of new batteries' projects.
  - Elia refers to the proposed changes to the regulatory framework (cf. public consultation on update Royal Decree Investment Thresholds) based on which capex spent 1 year before the auction would be eligible for a multi-year contract under the LCT. This change should facilitate the participation of batteries to the LCT and improve competition in the auction.



## Feedback during the public consultation led to some changes to the prequalification process

- **Fluvius** has formulated several useful suggestions to improve the interactions with the DSOs during the LCT process.
  - Elia has updated the rules accordingly (e.g. an additional check on the ‘in service’ status is added during the pre-delivery process for DSO-connected assets).
- **CBS** asks Elia to further clarify its position regarding the risk of double counting of implicit demand response.
  - Elia points out that the risk of double counting has been one of the main guiding principles in reworking the eligibility rules for DSM. This is explicitly addressed by defining and calculating an amount of “Existing DSM” that is excluded from capacity remuneration but is considered for the availability obligation if the capacity decides to offer additional DSM.
- **Febeliec** notices that the FPS Economy will no longer make a decision but only give an advice concerning compliance of a CMU with the CO2 emission cap.
  - Elia clarifies that the change actually concerns a translation inconsistency and that FPS Economy has always only provided an opinion on the matter. Elia does confirm that it always follows the advice, the absence of it results in a rejection of the PQ file.



## Feedback during the public consultation led to some changes to the prequalification process

- **Febeliec** remains worried about the lacking definition of ‘new’ concerning all asset classes and ‘low carbon’. Febeliec also insists to continue to remove remaining barriers for participation for additional DSR and refers e.g. to the periods taking into account for the baselines and the volume determination.
  - Elia takes note of Febeliec’s comment and wants to point out that the Functioning Rules provide a definitive definition of both ‘new’ (cf. ‘in service’ concept for generation/storage and ‘existing DSM’ for demand response) and ‘low carbon’ (cf. CO2 threshold that will apply).
  - Also, Elia takes into account specific circumstances such as closure, strike days, outages,... by allowing market parties to indicate these as “non-representative” for baselining measurement.
- **FEBEG** points out that the “in service” check was only mentioned at the moment of Prequalification File submission deadline, whereas it should also be checked at auction closing gate.
  - Elia thanks FEBEG for this comment and has updated the functioning rules accordingly.
- **Fluvius** asks confirmation that the ‘Existing DSM’ will be requested by Elia to the DSO.
  - The calculation of Existing DSM happens in the framework of Prequalification and follows indeed the same modalities as the NRP determination. It is indeed the DSO who will calculate this and provide Elia with the information



## Feedback during the public consultation led to some changes to the auction process

- **FEBEG** regrets that it is not possible to submit exclusive bids for long term contracts in the LCT and the Y-4 auctions organized in the same year.
  - Elia thanks FEBEG for this suggestion and has adapted the Functioning Rules to allow CRM Candidates to make mutually exclusive bids for multi-year contracts for the same CMU in multiple auctions that are organized in the same year.
- **FEBEG** suggests that Elia includes a more explicit end-date for the volume correction related to the new derated capacity 'put in service' between the publication of the grid operator report and the auction opening gate.
  - Elia agrees with the proposal and has updated the rules accordingly.



## Feedback during the public consultation led to some changes to the pre-delivery process

- **FEBEG** has requested Elia to clarify the pieces that are to be communicated in order to prove that a capacity has reached the permitting milestone.
  - The public consultation report presents a detailed overview of the cumulative proofs to be provided to Elia.
- **Fluvius** notes that the DSO can notify a potential delay to the candidate, but cannot describe the consequences for its contract.
  - Elia understands Fluvius' concerns and has adapted the functioning rules accordingly.
- **Fluvius** requests clarification on the period for which the “Existing DSM” should be calculated during the pre-delivery control.
  - Elia confirms that the amount of Existing DSM only needs to be calculated once during the Prequalification Process. The volume that is determined remains unchanged throughout the Pre-delivery Period and the Delivery Period.



## Feedback was also received on the secondary market and XB participation

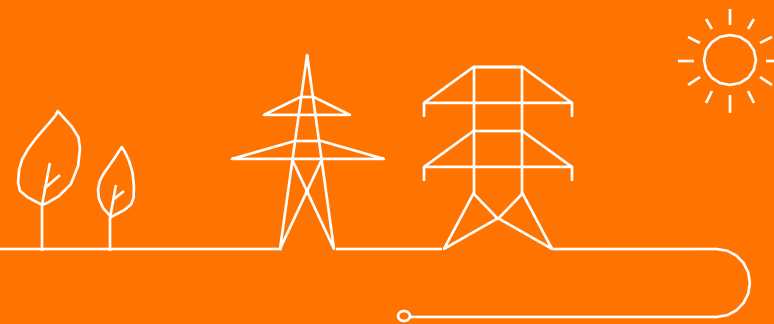
- **FEBELIEC** is concerned on how the LCT tender and CRM will be seamlessly integrated to avoid perverse effects in the secondary market. It is also unclear to Febeliec which will be the impact of existing DSR on the volumes that can participate in the secondary market as well as for participation in the CRM.
  - Elia refers to the next section (“deep dive LCT versus CRM”) for a more detailed overview of the interaction between the LCT and CRM, as well as the impact of Existing DSM on the volumes that can be offered in the Secondary Market and the Auctions.
- **FEBEG** mentions that implicit XB participation in the CRM can never become a rule and can only be an exception for the LCT (cf. organization of ad hoc targeted auction at short notice).
  - Elia points out that this implicit XB participation is indeed exceptional given the fact that only the gap is contracted, exclusively focused on new capacities. This gap determination already accounts for implicit cross-border capacity. Moreover, it is impossible to set up the required cross-border processes in such short notice.





# Deep dive LCT versus CRM

Evolution of the de-rating factor



## In the following example, the interaction between the LCT contracted capacities and the CRM is illustrated

- The example concerns a **DSM Delivery Point**, for which a **volume of ‘Existing DSM’** was determined during the Prequalification Process for the LCT.
- The main difference between the LCT and the CRM is that the **Existing DSM is set at 0 MW during the CRM Delivery Periods.**
  - **As a result, the existing DSM can be offered in the Auction or on the Secondary Market for the CRM Delivery Periods, reflected in the calculation of (Secondary Market) Remaining Eligible Volume.**
- The **capacities contracted under the LCT** (multi-year contract of 3 years in the example) are taken into account in the CRM via the parameter ‘total contracted capacities’.
  - **As a result, the volumes already contracted under the LCT are deducted from the volumes that can be offered in the Auction or on the Secondary Market for the CRM Delivery Periods.**



## In the following example, the interaction between the LCT contracted capacities and the CRM is illustrated

	LCT Auction (Delivery Period '24 – '25)	Y-1 CRM Auction (Delivery Period '25 – '26)
Nominal Reference Power (NRP)	20 MW	18 MW
Existing DSM	<b>8 MW</b>	<b>0 MW</b>
Reference Power (RP)	NRP – <b>Existing DSM</b> = 20 MW – 8 MW = 12 MW	NRP – Opt-out Volume = 18 MW – 0 MW = 18 MW
Last published DRF	30%	50%
Eligible Volume (EV) (RP * DRF)	12 MW * 30% = 3,6 MW	18 MW * 50% = 9 MW
Remaining EV <i>EV – Total Contracted Capacity</i> <i>x (Last published DRF)/(DRF(CMU,t))</i>	N/A	9 MW - 2,4 MW x $\frac{50\%}{30\%}$ = 5 MW
Contracted Capacity	2,4 MW (for 3 years)	2,4 MW + 1,2 MW (for 1 year) = 3,6 MW
Derating Factor (CMU,t) (NRP weighted average over all Transactions)	30%	$\frac{\left(\frac{2,4 \text{ MW}}{30\%} \times 30\% + \frac{1,2 \text{ MW}}{50\%} \times 50\%\right)}{\frac{2,4 \text{ MW}}{30\%} + \frac{1,2 \text{ MW}}{50\%}} = 34,6\%$

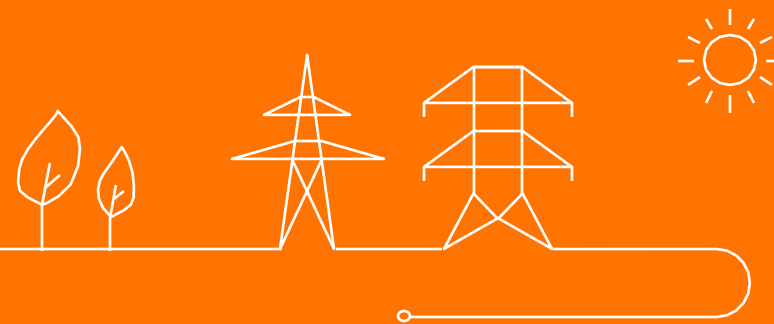
- The Existing DSM is set a 0 MW during the CRM Delivery Period  
 → This volume can be offered in the Y-1 CRM Auction as reflected in the calculation of the Reference Power & Remaining EV.
- The Derating Factor evolution is taken into account in the same way as in the CRM (for energy-constrained CMUs this implies the use of a NRP weighed average derating factor over all Transactions, including the LCT).

## In the following example, the interaction between the LCT contracted capacities and the CRM is illustrated

	LCT Auction (Delivery Period '24 – '25)	Y-1 CRM Auction (Delivery Period '25 – '26)
Pre-delivery Obligation (CMU,t)	$\frac{\text{Total Contracted Capacity (CMU, '24 – '25)}}{\text{Derating Factor (CMU, t)}} + \text{Existing DSM}$ $= \frac{2,4}{0,3} \text{ MW} + 8 \text{ MW} = 16 \text{ MW}$	$\frac{\text{Total Contracted Capacity (CMU, '25 – '26)}}{\text{Derating Factor (CMU, t)}} = \frac{3,6}{0,346} \text{ MW}$ $= 10,4 \text{ MW}$
Obligated Capacity (CMU,t)* <small>*simplified formula, no SM transactions</small>	$\frac{\text{Total Contracted Capacity (CMU, t)}}{\text{Derating Factor (CMU, t)}} + \text{Existing DSM}$ $= \frac{2,4}{0,3} \text{ MW} + 8 \text{ MW} = 16 \text{ MW}$	$\frac{\text{Total Contracted Capacity (CMU, t)}}{\text{Derating Factor (CMU, t)}} = \frac{3,6}{0,346} \text{ MW} = 10,4 \text{ MW}$
Secondary Market Remaining EV (SMREV) SLA hours, ex-ante*  <small>* Simplified formula</small>	$\left( \text{Max Remaining Capacity} - \frac{\text{Total Contracted Capacity}}{\text{Derating Factor (CMU, t)}} - \text{Existing DSM} \right) * \text{last published DRF}$ $= \left( 20 \text{ MW} - \frac{2,4}{0,3} \text{ MW} - 8 \text{ MW} \right) \times 0,3 = 1,2 \text{ MW}$	$\left( \text{Max Remaining Capacity} - \frac{\text{Total Contracted Capacity}}{\text{Derating Factor (CMU, t)}} \right) * \text{last published DRF} = \left( 18 \text{ MW} - \frac{3,6}{0,346} \text{ MW} \right) \times 0,5 = 3,8 \text{ MW}$

- During the LCT Delivery Period, the Existing DSM increases the Pre-delivery Obligation and Obligated Capacity, but as of the CRM Delivery Period, the Existing DSM does not affect these obligations anymore.
- For transactions related to the CRM Delivery Period, the existing DSM can be offered on the Secondary Market (not deducted from the SMREV anymore).
- During the CRM Delivery Period, the Total Contracted Capacity includes the capacities contracted under the LCT (for the multi-year contracts).

# Update on LCT qualitative assessment



# Qualitative Assessment Update

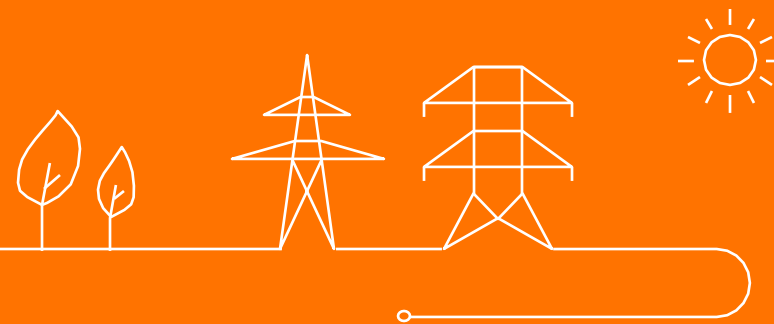
*Upon request by Market Parties, Elia investigated the potential for a Qualitative Assessment to support the Quantitative Assessment of the Existing DSM.*

Qualitative Assessment explored in cooperation with **National Grid ESO** (ITE program –cfr. ), **2 neutral third parties were approached**. Both these parties indicated could perform such an assessment, but:

- **Low cost-benefit**  
Cost of such an analysis could prove to be prohibitive, especially for difficult cases
    1. Potential **lack of information/data** at certain Market Parties, requiring additional metering and monitoring
    2. Multiple days will be required on-site at the Market Parties for in-depth knowledge on processes
    3. Data verification required...while not being certain of being selected in the Auction.
  - **Timing of accreditation**  
Difficult to get a third party “officially” certified, long and arduous (months +) process (through Belac)
  - **Need for a detailed framework to perform the assessment**  
Impossible to develop such a framework under the current timing of the functioning rules proces
- **Elia proposes not to pursue this route** due to the above difficulties and potential for uncertainty.
- The indication of “**non-representative**” days in the **Quantitative Analysis** should provide enough possibilities to determine the actual “Existing DSM” .

# CRM Functioning Rules philosophy

## Opt-OUT Classification Rules



## Feedback received during the public consultation on the CRM Functioning Rules on the opt-out classification rules (own underlining)

- **FEBEG:** “... prequalified demand response capacities that are opted out are considered as ‘opt-out/IN’, i.e. contributing to security of supply. Article 4 bis of the Electricity Law obliges operators of generation facilities to announce a temporary or definitive closure or capacity reduction. Such procedure doesn’t exist for storage or demand response. As a result, storage or demand response capacities that have prequalified and that are opted out, could already have –partially –left the market just after the prequalification. These capacities cannot be counted upon for security of supply and lead to an underestimation of capacity needs jeopardizing security of supply of the country. If a CMU had no obligation to prequalify (no production facility) but did prequalify and at the end makes a full opt-out, it should be considered as opt-out/OUT.”
- **Zandvliet Power:** “Finally, Zandvliet Power would like to raise a general concern about the opt-out volumes. We have noticed, in the last two auctions, that significant opt-out volumes were added into the dummy bid, while there is no guarantee that these volumes will effectively be contributing to the security of supply. Therefore, Zandvliet Power encourages Elia and the authorities to only consider volumes for which there is enough confidence they will be able to deliver the counted MW. This is also necessary to ensure a level playing field for technologies that are more inclined to participate to the T-4 auction, given the important volume reserved for the T-1 auction.”



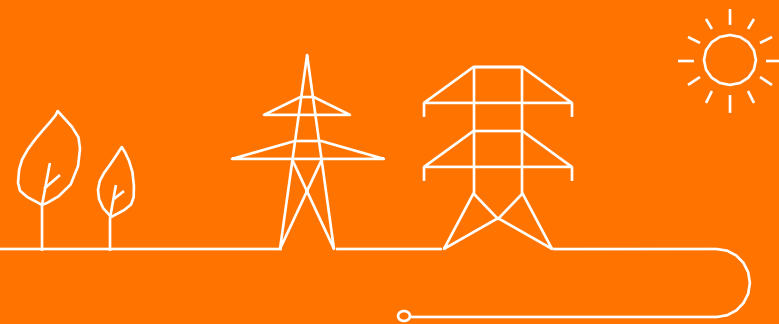


## Elia proposes to amend the Functioning Rules as follows

- Rule added to the CRM Functioning Rules submitted on 1/2 to the CREG, in section 5.4.2.2 *Classification of opt-out volumes*:
  - *“An Opt-out Volume related to a [Y-4/Y-1] Auction is classified as ‘OUT’ in case the Opt-out Notification submitted by the CRM Actor indicates that:  
...  
- the volume relates to a CMU that is associated to an SLA category, to the extent the capacities part of the CMU do not have an obligation to submit a Prequalification File as described in article 7undecies, §, 8 al. 2 of the Electricity Act and complemented by the description in § 100, second alinea”*
- What does this mean?
  - To the extent the capacities of a CMU have **no obligation to prequalify**
    - In case of a full opt-out, pro rata the capacities for which there is no obligation to prequalify
    - In case of a partial opt-out, for the opt-out volume but only if all capacities in the CMU have no obligation to prequalify
  - If the CMU does an **opt-out**
    - In the same way as when the CMU would be archived or not prequalified at all
  - This volume will be considered as **OUT**



# External Studies



## Cost of Capacity study

- Following multiple comments from market parties, Elia is launching a Request for Proposal in collaboration with the CREG to update the 2019 Fichtner “Cost of Capacity” study
- The goal of the study is to:
  1. Update the values that are used for the Fixed and Variable O&M
  2. Clarify explicitly which cost components are considered
- The Request for Proposal is currently under review by the CREG and will be published in the upcoming weeks



## Net balancing study

- Following a repeated feedback from market parties, Elia agrees with the need to re-investigate and improve the estimation process of the net balancing revenues used a.o. for calibration purposes.
- Elia is still scoping such exercise and will come back towards the WG Adequacy with a proposed view on the way forward.

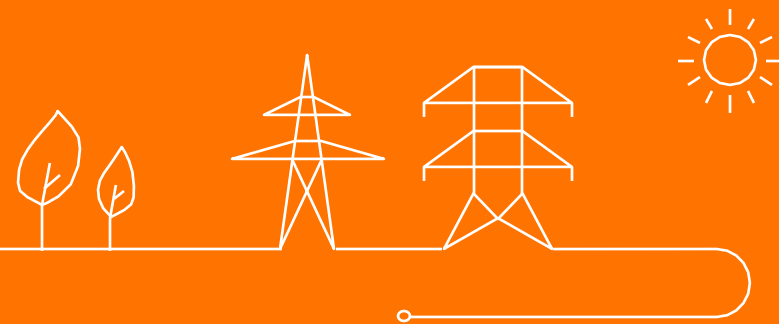


## Update of the price thresholds used in the E-cube study on market response

- Following feedback from market parties and as discussed during the WG Adequacy last year, Elia has initiated discussions with E-cube on the definition of the price thresholds (150€/MWh and 500€/MWh) used to define the volume of market response observed in the DA market.
- Elia proposes to outline an evolution to the methodology during the WG of 14/04



# CO2 approach



# CO<sub>2</sub>/CRM

## 23/03/2023



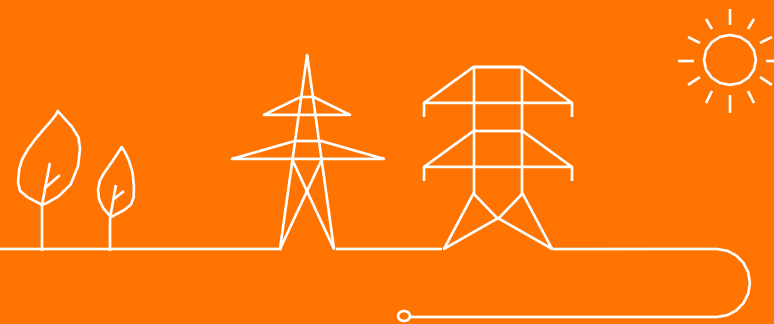
# CO<sub>2</sub>/CRM: 2023-2028

1. One annual emission threshold of 306 kgCO<sub>2</sub>/kWe/year **linked** to a maximum specific emission threshold of 600 gCO<sub>2</sub>/kWh;
2. Or only one specific emission threshold of 550 gCO<sub>2</sub>/kWh





# AOB & Next meetings



# Sessions for Stakeholders

## General Info session

### What can you expect?

Get an introduction to the CRM and LCT mechanisms as well as more detailed and concrete understanding of some specific topics

### Who should attend?

Market parties who are interested in participation in the CRM and/or LCT, but are not familiar with the basic modalities yet;

### When?

Two identical sessions\* are organized @Elia Empereur office, on :

- 31/03/2023 from 9.00 to 12.00, and
- 07/04/2023 from 9.00 to 12.00.

## Specific Info session

### What can you expect?

Share with Elia the topics that still require further clarification.

### Who should attend?

Market parties who are considering participation to the CRM and/or LCT, who want to assess the implications of participation more thoroughly.

### When?

Two identical sessions\* are organized @Elia Empereur office, on :

- 18/04/2023 from 9.00 to 16.00 (split by a lunch break), and
- 24/04/2023 from 9.00 to 16.00 (split by a lunch break).

## Operation & Tool Info

### Session

### Goal of the Session

*Present the operational processes and the tools developed for these processes*

### What can you expect?

*Participating to these sessions will help you to be up-to-speed and ready to operate the processes that will be presented. More specifically, as an example, the following themes will be presented:*

- *Prequalification (PQ):*
- *Secondary Market (SM):*
- *Pre-Delivery Monitoring (PDM):*
- *Financial Security (FS):*

### Who should attend?

*Expected profile of the participants: Operation managers, users or representatives of users of the concerned processes.*

### When?

**On 14/04/2023 from 13.00 to 17.00 @Elia Empereur office.**

## UX Design Av. Mon.

### Goal of the session

The goal of the session is to present you our draft interface design and our ideas and get your feedback.

### What can you expect?

Participating to this session will be a good opportunity for you to communicate your eventual specific requirements/needs and to give your feedback on our interface prototypes.

### Who should attend?

Expected profile of the participants: future users or representatives of users of the Availability Monitoring & Payback tool of Elia.

### When?

**On 23/03/2023 from 13.00 to 16.00 @Elia Empereur office.**

## Foreseen timeslots for next meetings

- Friday 14th April 2023 am
- Tuesday 23th May 2023 am
- Friday 16th June 2023 am



**Thank you !**

