# Capacity Remuneration Mechanism

Cogen Vlaanderen

02/05/2024 - Leuven

# Disclaimer

This document constitutes a commercial presentation for the Belgian Capacity Remuneration Mechanism (CRM) and is to be considered as an educational document facilitating understanding of all other CRM documents that together form the official legal and operational framework. As an introduction to the CRM, the commercial presentation sets out the wide range of principles governing the mechanism as a whole, focusing on the outlook for the operational rollout for the CRM 2024 and further, based on the current regulatory framework and purposely simplifying some items to facilitate understanding. Elia refers any readers wishing to gain a complete understanding to all relevant legal and explanatory references:

• The Law and its implementing Royal Decrees

▶ https://economie.fgov.be/nl/themas/energie/bevoorradingszekerheid/capaciteitsremuneratiemechanis

• The Functioning Rules, as approved by the Royal Decree of 30th of August 2023

▶ https://www.ejustice.just.fgov.be/mopdf/2023/09/15_1.pdf#Page36

• The Capacity Contract, as approved by the CREG on 31st of August 2023

▶ https://www.elia.be/-/media/project/elia/elia-site/electricity-market-and-system/adequacy/crm/2023/20230929_crm-capacity-contract-approved-by-creg-on-31082023_en.pdf

This commercial presentation is based on the current understanding and state of play, which may evolve as certain regulatory (Functioning Rules, Capacity Contract) and legal (Royal Decree, Law) documents still need to be formally approved and/or adopted or might evolve over time. This document has no legal value and if it is in any way inconsistent with existing legal or regulatory documents, then the latter shall prevail. The main objective of this document is to highlight the customer's obligations and opportunities within the Capacity Remuneration Mechanism.

All illustrative cases are fictive and are meant as relatable examples. Any similarities with real market parties are coincidental and unintended.

# Disclaimer

This presentation represents the current design of the Belgian Capacity Remuneration Mechanism. At this time several changes are being introduced to the regulatory framework (Electricity Law, Royal Decrees governing the CRM and where relevant EC notification). At the time of this presentation these changes have not entered into force, but are expected to do so in the coming months. Amongst others, these are:

- The introduction of the Y-2 auction in 2025 for delivery 2027-2028.
- The introduction of multi-year contracts for existing capacity.
- The exemption of the payback obligation for DSM

Where relevant, this presentation already includes these evolutions.

This presentation has been prepared targeting Belgian Market Actors and does not dive into the specificities for the Cross-Border participation to the Belgian CRM. A dedicated session is planned for foreign Market Actors to elaborate on the Cross-Border specificities.

# Today's CRM Session

## Part 1:

## Context

## What is the CRM?

## Who can / who must participate?

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## Part 2:

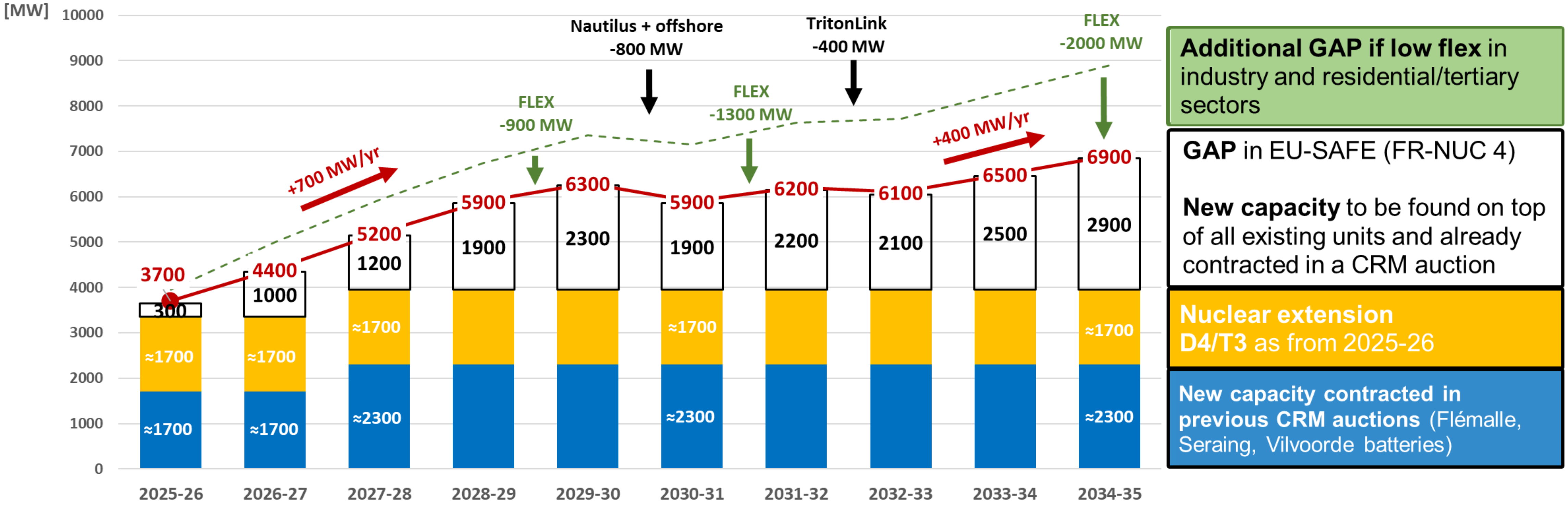
## Opportunities? Getting to a contract:

- Types of Contracts
- Eligibility & Participation Assessment
- Prequalification
- Financial Security Obligation
- Auction
- Contract

# Context

The future of the Belgian energy landscape.
Why was the CRM introduced?
When was the CRM introduced & where are we today?
How can I get involved in the further development of the CRM?

# Due to predicted higher energy offtake, renewables objectives and lower amounts of steerable capacity, Belgian authorities introduced the CRM with a view to maintaining the required level of security of supply for Belgium.




*Based on the EU-SAFE scenario from the Adequacy & Flexibility study 2024-34 published in June 2023 complemented with the Flex LTO (keeping D4/T3 during witner 2025-26) and the results of the 3rd Y-4 auction for 2027-28. All other thing equal.*

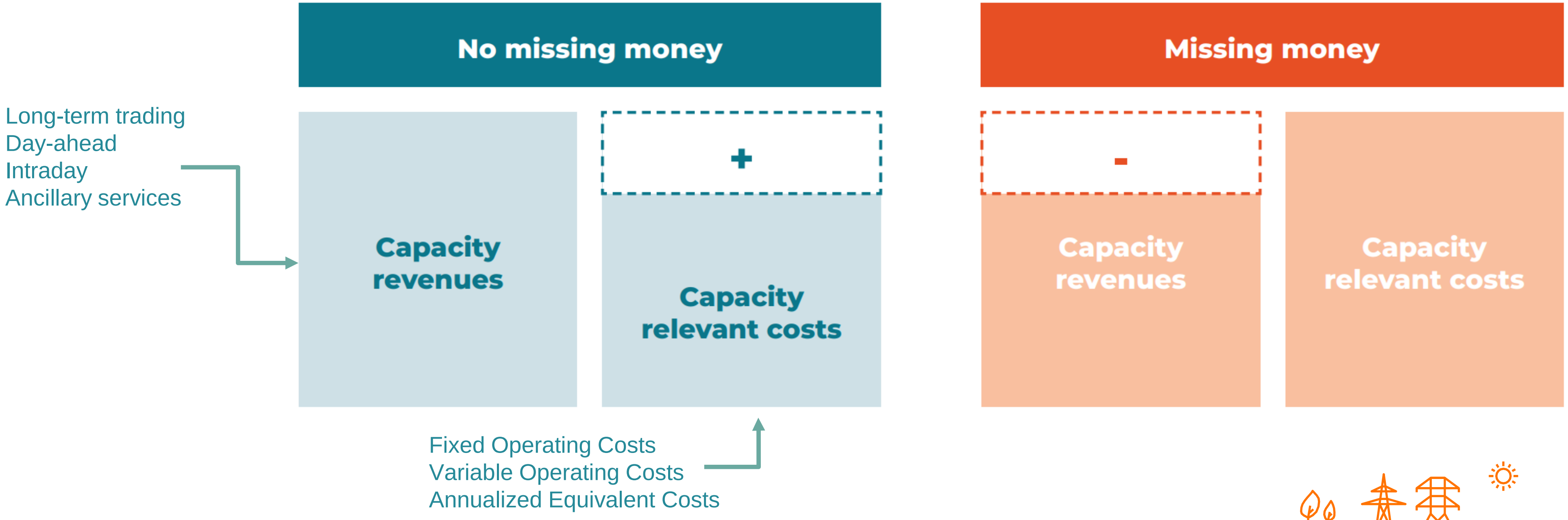


Source: Elia Adequacy & Flexibility Study ‘23

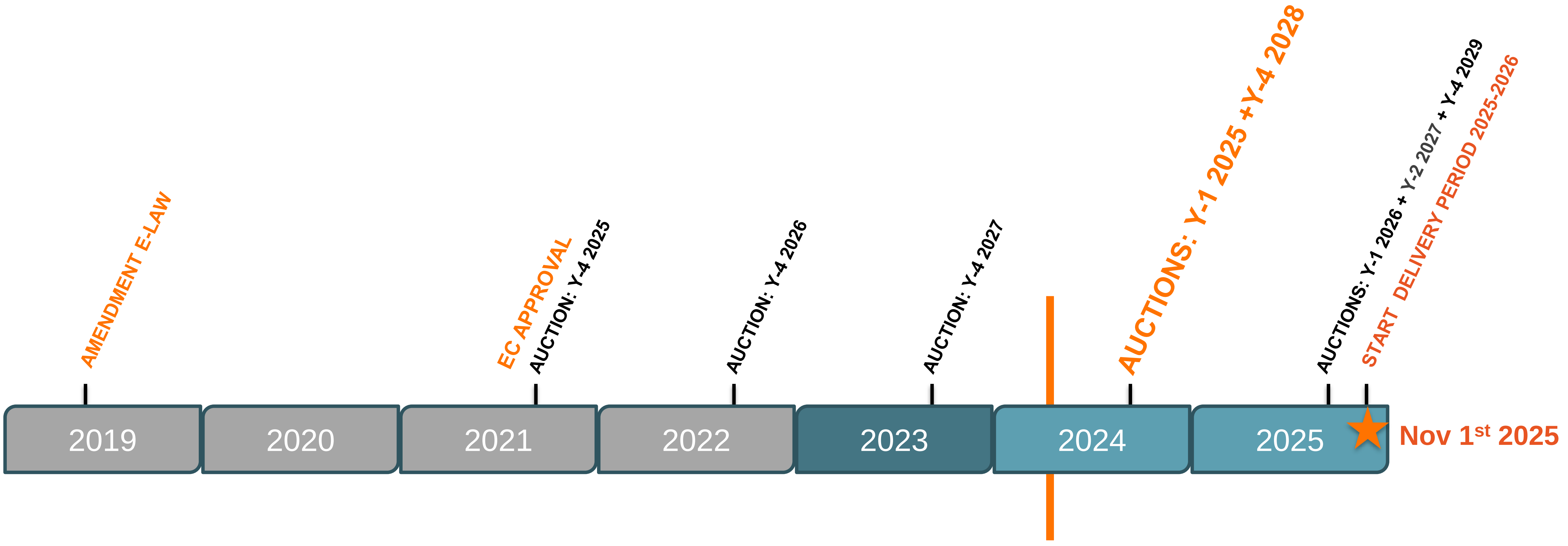
# Existing capacity risks leaving the market and new capacity is not being built because of missing money issues.

Many capacity holders **lack a positive business case** to enable current and new capacities to be available on the market and to contribute to the Belgian security of supply.

The portion of their capacity relevant cost that aren't compensated by their revenues is called **missing money.**



The CRM was introduced by Belgian Authorities in 2019 via the Electricity Law followed by a series of Royal Decrees.



# What is the CRM?

What is a CRM?
What is the goal of the CRM?
How does it fit in the energy market?

# As the CRM is a support mechanism for missing money assets, it works on top of regular market operations, without impacting them.

## Your (upcoming) Flexibility sources

From your **processes**:
- Load Shedding
- Load Shifting

+

From your local
- **Production** units
- **Storage** facility

+

## Energy Markets revenue

### Spot market revenue

- Day ahead , intraday market, imbalances prices
- Upwards / Downwards possible
- You or through an optimizer / partner

### Balancing Services to Elia

- Upwards / Downwards possible
- Through a Balancing Service Provider

## Capacity Remuneration yearly fixed revenue

- Incentive mechanisms for **Upwards flexibility** (less consumption / more production)
- New projects are surely welcome and may be granted of multi-year fix remuneration
- 2024: Auction CRM Y-1 for delivery period Nov2025-Oct26 and;
- 2024: Auction CRM Y-4 for delivery period Nov2028-Oct29

# The CRM aims to support existing capacity to remain in the market and attract new capacity by supporting investments, in order to reach the SoS Reliability Standard.

**Principle:** TSO as 'single buyer' contracts sufficient capacity 4, 2 or 1 year(s) in advance to be available at adequacy-relevant moments. Capacity Providers get rewarded for increasing their flexibility.

### Capacity providers

**Market presence at relevant moments**

- Commits to being in the market when needed in return for compensation for missing money
- Incentive to build the required investment via the money received through the auction

Certification & verification

Capacity Auction

**Y-4, (Y-2)* or Y-1**
***as of 2025**

### CRM operated by Elia

**Pay Capacity Remuneration (missing money)**

- Sets the target parameters based on input from public authorities (volume, price cap, …)
- Is the single buyer at the Forward Capacity Auction

# Capacity Remuneration Mechanisms ‘CRM’ in a nutshell

## Belgian Authorities Capacity Mechanism(s)

Secure the supply/demand balance after 2025/2026

Incentive for **upwards flexibility and market presence**

- Consumption able to decrease in case of high prices
- Injection available for the market (even local)

## Who participates?

The **grid user or mandated partner** with your projects and existing capacity

## How?

By 15/06, a file submission.

By 30/09, a Bid in the Auction.

## Service to deliver in the delivery period?

A yearly commitment to **add your capacity to the energy markets (with your activation price*)**

Checks?
Only **in case of very high prices identified the day before** *or in case of test*

**Offtake points & small-scale injections (<25MW)*

## Idea of a CRM yearly fix revenue?

Y-4: Max **76 800€/MW /y**

Y-1: Max **28 200€/MW /y**

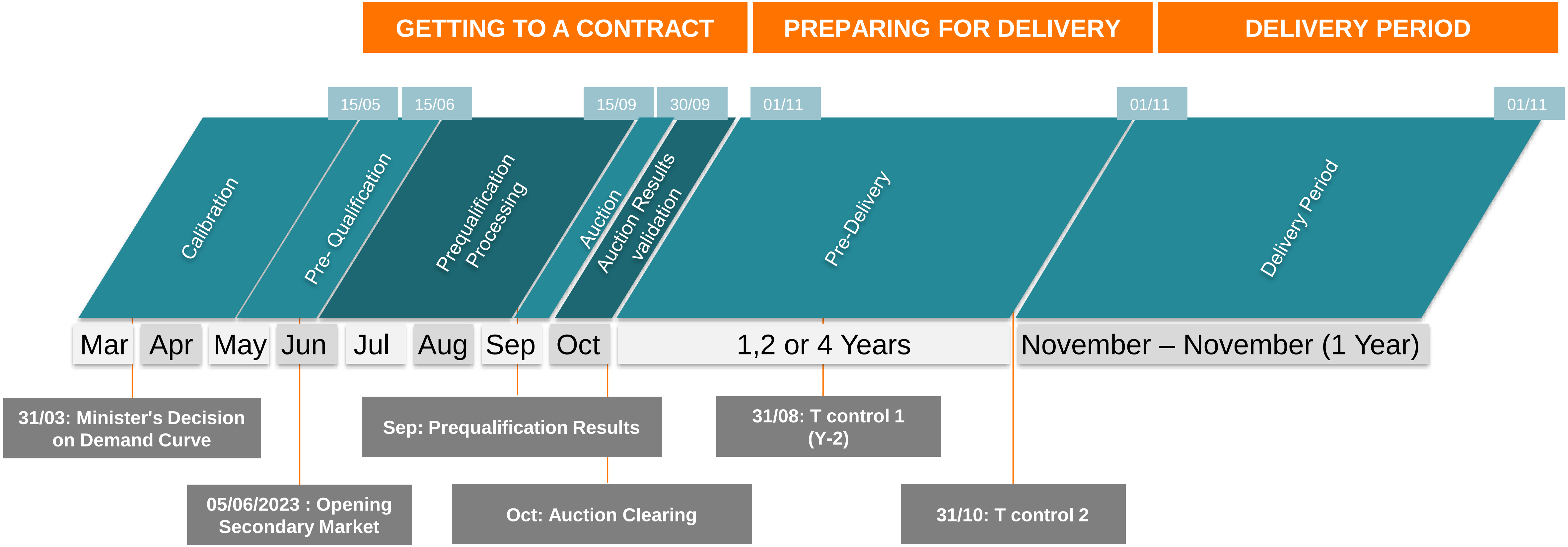
For new capacities

Y-4: Max **26 500€/MW /y**

Y-1: Max **27 300€/MW /y**

For existing capacities

(2024 figures)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05/06/2023 : Opening Secondary Market
Oct: Auction Clearing
31/10: T control 2

# Who can/must participate?

Who is subject to the mandatory prequalification?

Derating Factors per technology

Who can participate?

When does it occur?

# Capacities that meet certain criteria are obligated to prequalify for the CRM, while others are free to join* the market-wide CRM

*provided they comply with a set of eligibility criteria, including the refusal of other variable subsidies during the delivery period and the creation of participation units of at least 1 MW of derated capacity.

➔ The **Prequalification Process** is **mandatory for the capacity holder** when four conditions are simultaneously met:

- The capacity is a production or storage unit
- without on-going variable subsidies during the Delivery Period
- with *a capacity above* 1MW* threshold measured at the Delivery Point
- Measured at the moment of the Prequalification Process ➔ in service

The capacities of the Eligible Capacity Holder

**MAIN FOCUS: check the status on Nov2025 & on Nov2028**

➔ Other projects or existing flexibilities may want to prequalify for the CRM on purpose but have no obligation to do so (see part 2 of the presentation)

** Such threshold is to considered as after application of the derating factor – see later*

# CRM – Derating Factors* of the Capacities

## Derating Factors of other Capacities

Applies to the 'Pmax' of the local Capacity ('NRP').
This is to be considered as a max potential in the Auction.
Could be lowered by an Opt-Out.

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| Onshore Wind | 9 (2025) / 7 (2028) |
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| Category V: Thermal technologies without daily schedule | |
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| Sub-Category | Derating Factor [%] |
| Aggregated thermal technologies | 67 (2025) / 64 (2028) |

Concretely for the WKK threshold per site:

➔ Min. **1,49MWe** for Nov 2025 check

➔ Min. **1,56MWe** for Nov 2028 check

If <
➔ not mandatory prequalification file



* Derating Factors proposed by Elia for the 2024 Y-4 Auction with Delivery Period 2028-2029

# CRM – Derating Factors* of the Capacities

**The Demand Side Response can choose their SLA (hours / day)**

***(the same for local thermal productions and batteries, …) < 25MW***

| Category I: SLA | |
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| SLA-2h | 38 (2025) / 35 (2028) |
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| SLA unlimited | 100 (2025) / 100 (2028) |

Applies to the ‘Pmax’ of the local Capacity (‘NRP’).
This is to be considered as a max potential in the Auction.
Could be lowered by an Opt-Out.



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# Call for Action: by Law, the Grid User (CDS User) is in the lead

‘CRM Candidate’ is the one providing the prequalification file, it could be:

- **The grid user**
- **A mandated counterparty: Grid User declaration**
  - **One template: annex A2, to be filled and signed**
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  - **https://www.elia.be/-/media/project/elia/elia-site/users-group/ug/wg-adequacy/2024/20240201_crm_functioningrules_fr.pdf**

- **Register an Application Form takes 10’ on https://Ademar.elia.be**
  - **As of now, company can register**
  - **Company register possible until 07/06/2024 (5WD before 15/06 file submission deadline)**

# Call for Action: The way to pre-qualify depends on the CMU's engagement in the CRM. Three different prequalification tracks exist: Standard, Specific & Fast-Track

**Grid User decision + Submission by 15/06/2024**

I might want to participate in Auction and I have a mandatory participation for Nov25 or Nov28 or not (opportunity).

I don't want to participate in Auction but I have a mandatory participation for Nov25 or Nov28

## STANDARD

- For CRM actors that are considering to **offer volume** in the auction and already have delivery points.
  (Existing or Additional CMU's)
- The final decision to offer (or not) is always possible until 30 September

## SPECIFIC

- For CRM actors that **are considering to offer volume** in the auction but have **no delivery points (yet).** ('Virtual CMU')
- **Only allowed** in **Y-4**
- **Limited to X MW (e.g. 300 MW) – defined in each Ministerial Decree applicable to an Auction.**

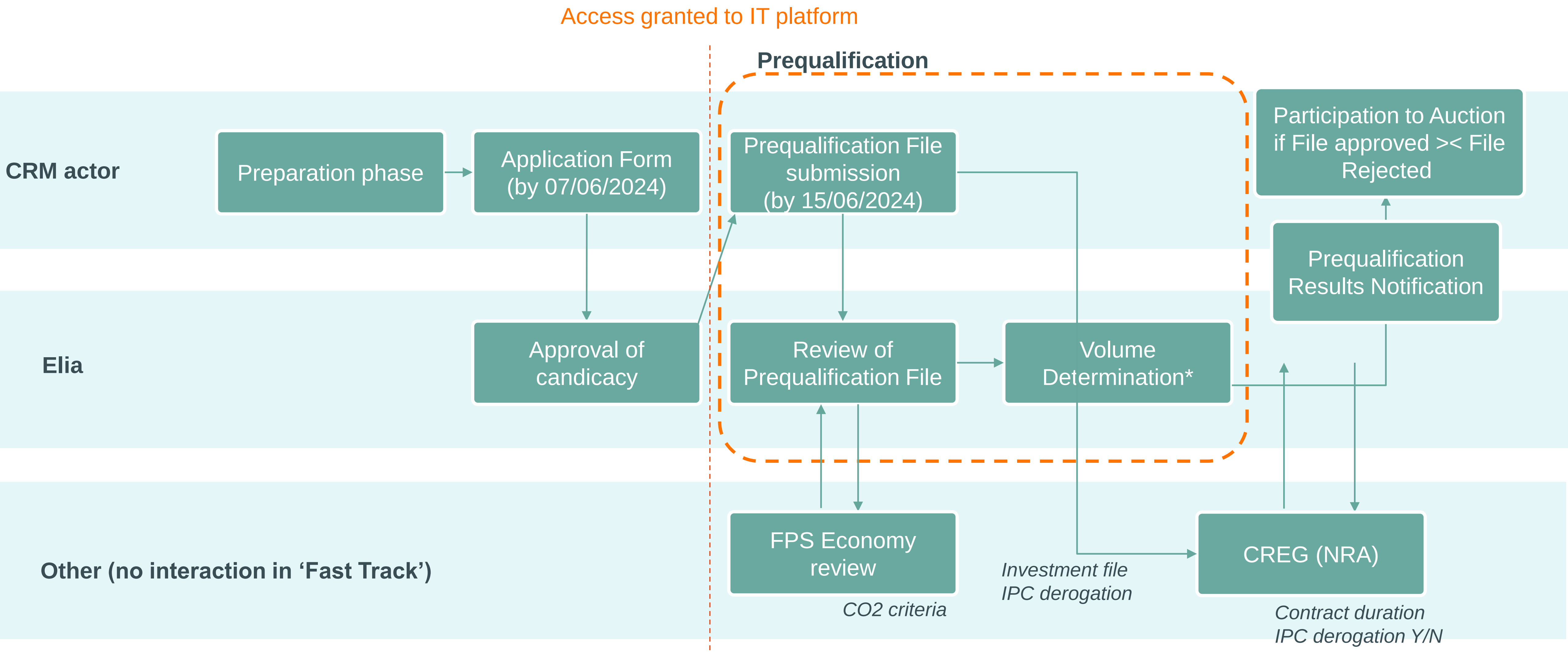
## FAST-TRACK

- For market parties who are **obligated to pre-qualify** but have **no intention of participating in the auction**
- is considered the CRM's "exit door"
- **Treatment** of Fast Track volumes (and impact on demand curve) will depend on whether the capacity already has its permits or not.

**It is never mandatory to offer in the Auction ! (>< prequalification)**
It is just more work for you in preparation <15/06, in August and September (see part 2)

Declaration of your Pmax and;
**' Opt-OUT' of that Pmax** + reason

# Every CMU is subject to a sequential Prequalification Process, interacting with Elia, FPS Economy and CREG.




*in case of DSO-connected points, Volume Determination is done by the DSO

Part1:

Context

What is the CRM?

Who can / who must participate?

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## Part 2:

# Opportunity? Getting to a contract:

- Types of Contracts
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# Types of Contracts

In what ways can I engage with the CRM?

# There are multiple ways to engage with the CRM: single Year & Multi-Year contracts with Elia, or Secondary Market Contracts with other CMUs.

## Primary Market

### Single year Capacity Contract:

- **Contract with Elia**
- Lasts for a single delivery period November Y to October Y+1 included
- Possibility to bid up to the Intermediate Price cap
- No investment file required
- But possibility to request intermediate price cap derogation to CREG

### Multi-year Capacity Contract:

- **Contract with Elia**
- Lasts for a maximum of 3, 8 or 15 delivery periods.
- Required to submit Investment file to CREG
- Possibility to bid up to the Global Auction Price Cap
- ***An evolution is under discussion to allow for MY contracts for existing capacity***

## Secondary Market

### Secondary Market Contract

- **Bilateral Agreement with Capacity Providers having contracted CMUs**
- Higher granularity of contract durations (1hr up to 15 years, conditions apply)
- Extra terms & conditions can be discussed bilaterally by CMUs

# Eligibility

Can I participate?

# Participation to the CRM-Auction is market wide; It's open to all TSO and DSO connected capacities over 1MW below the emission limit set for the auction.

| | CRM |
|---|---|
| Minimum Capacity | Minimum volume requirement of **1 MW after derating**<br>✓ Individually or aggregated with other capacities (without daily schedule obligation)<br>✓ Derating depends on adequacy contribution of technology: e.g. you would need 100 MW of installed solar PV ↔ 1,5 MW of 4 hour batteries to reach the threshold* |
| Connection | For **TSO- and/or DSO-connected** capacities, including **low-voltage** flexibility in the near future (currently WIP) |
| Emission limit | emission limit of<br>**550 g** $CO_2$/kWh<br>Or 306kg $CO_2$/kW/y (only if <600 g $CO_2$/kWh)* |
| CMU status constraints | No constraint (market-wide mechanism) |

**Reminder:** Existing production and storage units without ongoing variable subsidies during the Delivery Period with a capacity above 1MW measured at the delivery period during the Prequalification process, are **obligated to Prequalify for the CRM, not to offer in the Auction.**

*Yearly threshold is allowed to reach a limit of 350 kg $CO_2$/kW/y for the upcoming Y-1 auction if the limit of g $CO_2$/kWh > 550.

# Prequalification

What purpose does Prequalification serve?

How can I participate?

What's the amount of capacity I can participate with?

What are the first administrative steps?

# During Prequalification, CMU's data is collected and processed to determine the Eligible Volume the CMU can offer in the Auctions.

The **Prequalification Process** aims to ensure, for the Capacity Holder, its compliancy with legal requirements

- ➔ Either by processing the adequate Prequalification process(s) until **the submission of an offer in the Auction**
  - ➔ Process standard, or
  - ➔ Process specific
- ➔ Or by following a Fast Track Prequalification process **to exit**

The **objectives** of the Prequalification process(es) are the following

- ➔ Collecting adequate and correct data related to each CRM Candidate capacities
- ➔ Determining the volume to be submitted by CMU during an Auction (Eligible Volume)

# The way to pre-qualify depends on the CMU's engagement in the CRM. Three different prequalification tracks exist: Standard, Specific & Fast-Track

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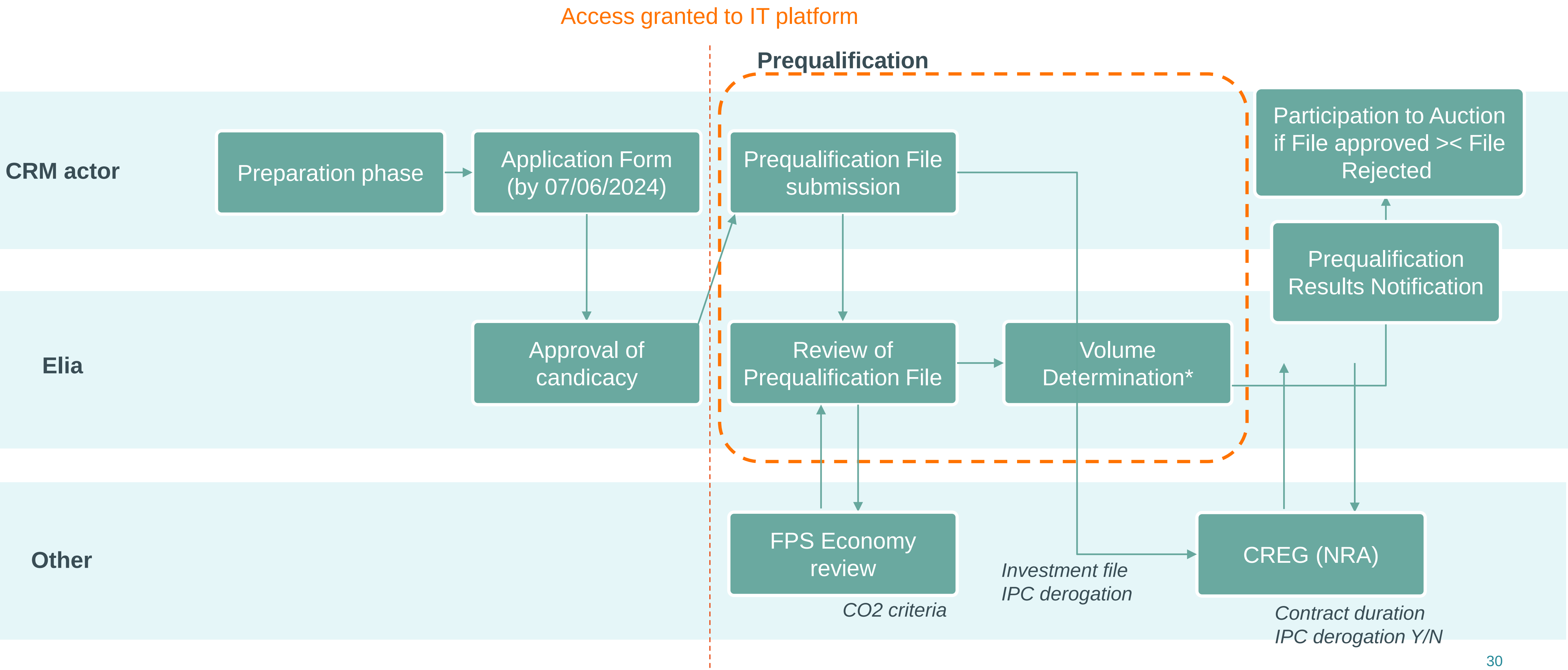


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# The Maximum Capacity a CMU can offer in auction (Eligible Volume) is limited by a derating factor, which represents the degree to which it contributes to Security of Supply.

All technologies are subject to the application of a **derating factor** representing the degree to which the technology contributes to security of supply.

**Derating factors are classified in 5 Categories:**

**> whether the CMU is Energy Constrained or not,**

**> has a Daily Schedule (>25 MW) or not**

**Split by technology are possible within a category.**

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- **If you plan to add a STANDARD File with DSO existing points: the candidate (e.g. mandated) has to dispose of an “FSP-DSO Agreement” with DGO (e.g. Fluvius)**

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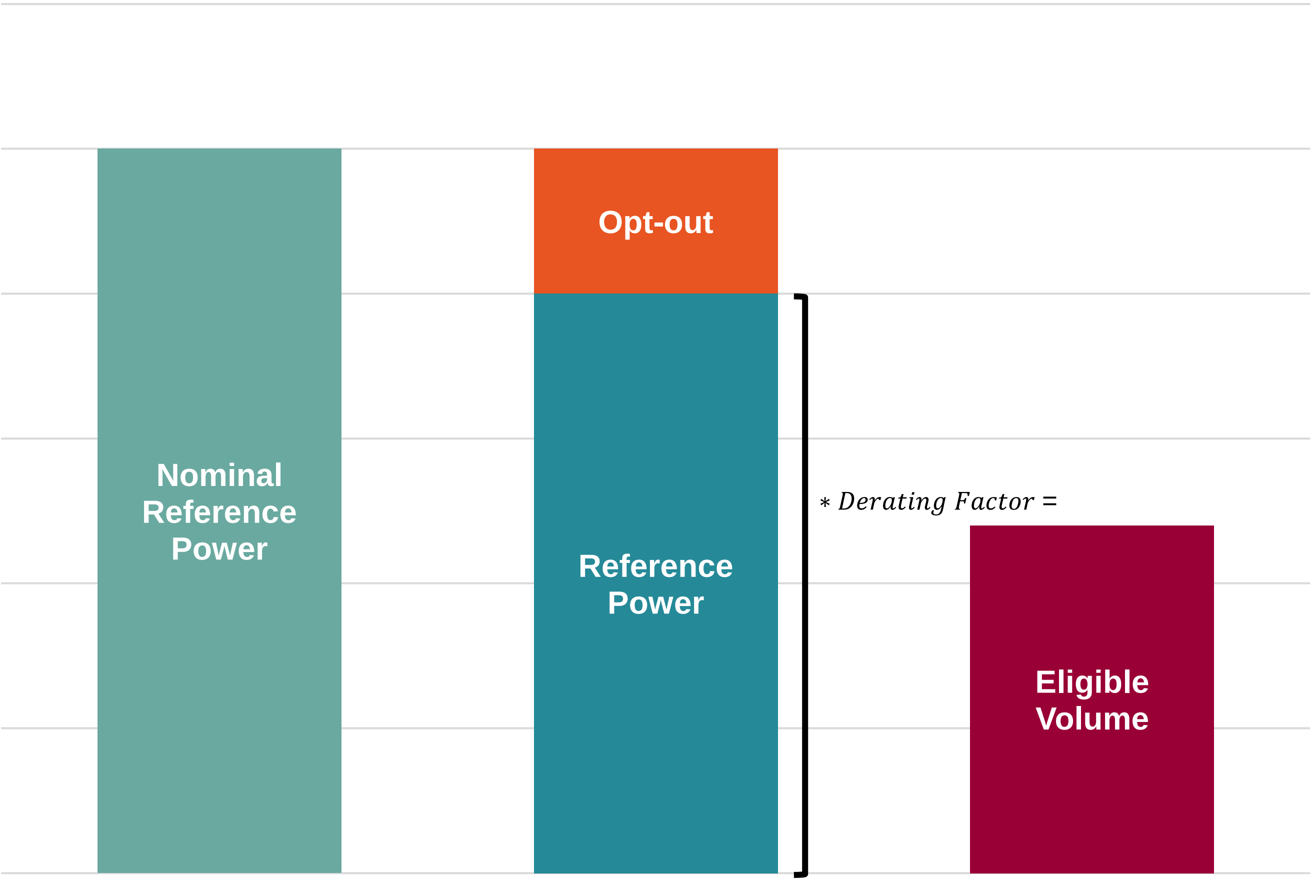
# The maximum volume that can be entered into auction (Eligible Volume) gets determined during the Prequalification, by derating the Reference Power




**The Nominal Reference Power (NRP)** gets determined using 1 year of historical data, if available.

Subtracting the **Opt-out Volume** (volume the CMU does not want to enter in auction) from the **NRP** results in the **Reference Power**.

Multiplying the **Reference Power** with the Derating Factor results in the **Eligible Volume**, which is the maximum that can be bid into auction*.

* CMUs are obligated to enter their full Eligible Volume (lowering the Eligible Volume is possible via opt-out)

**As a reminder:**

Derating factors differ per technology and whether the CMU is Energy Constrained and/or has a Daily Schedule (~ >25 MW)

# Eligible Volume Determination: Examples Y-1

## COGEN WKK UNIT

- **Not Energy Constrained**
- **Non Daily Schedule** (<25 MW)

- **NRP:** 10MW
- **Derating Factor: 67**%
- **Eligible Volume(max): 6,7MW**

- If opt out of 2MW (parameter before 30/09/2024)
- Eligible Volume becomes 5,36MW

## DSM or Cogen WKK

- **Energy Constrained** (SLA 3h)
- **No Daily Schedule** (<25 MW)

- **NRP:** 5 MW
- **Derating Factor: 50**%
- **Eligible Volume (max):** 2,5 MW

## STORAGE

- **Energy Constrained** (SLA 2h)
- **Daily Schedule** (>25 MW)

- **NRP:** 30MW
- **Derating Factor:** 46%
- **Eligible Volume(max):** 13,8 MW

Derating factors from Y-4 2022 (delivery 2026-2027) are used in these examples

# A number of administrative files need to be presented to successfully prequalify.

**The prequalification process and data requirements** (according to Functioning Rules proposal & current framework) **are highly dependent on the capacity features but in all cases it requires those 5 elements:**

- 1 - The respect of a **max $CO_2$ European threshold** with official documents or attests
  - FPS Economy judges the pertinence of such data

- 2 - The **refusal of cumul with other variable subsidies** (mainly the green ones) on the Delivery Period – conditional waiver template of the FPS Economy

- 3 - Financial security valid until 2025 or 2029 (CRM ‘24): Each candidate to the Auction or Secondary Market provides a sufficient collateral for the CRM
  - 10k€ - 20k€ / Eligible Volume MW in **Bank Guarantee, a PCG-like**

- 4 – The **regional Permit in the last administrative instance for the construction and/or exploitation** is to be provided by the bid submission deadline

- 5 – For new built connected to Elia, a waiver of Elia grid reserved/allocated capacity in case of non-selection

# Financial Security Obligation

What is the Financial Security Obligation?
Does the same Financial Security apply to everybody?
When does the Financial Security get returned?

# The Financial Security is a collateral deposited by participating market parties to cover for non-payment of potential pre-delivery penalties.

**Commitment of the market parties participating in the CRM**

- Contributing to the Security of Supply
- Preventing gaming in the Auction

*through*

**Collateral in case of non-payment of potential penalties arising during the Pre-delivery Period**

- Supporting the Pre-delivery process

1. The Financial Security **covers the pre-delivery period** and is released after the start of the delivery period, if CMU has received the status “existing” (representative NRP can be measured)
2. The Financial Security is linked to a CMU and **should cover the maximal expected contracted capacity** for the forthcoming Delivery Periods
3. Financial security **covers penalties during the pre-delivery period (if these remain unpaid)**

Does the same Financial Security apply to everybody?

When does the Financial Security get released?

# The amount of Financial Security to be deposited is dependent on the CMU's status.

| CMU Status | FS in €/MW |
|---|---|
| Existing CMU | 10k |
| Additional CMU (other) | 11k |
| Additional CMU (new build with Permitting Milestone achieved or not applicable) | 15k |
| Additional CMU (new build without Permitting Milestone achieved) | 20k |
| Virtual CMU | 20k |

- Changing Statuses or getting past certain milestones/permits will result in partial releases of deposited securities.
- The purpose is to release the Financial Security in full after all Pre-Delivery Checks are passed.
- It only applies to the Eligible Capacity (after derating and potential opt-outs).
- Financial securities are bank guarantees, affiliate guarantees (e.g. PCG) or cash deposit (or a combination of them)

# Financial Security Obligation: examples

## COGEN 10MW

- **Not Energy Constrained**
- **Non Daily Schedule** (<25 MW)
- **Eligible Volume: 6,7**MW

- **Status:** Existing
- **FS per MW:** 10k€/MW
- **Total FS: 67** k€
- **Type of deposit:**
  Bank Guarantee

## DSM 5MW or Cogen

- **Energy Constrained** (SLA 3h)
- **No Daily Schedule** (<25 MW)
- **Eligible Volume:** 2,5 MW

- **Status:** Existing
- **FS per MW:** 10k€/MW
- **Total FS:** 25 k€
- **Type of deposit:**
  Parent Company Guarantee

## STORAGE 30MW

- **Energy Constrained** (SLA **2**h)
- **Daily Schedule** (>25 MW)
- **Eligible Volume:** 13.8 MW

- **Status:** Additional (New Build)
- **FS per MW:** 20k€/MW
- **Total FS:** 276 k€
- **Type of deposit:**
  Bank Guarantee

# Auction

What are the Auctions?
When do the Auctions occur?
How do the Auctions work?
How does is the need in the Auctions calculated?
What is expected of me in the Auctions?
What capacity is already contracted in the past Auctions?

# In the Auction, CMU's can offer Eligible Volume to the CRM at a chosen price and a contract duration (of which the maximum is determined by CREG).

➔ The **access to the Auction** is granted to the CRM Prequalified Candidates CMUs

- The CRM actor enters one or more offers related to each prequalified CMUs to **bid in the Eligible Volume** as determined in the Prequalification Process
- Each offer consists of a **volume, a chosen price and a contract duration**
- The Price is limited to an Intermediate Price Cap for the 1 year capacity contract duration
  - Y-4: Max 26 500€/MW /y and Y-1: Max 27 300€/MW /y
- The maximal capacity contract duration of a bid is determined by CREG (investment file of the CMU)

➔ Prior the Auction:

- The CRM Candidate can still **reduce** (partially or entirely) its **Eligible Volume through an Opt-Out** (up to mid-Sept.)
- The CRM Candidate can still remove its Prequalification File and bids without consequence (if no mandatory participation, up to Gate Closure Time 6am)

➔ Auction algorithm selects the bids that maximize the global welfare considering the Grid Constraints

➔ The selected offers are listed in a Capacity Contract under 'transactions'

# Two (Three) Auctions are organized for each Delivery Period, respectively 4 years, (2 years) and 1 year ahead

Last Y-4 auction in 2030
*Last Y-2 auction in 2032*
Last Y-1 auction in 2033
→ delivery in 2034

| 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | … |
|---|---|---|---|---|---|---|---|
| | | | | | | | |
| Y-4 2025 | | | Y-1 2025 | Delivery 2025 | | | |
| | Y-4 2026 | | | Y-1 2026 | Delivery 2026 | | |
| | | Y-4 2027 | | **Y-2 2027** | Y-1 2027 | Delivery 2027 | |
| | | | Y-4 2028 | | Y-2 2028 | Y-1 2028 | Delivery 2028 |

*Note: a delivery year always* ***start on 1 November 20XX and ends 31 October 20XX+1***

- **Obviously, a multi-year contract covers more than 1 delivery year.**
- **However, auctions only deal with a single delivery year.**
- **Hence, Contract length is not a criterion in selecting capacities.**
  (except in case of tie)

# The Auction Process consists of setting up the Demand (need) and Supply (bids) curves and clearing at their intersection.

## I. Setting the demand curve

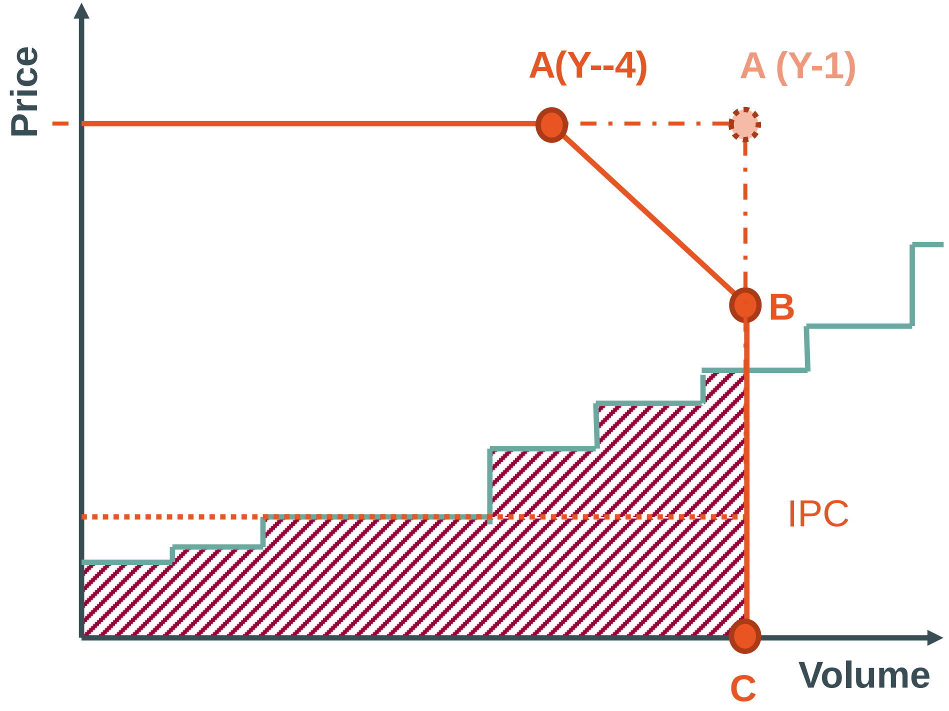
- Annual determination by Ministerial Decree
- Intermediate Price Cap (IPC) for one-year contracts
- A certain volume is reserved for the Y-1 auction

## II. Setting the supply curve

- Bid price indicated by CRM participants
- Volume up to (Remaining) Eligible Volume
- Contracts non-eligible for multi-year without derogation can bid up to IPC
- Multi-year contracts can bid up to price in point A

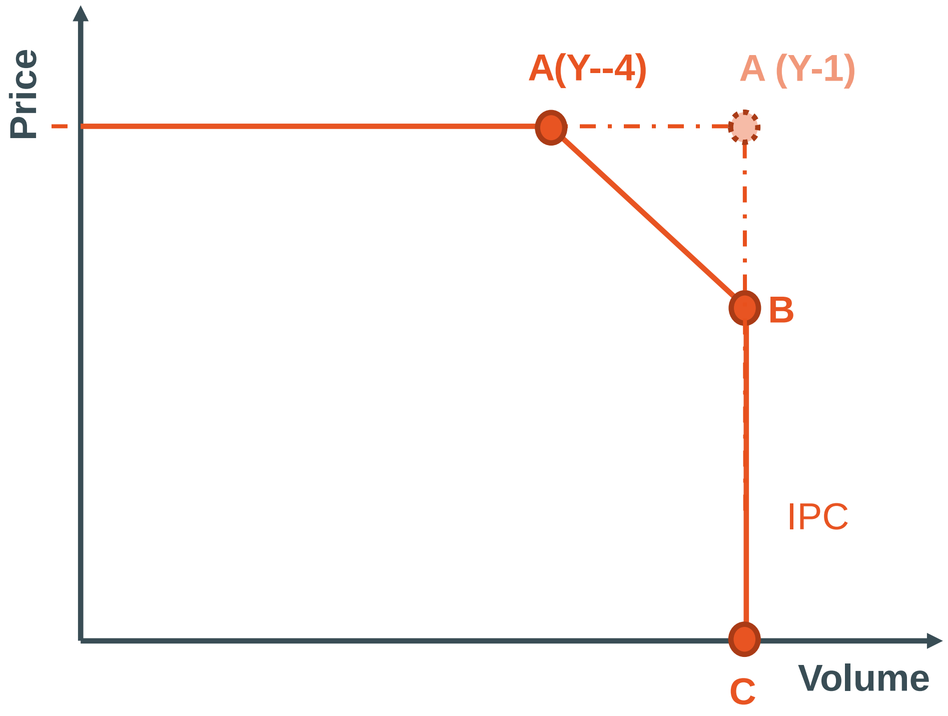
## III. Auction clearing

- Maximize welfare
- Combination of bids respects grid constraints
- Optimization of selection
- Single-round, sealed-bid
- Pay-as-bid



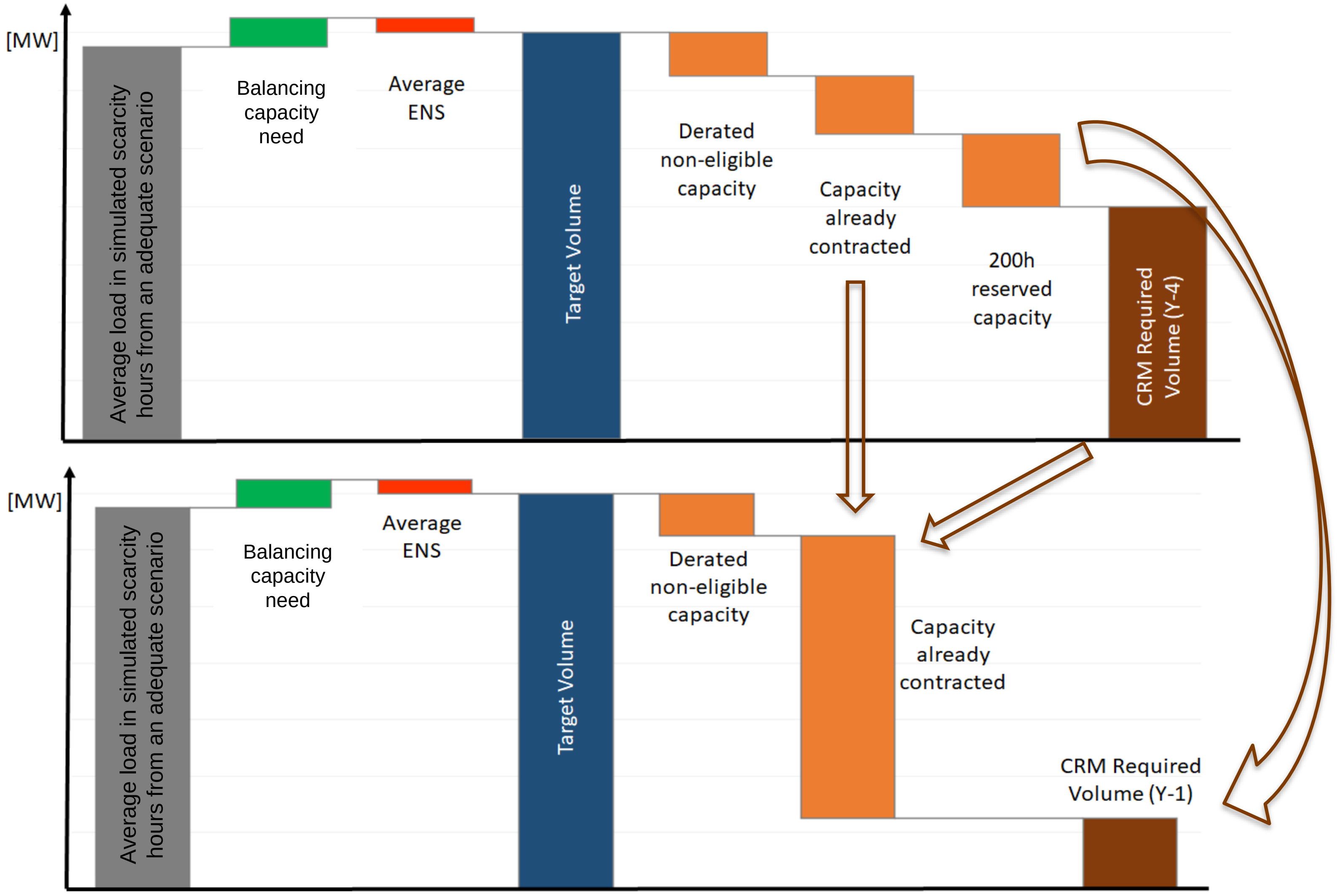
# The Demand Curve represents society’s willingness-to-pay for adequacy.

- Set in an administrative way
- Parameters are defined in a Ministerial decree by 31/03
- The demand curve may be shaped differently in a Y-4 or Y-2 vs. a Y-1 auction
- The need (required volume in the auction) is based on studies performed by Elia:
    - Calibration Report: yearly
    - Adequacy & Flexibility Study: every two years




**The demand curve is a crucial input for the auction, determining adequacy levels and the price that society is willing to pay for achieving each adequacy level**

# The Required Volume of Auctions is calculated in accordance with Article 11 of the Royal Decree Methodology.



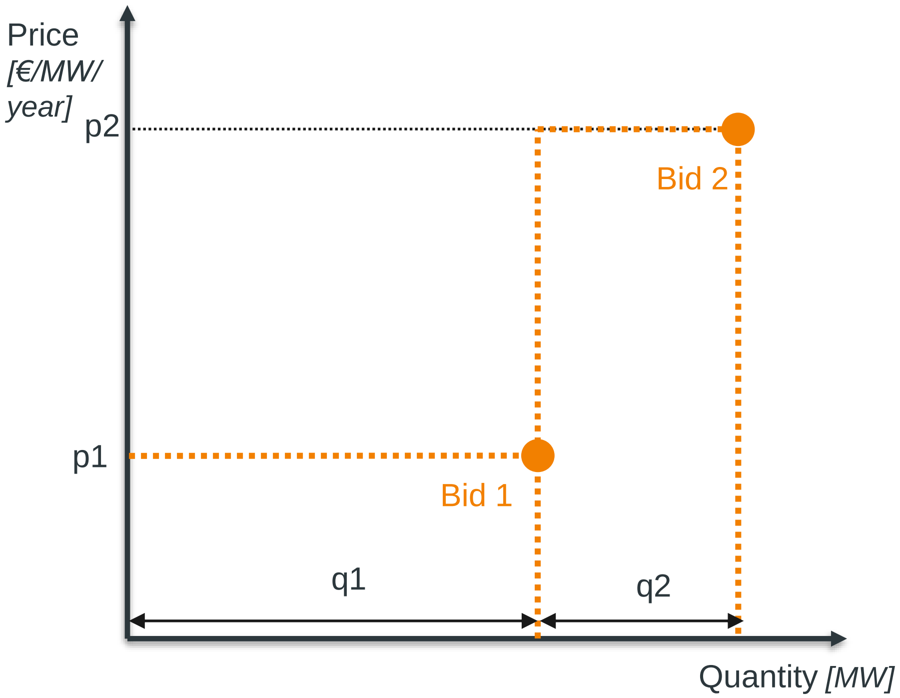

## Determination of the volume parameters – Article 11 of the Royal Decree

- Proposal & simulations by the TSO (Elia)
- Proposal made by the NRA (CREG)
- Minister determines the final demand curve

*The Y-2 auction has not been added to this figure since the capacity split between the auctions is under consultation*

# The Supply curve is formed by combining the bids of all Auction participants, which entail volume, price and duration.

- Each bid is formed by 3 components a minima:
  - **Capacity volume** (in MW), as determined during the prequalification process
  - **Price** (in €/MW/year)
  - **Contract duration** (in # years), respecting the maximum contract duration as determined by CREG
- For a CMU, a combination of bids MW should raise the Eligible Volume (otherwise, possibility to modify the EV by Optout modification)
- It is possible to create mutual-exclusivity or links between bids in specific cases



# The Auction is cleared in a way that maximises social welfare and respects grid constraints.

→ Single round, sealed-bid

→ Pay-as-bid

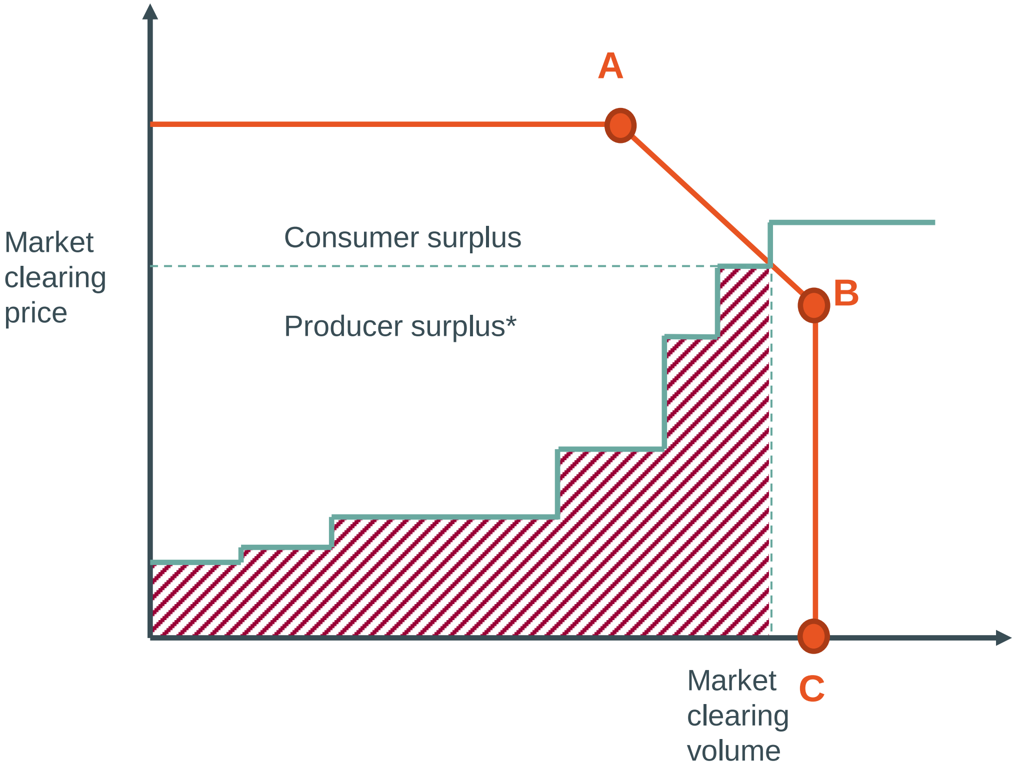
**Maximization of social welfare**

- **Consumer surplus**: Surplus for society from satisfying demand at a price below the willingness-to-pay for capacity
- **Producer surplus**: Surplus for suppliers from the selection of their bids at a price above the bid –price

**Respecting grid constraints**

- Normally: connection requests handled sequentially. Here: bulk requests at the moment of the auction
- Calculated before the CRM auction, considering all new capacity projects on a "reference" grid

→ Certain combinations of capacities will be impossible, auction algorithm takes this into account



# Contract

What are the specifics of the Contract?

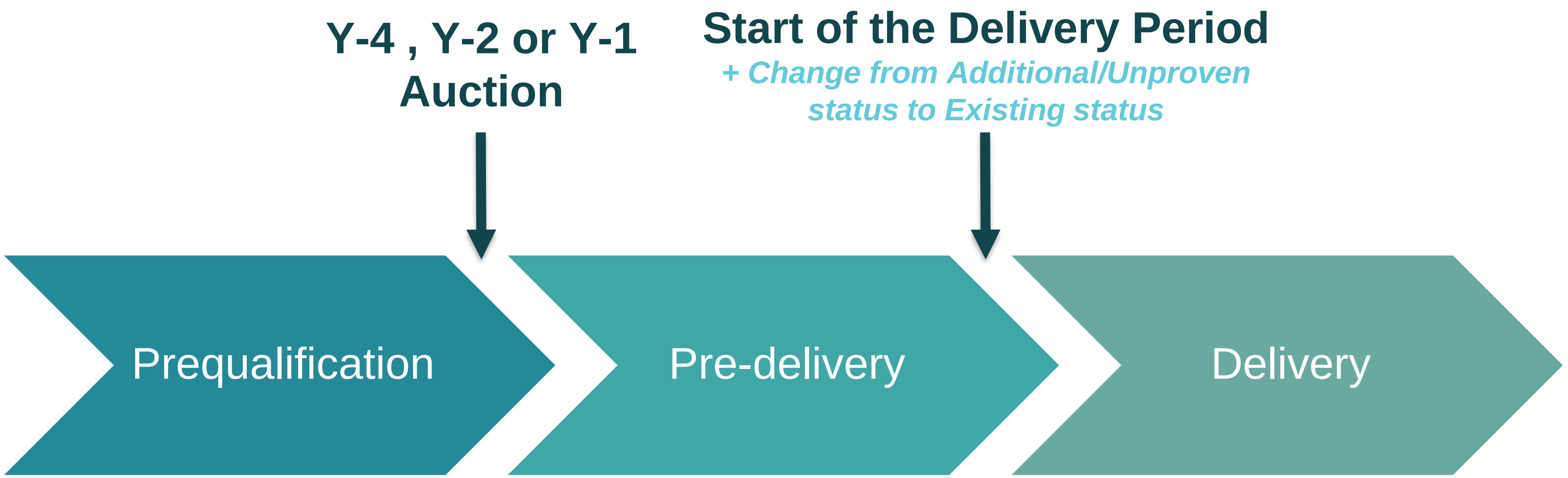
# The Capacity Contract is the formal agreement between the Capacity Provider and Elia. It is concluded after selection in the auction.

- Following a positive selection of the offers, a contract is concluded between the **Capacity Provider** and **Elia:**
    - Within 40 WD after the Auction results.
    - In case of Additional capacity, where applicable the Connection contract is signed within the time limits of the Grid codes (and in accordance with the Technical agreement provided in Prequalification process).
        - The Capacity Contract is signed within 20 WD right after the connection contract.
- CAPACITY PROVIDER undertakes to ELIA to provide the Service, as specified in the Functioning Rules, throughout each:
    - Transaction Period (in this case as of November 2025 (Auction Y-1 2024) or November 2028 (Auction Y-4 2024));
    - And its respective Pre-Delivery Period: between auction results and delivery period.
- Secondary market transactions also require contract signatures.

# The Capacity Contract is the formal agreement between the Capacity Provider and Elia. It covers the rights, obligations and possible related penalties of the arrangement.

- The Capacity Provider is entitled to the Capacity Remuneration of the Transactions;
- After the effective Service delivery and the settlement, invoicing and payment modalities;
- Any breach of the Pre-delivery and/or Availability Obligations shall be sanctioned by one or more penalties;
- Penalties are subject of a pre-delivery activity report for the Pre-Delivery Obligations and of a delivery activity report for the Availability Obligations. The delivery activity report also contains the Payback Obligations (re-imbursement of undue market revenues).

All Contracted CMUs are subject to Pre-Delivery Obligation, in which Elia verifies their ability to provide Capacity by the start of the Delivery Period.




- Only concerns the obligations resulting from the Primary Market (Y-1, Y-2 and Y-4) and Secondary Market transactions validated in pre-delivery period
- Ensures the Capacity Provider's ability to provide the awarded Capacity
- Valid for Existing, Additional & Unproven Capacities

# Pre- Delivery Monitoring minimizes gaming risks, allowing for a more competitive and cost-efficient CRM environment.

Monitoring process aims at verifying that the awarded capacity will effectively be there as of 1st day of delivery period for which they have been contracted

| | |
|---|---|
| Minimize gaming risk | • Develop rules to limit gaming risk (volume retention in the auction or excluding competition) |
| Ensure level playing field | • Financial penalties must reflect the project owner ability to mitigate the risk |
| Minimize mechanism total cost | • Minimize impact of mitigation measures on mechanism total cost<br>• Maximize competition |


GETTING TO A CONTRACT
PREPARING FOR DELIVERY
DELIVERY PERIOD
15/05
15/06
15/09
30/09
01/11
01/11
01/11
Calibration
Pre- Qualification
Prequalification Processing
Auction
Auction Results validation
Pre-Delivery
Delivery Period
Mar
Apr
May
Jun
Jul
Aug
Sep
Oct
1, 2 or 4 Years
November – November (1 Year)
31/03: Minister's Decision on Demand Curve
Sep: Prequalification Results
31/08: T control 1 (Y-2)
05/06/2023 : Opening Secondary Market
Oct: Auction Clearing
31/10: T control 2

During Adequacy-relevant moments and tests, a CMU is expected to have their Obligated Capacity available.

**Capacity Market Unit**
Obligations during Delivery Period

- **Availability Obligations**
  - **Availability Monitoring**
    Verify availability of CMU’s through centrally collected data
    *“Did you follow through on your side of the deal?”*
  - **Availability Testing**
    Verify availability by performing tests on CMU’s
    (only if not visible in monitoring)
    *“Would you be able to follow through on your side of the deal if needed?”*
- **Payback Obligation**
  Ensure a pay-back of energy market revenues when the Reference Price exceeds the Strike Price
  **(Next chapter)**

# In Availability Monitoring, Elia checks the market presence of CMUs. Unavailability at adequacy relevant moments will result in a Financial Penalty.

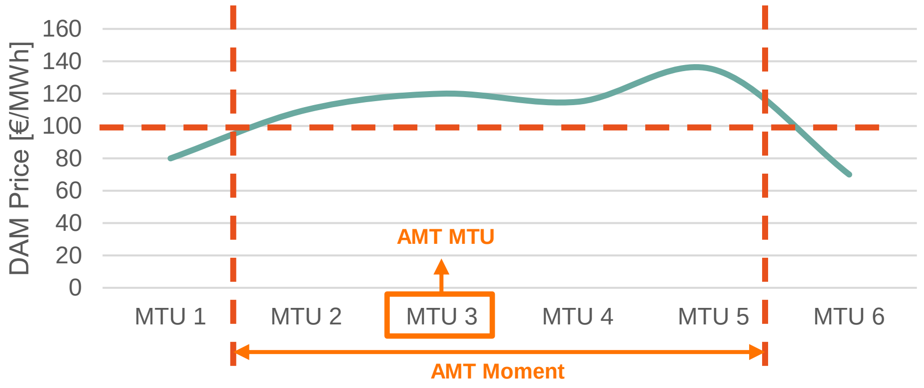
*“Did you follow through on your side of the deal?”*

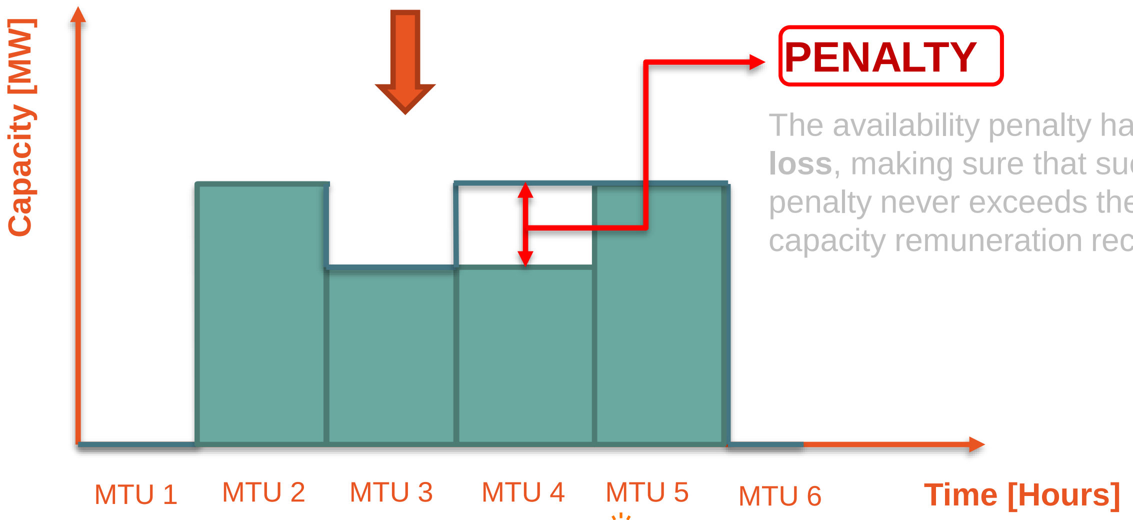
**I. Identify adequacy relevant moments**

**II. Establish Obligated Capacity**

**III. Establish Available Capacity**

**IV. Availability Penalty (if needed)**

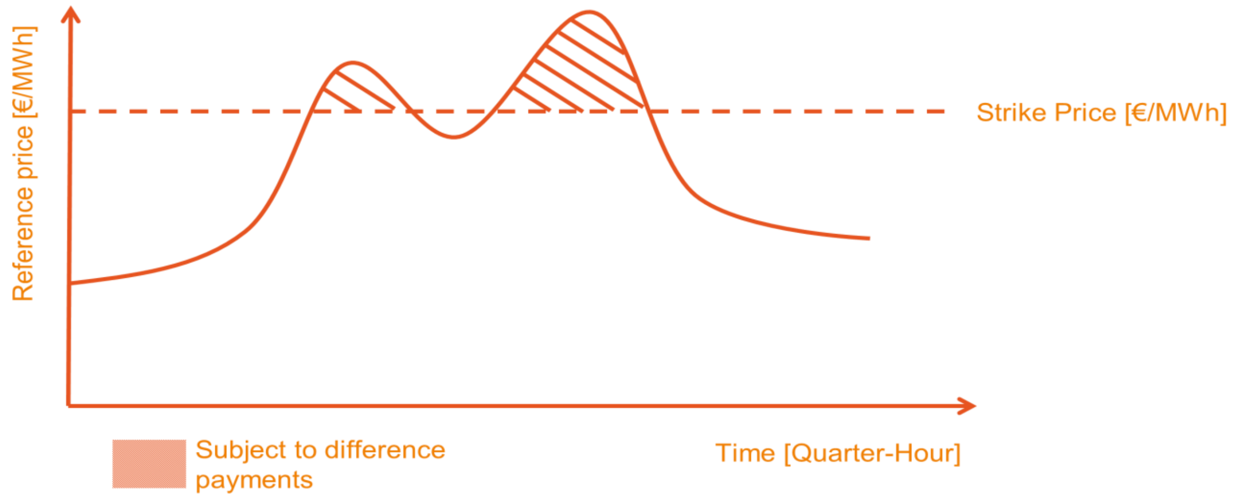



The availability penalty has a **stop-loss**, making sure that such penalty never exceeds the initial capacity remuneration received.

# Remunerations have to be paid back if energy reference prices exceed the strike price, to avoid double remunerations.

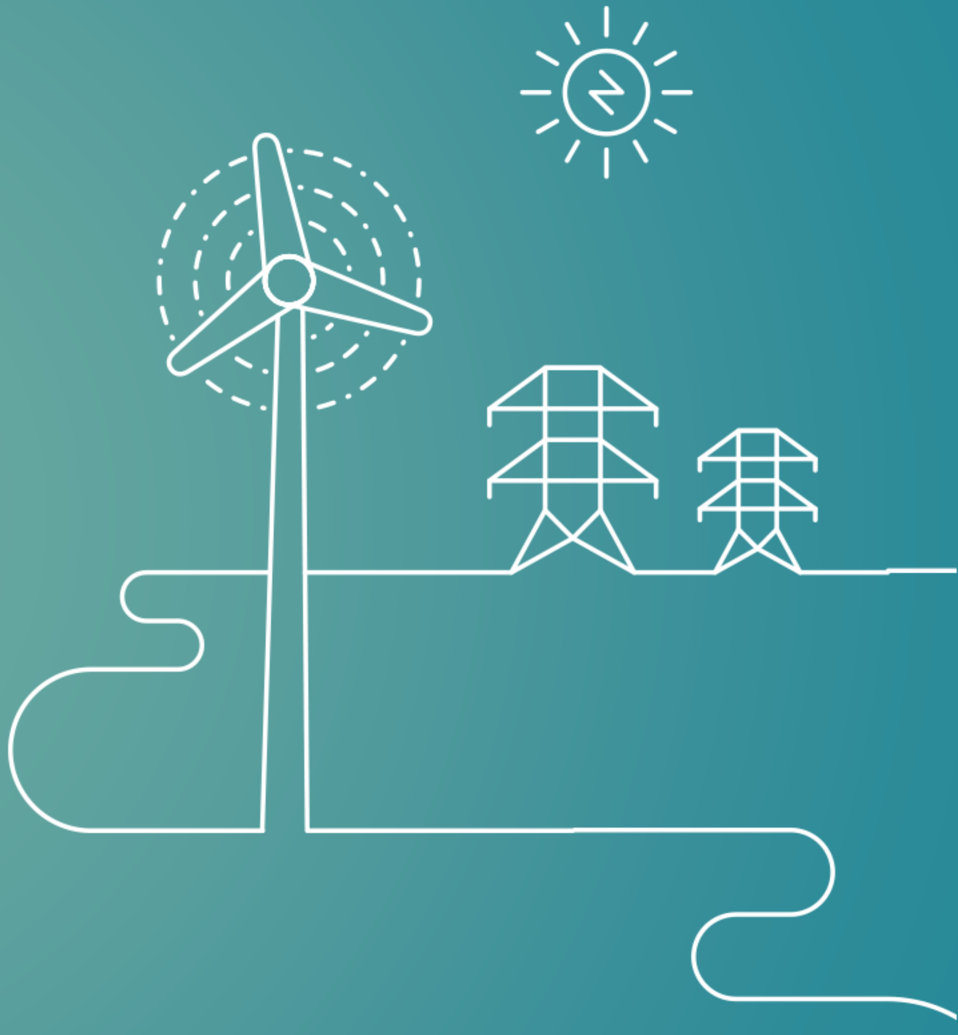
**In a reliability option**, the capacity provider receives a capacity remuneration but is obliged to payback money to society whenever the reference energy spot price (e.g. day-ahead price) exceeds a pre-defined strike price.




Such approach has two advantages for society:

- **Avoiding windfall profits**: as the capacity provider already receives a capacity remuneration on top of its 'normal' energy market revenues which should cover all its costs, extreme energy prices would provide him with an extra, double remuneration. This would constitute a windfall profit. The Payback Obligation has a stop-loss, making sure the amount to be paid back never exceeds the initial capacity remuneration received.
- **Strengthening incentive to deliver on SoS-obligations**: as capacity providers are obliged to payback when the energy price exceeds the strike price and those moments are strongly correlated with moment of (near-)scarcity, there is an extra incentive for capacity providers to be available in the system at such moments.

# Final notes



# CRM auction - key dates in 2024

| MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC |
|---|---|---|---|---|---|---|---|---|---|

Follow-up & ad-hoc meetings with ELIA customers

Today

**31/03**
Minister's Decision

**12/04**
Deadline to submit 1s version of the Admission File

**15/04**
Deadline to request for production license to FOD

**15/05**
Validation of the FR by CREG

**15/06**
Deadline to submit 1st version of PQ File

**15/06**
Deadline to submit of investment file to CREG

**25/08**
Deadline to obtain a Tech. Agreement

**01/09**
Deadline for Financial Security submission

**15/09**
Results of CREG for multiyear contracts

**30/09**
Deadline to submit a bid

**31/10**
Result notification of the Auctions

# Your participation in the Y-1 / Y-4 Auction

**Now to Q2 2024 'Preparation'**

Flex revenue estimation with Elia on demand / in the 'Road Shows'

**By 15 june 2024 'Submission'**

Prequalification File to Elia

Multi year contract possible via CREG

**Sept 2024 'Bidding'**

Elia feedback on MW

Your offers for the Auction by 30/09

**as of Oct 2024**

Results
&
Contracts

Your Elia KAM guides you through your flexibility valorization supported by:

- CRM dedicated support (customer.crm@elia.be)
- Balancing products dedicated support (contracting_AS@elia.be)

You can also find here the list of "Balancing Services Providers"

# Thank you