

CRM Prequalification process

Introduction

12/05/2022 (v2.1)

Disclaimer

This document constitutes a presentation for the Belgian Capacity Remuneration Mechanism (CRM) and is to be considered as an educational document facilitating understanding of all other CRM documents, which together form the official legal and operational framework. As an introduction to the CRM, the presentation sets out the wide range of principles governing the mechanism as a whole, focusing on the outlook for 2022 and purposely simplifying some items to facilitate understanding. Elia refers any readers wishing to gain a complete understanding to all relevant legal, regulatory and contractual frameworks, some of which still need to be approved and/or adopted.

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.



Agenda

- *Introduction to the Capacity Remuneration Mechanism (hereafter 'CRM')*
- *Who is participating in the CRM and with which capacities?*
- *What's in it for me?*
- *Prequalification Process*
- *Auction*
- *Capacity Contract & Connection Contract*



General overview

The main objective of the presentation is to highlight the customer obligations and possibilities in the Capacity Remuneration Mechanism (hereafter 'CRM') phases foreseen in 2022.

The two first phases of 2022 are composed of the:

- **Prequalification Process** allowing a participation in the Auction and starting in May '22
- **Auction**, a market-wide bidding procedure with a selection of the offers leading to a CRM Capacity Contract

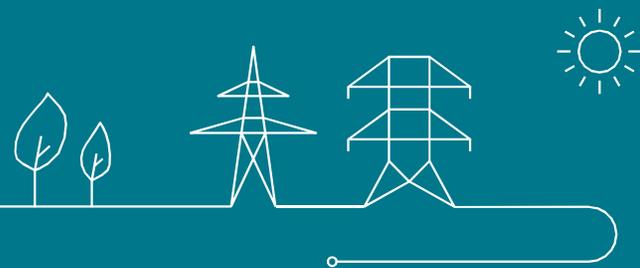
In some cases and under certain conditions, the capacity holder is obliged or may enter the Prequalification Process.

It is never mandatory to participate in the CRM Auction, therefore, until the Auction Gate Closure Time, such Candidate has **different alternatives to stop** (fully or partially) its participation to the Auction.

Elia CRM webpage: <https://www.elia.be/en/electricity-market-and-system/adequacy/capacity-remuneration-mechanism>



Introduction



Introduction to the Capacity Remuneration Mechanism ('CRM')

- The **Belgian Authorities developed the CRM mechanism in a Law** to provide a financial supporting mechanism to compensate the missing money of the participating capacities (existing or new ones) and guarantee the security of supply of Belgium on the long run (from November 2025).
 - A chosen Financial support to existing or new eligible capacities (production, storage or demand side management) for their upcoming Availability commitment on top of the market revenues (AS, hedging and spot revenues) → a new auction for the delivery period 2026-2027 has been decided by the Minister on 30/03/2022
 - Elia facilitates, operates and contracts the CRM with key prerogatives at Energy Minister Cabinet, FPS Economy and CREG levels
- **Revenue:** The revenue is paid as of November 2026 is chosen by the candidate under:
 - A max of 20k€/MW/year (2022 Auction parameter) for the existing or projects without CREG approval for 3, 8 or 15 years capacity contract (without prejudice to the IPC derogation process)
 - A max of 75k€/MW/year (2022 Auction parameter) for the projects with CAPEX investments (CREG approval for up to 3, 8 or 15 years capacity contract)
- **Service:** The contracted CRM Capacities provider commits on an **Availability Service in the Market in counterparty of a fix payment** (on top of other revenues for it)
 - During Delivery Period (e.g. 2025/2026): **Availability** when the DAM prices are high → Trigger price (AMT) calibrated for 15 moments/y (could be 0 and max 30) (e.g. above 220€/MWh)
 - During Pre-delivery period: regular checks on the contracted projects evolution and sporadic checks for existing units
 - In both periods: monitoring, controls & tests are foreseen with penalties in case of missing capacity
- **A CRM contract is awarded in an Auction**, either 4 years in advance (Y-4) either 1 year in advance (Y-1) of the Service delivery period

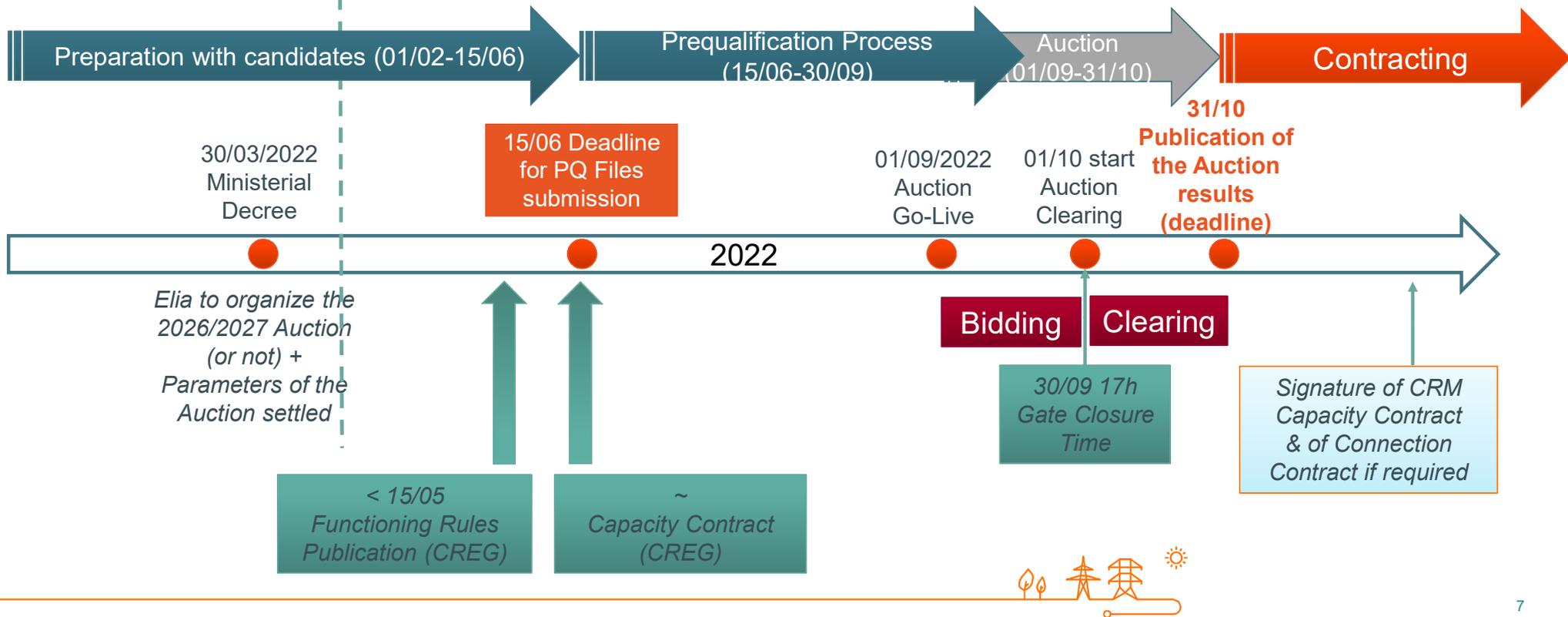
- Each year is decided (an) Auction(s)
- Each Auction has a limited volume
- Also, a Secondary Market will open in 2023

2021	2022	2023	2024	2025	2026	2027	...
			Auction Y-1 2025	Delivery Period 2025			
		Auction Y-4 2026		Auction Y-1 2026	Delivery Period 2026		
			Auction Y-4 2027		Auction Y-1 2027	Delivery Period 2027	
			Auction Y-4 2028			Auction Y-1 2028	Delivery Period 2028

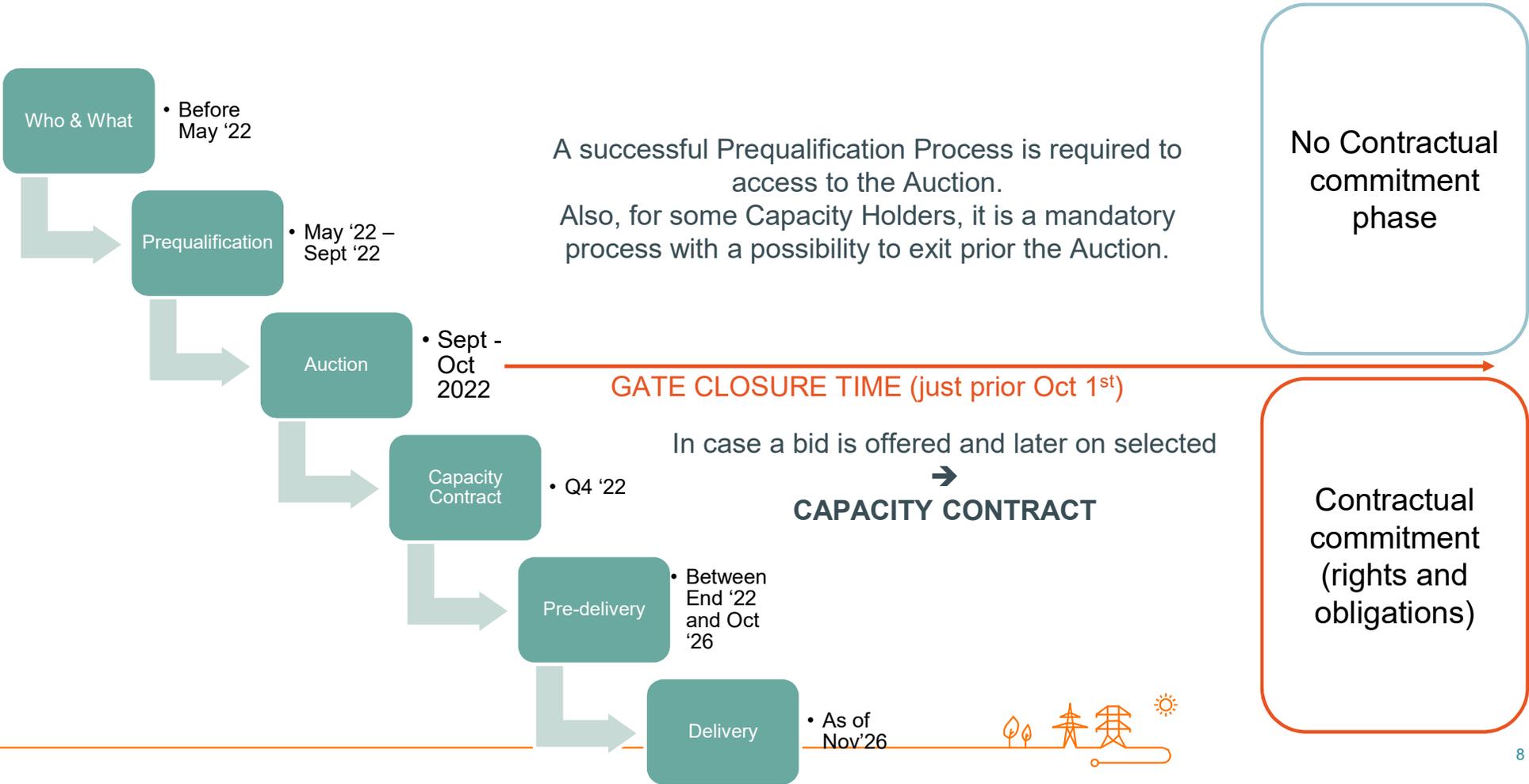
CRM - 2022 phases & processes

- By Law, there is a **mandatory prequalification for the production units > 1MW** (after derating) and not having variable subsidies.
- It is **never mandatory to submit bids** (processes)

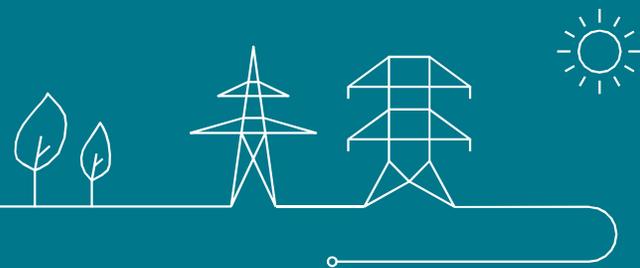
TODAY May '22



Introduction to the Capacity Remuneration Mechanism ('CRM')

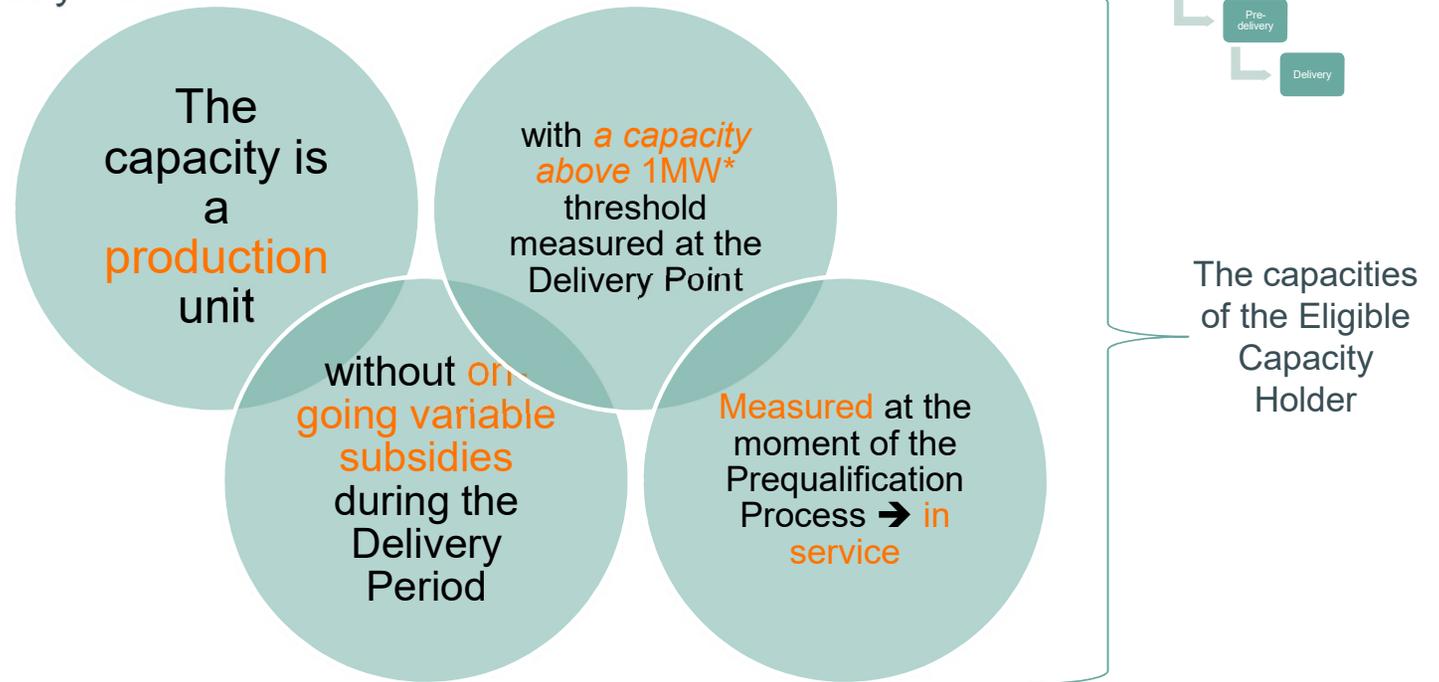


Who's participating



Who is participating to the CRM? (1/2)

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

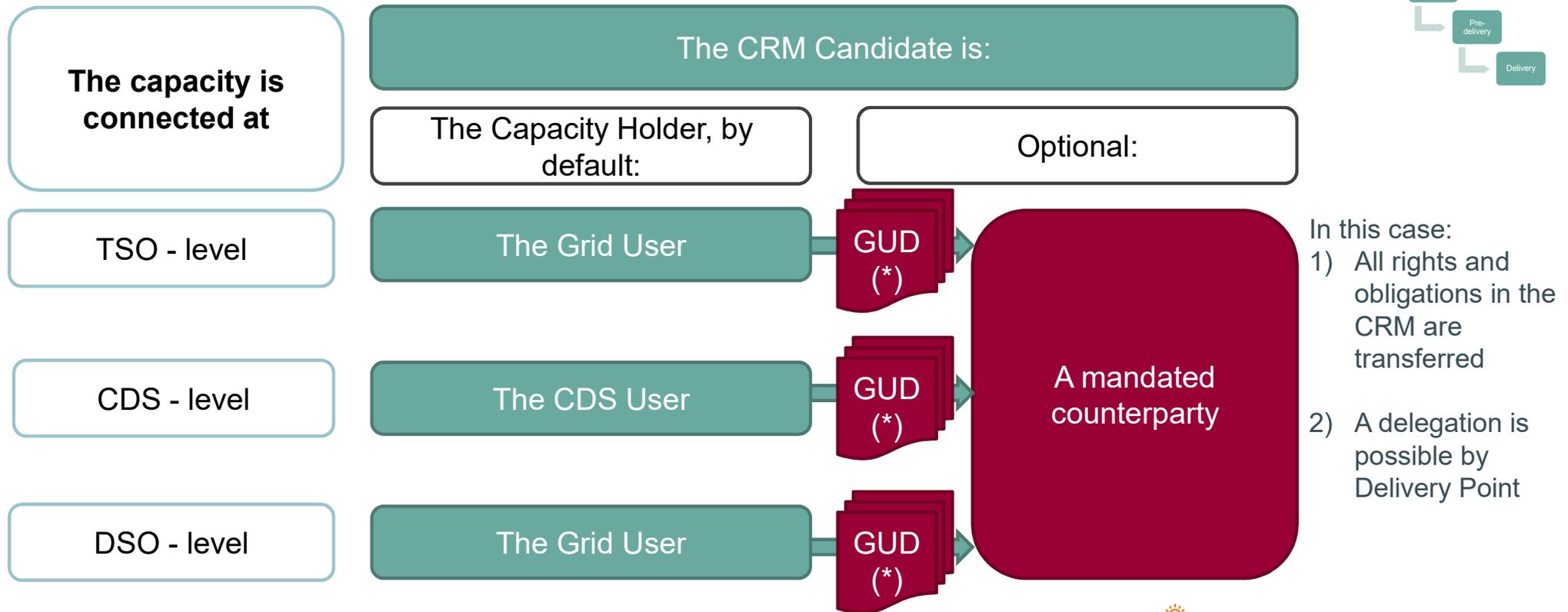
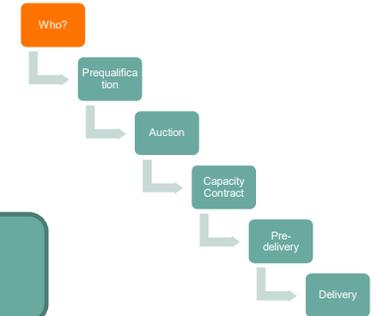


→ Others may **want** to prequalify for the CRM on purpose but have no obligation to do so



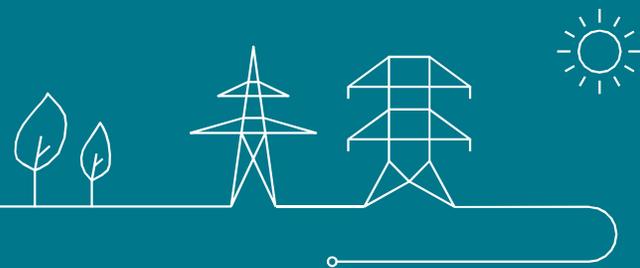
* Such threshold is to considered as after application of the derating factor – see slide 12

Who is participating to the CRM? (2/2)



* Grid User Declaration document to be signed (see back-up slides)

What's in it for me



Prequalification Process terminology: derating factors

All technologies may participate in the CRM Auction but each comes with its own added-value to the Security of Supply: **The derating factors of technologies**

- For the next Auction, the derating factors are not settled yet (31/03/2022)
- [Elia published a proposal](#) towards the Minister in December 2021

Energy Constrained categories are limited to a certain (chosen) number of hours by calendar days

- the Service is limited to max x hours in a row for each day of the Delivery Period
- CAT II, IV and V are non-Energy Constrained

Some examples:

- An OCGT of 100MW has a CRM Eligible Volume of $100 * 91\% = 91\text{MW}$ max
- A 2MW Cogen can choose between an EV of Cat V = 1,3MW or an SLA of 8h EV = 1,66MW max (becoming energy constrained if so)
- A 100 MW onshore wind park has an EV of 9MW max in the CRM

With daily schedule obligation is a production/storage capacity > 25MW and Elia connected

> 25MW

< 25MW

Category I : SLA	
Sub-Category	Derating Factor [%]
SLA-1h	26
SLA-2h	45
SLA-3h	60
SLA-4h	68
SLA-5h	73
SLA-6h	77
SLA-7h	80
SLA-8h	83
SLA-9h	85
SLA-10h	87
SLA-11h	88
SLA-12h	89
SLA unlimited	100
Category II : Thermal technologies with daily schedule	
Sub-Category	Derating Factor [%]
CCGT	92
OCGT	91
Turbojets	96
IC Gas Engines	95
IC Diesel Engines	93
CHP	93
Biomass	96
Waste	90
Category III : Energy-limited technologies with daily schedule	
Sub-Category	Derating Factor [%]
Storage 1h	31
Storage 2h	56
Storage 3h	65
Storage 4h	79
PSP	73
Category IV : Weather-dependent technologies	
Sub-Category	Derating Factor [%]
Offshore Wind	13
Onshore Wind	9
Solar	1
Hydro Run-of-River	41
Category V : Thermal technologies without daily schedule	
Sub-Category	Derating Factor [%]
Aggregated thermal technologies	65

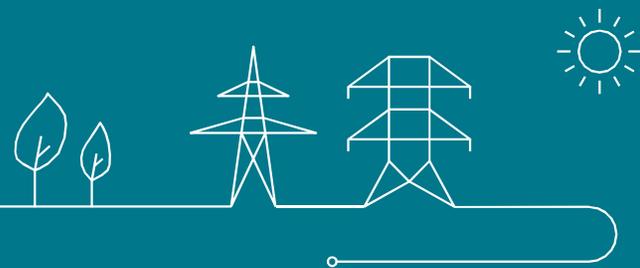
What's in it for me? (example)

→ ELIA can perform with you a review of your current assets and analyze the customer possibilities:

Capacity unit	Technology	measured MW	Production unit (Y/N)	Existing or Additional in May '22	Derated MW above 1MW	No Subsidies (Y/N) in 2026	Mandatory prequalification	Possible to prequalify if:	CMU has to be individual (1 ! DP)
COGEN ABC	Generation	20 MW	Y	Existing (Y)	Y (65%) → 13 MW	Y (no subsidies)	Yes if no subsidies		No
PV 1234	PV	0,5 MW	Y	Existing (Y)	N (1%) → < 1MW	Y (no subsidies)	No	Declare an abandon of variable subsidies in case of Auction success	No
Battery xyz	Battery Storage	1 MW	Y	Project (Y)	N	Y (no subsidies)	No	Yes in case of Aggregation with others	No



Prequalification Process



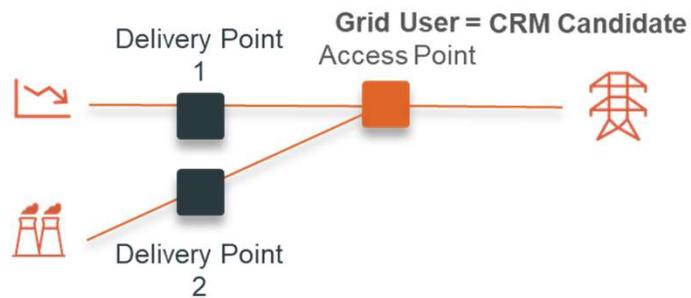
Prequalification Process terminology: Delivery Points

The Delivery Point ('DP') is the smallest granularity of the CMU ('Capacity Market Unit') which is the generic unit of the CRM



"A (future) point on an electricity grid or within electrical installations of a Grid User where the Service is or will be delivered..."

(Functioning Rules definition of "Delivery Point")



Could be either a Headmeter or a Submeter in conformity with standard set by Elia

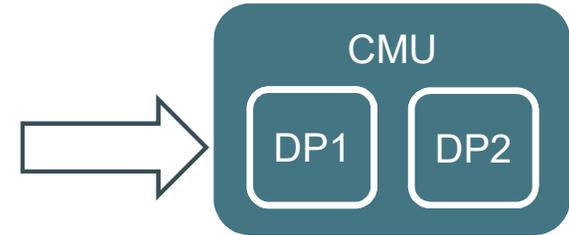
Different statuses:

- 'Existing' DP providing it meets:
 - Standard metering equipment
 - + All technical agreements
- 'Additional' DP: all other cases



Prequalification Process terminology:

A **CMU** ('Capacity Market Unit') is the CRM participation unit



Composition

- Individual CMU
 - = **One capacity** (DP)
- Aggregated CMU
 - = **Several** associated capacities (DPs)

Status

- The CMU is **Existing** if it contains solely Existing delivery points
- The CMU is **Additional** if it contains at least one Additional delivery Point
- The CMU is **Virtual ('VCMU')** if it contains no Delivery Points (yet)

Constraints

- The CMU has to be > 1MW derated
- A CMU with a Delivery Point under individual MW schedule(/CIPU) constitutes an individual CMU
 - → no aggregation is authorized
- One Delivery Point can't influence another one

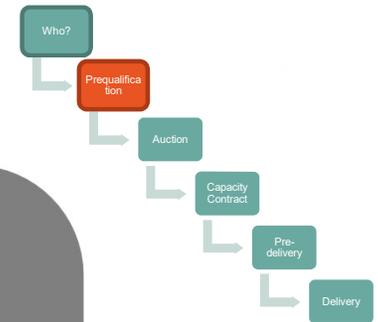
CRM Prequalification Process: objectives

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

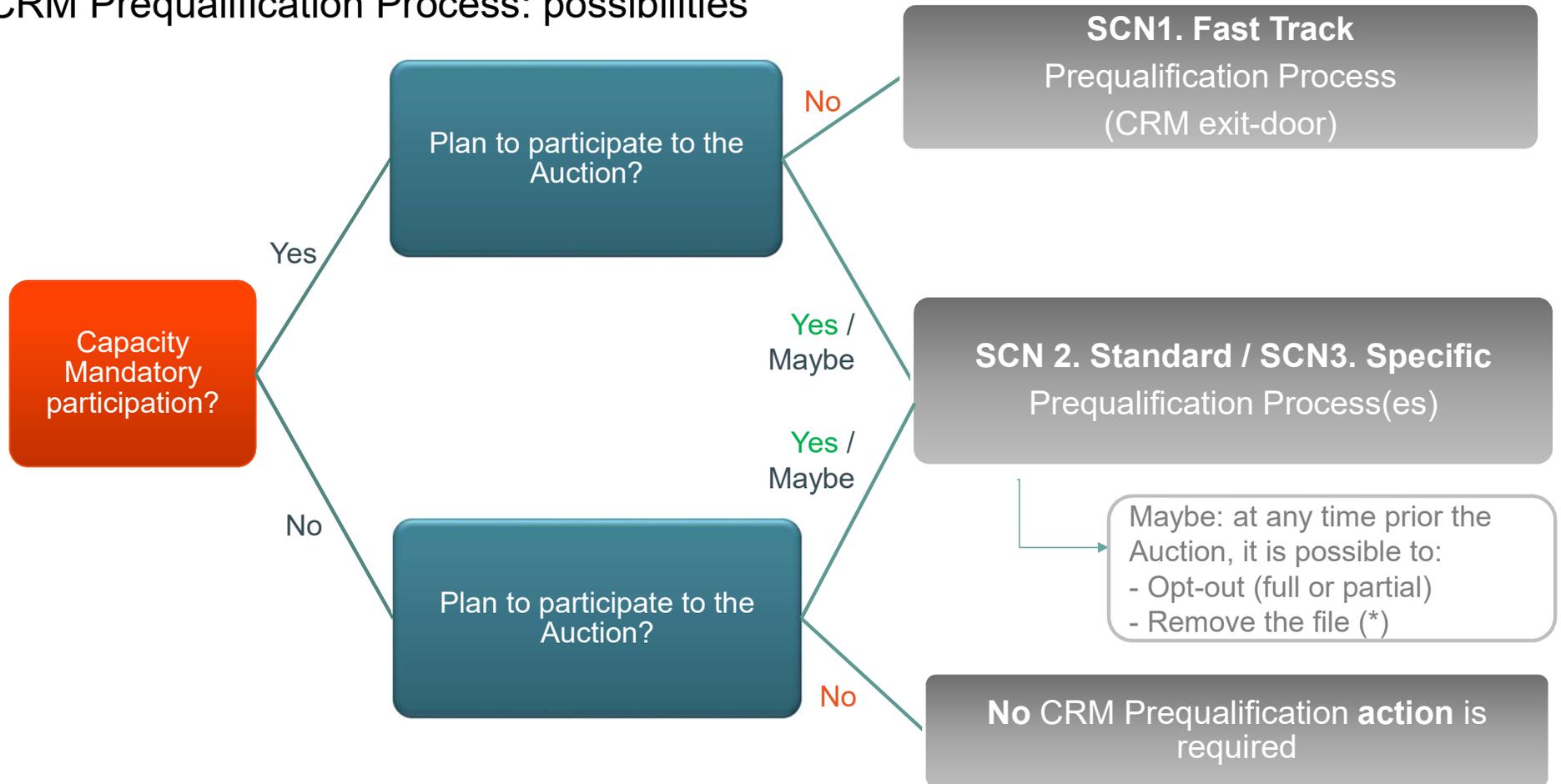
- Either by processing the adequate Prequalification process(es) until **the submission of an offer in the Auction**
 - Process standard, or
 - Process specific
- Or by processing a **Fast Track Prequalification process to exit**

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)

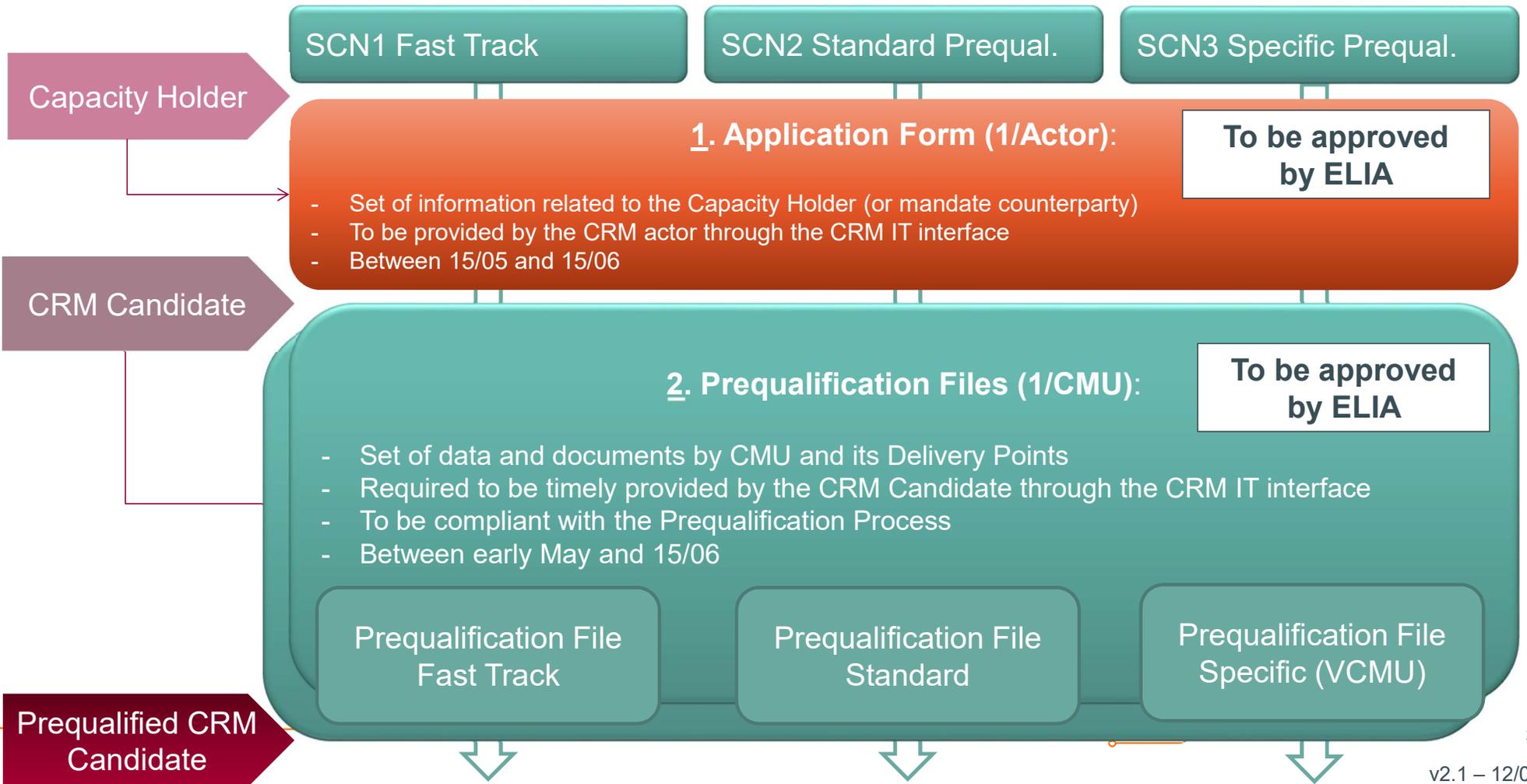


CRM Prequalification Process: possibilities



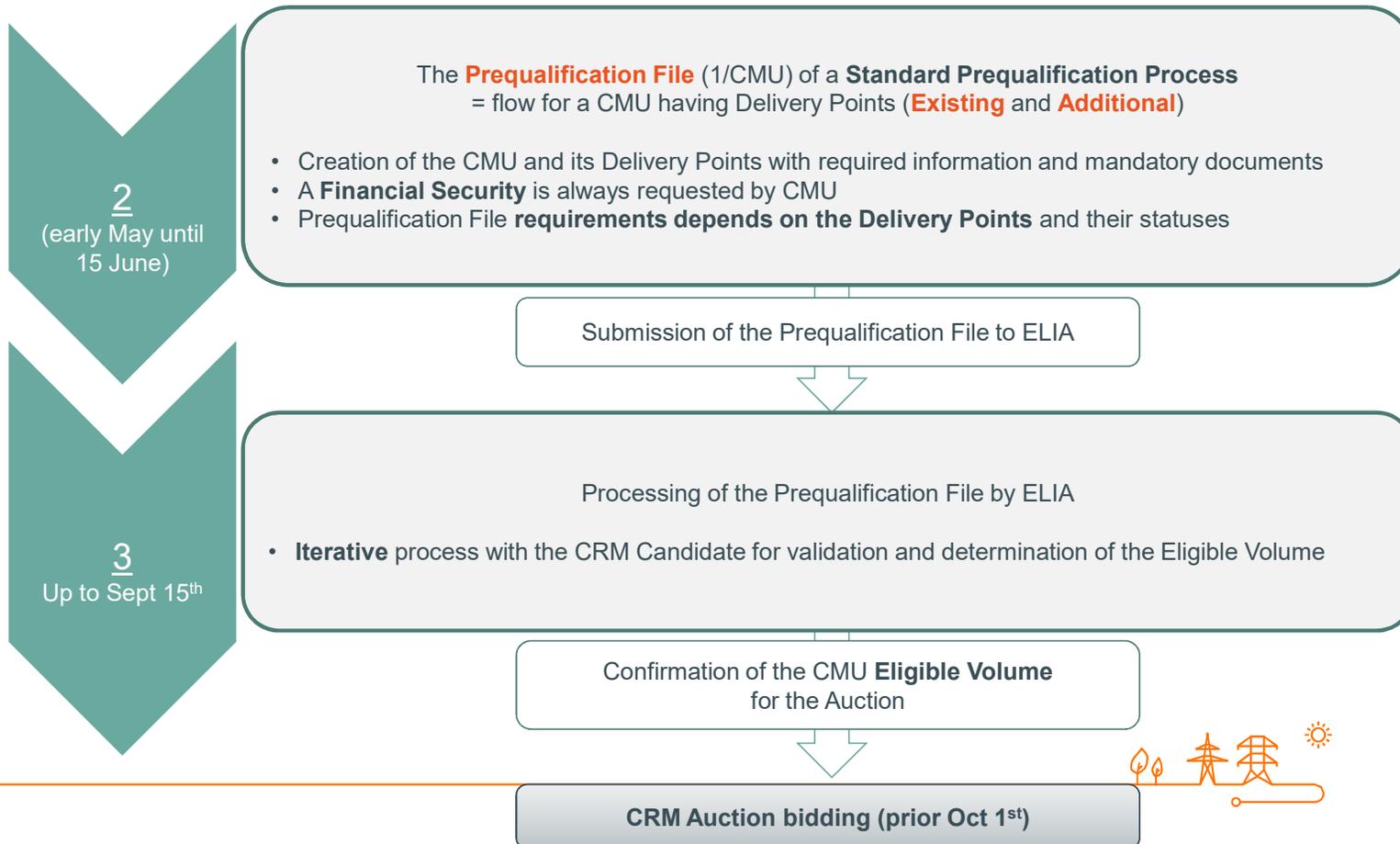
(*) Not recommended for the capacity holder with mandatory participation to comply with Law

Prequalification Process: Application Form & Prequalification Files



SCN 2. Standard Prequalification Process

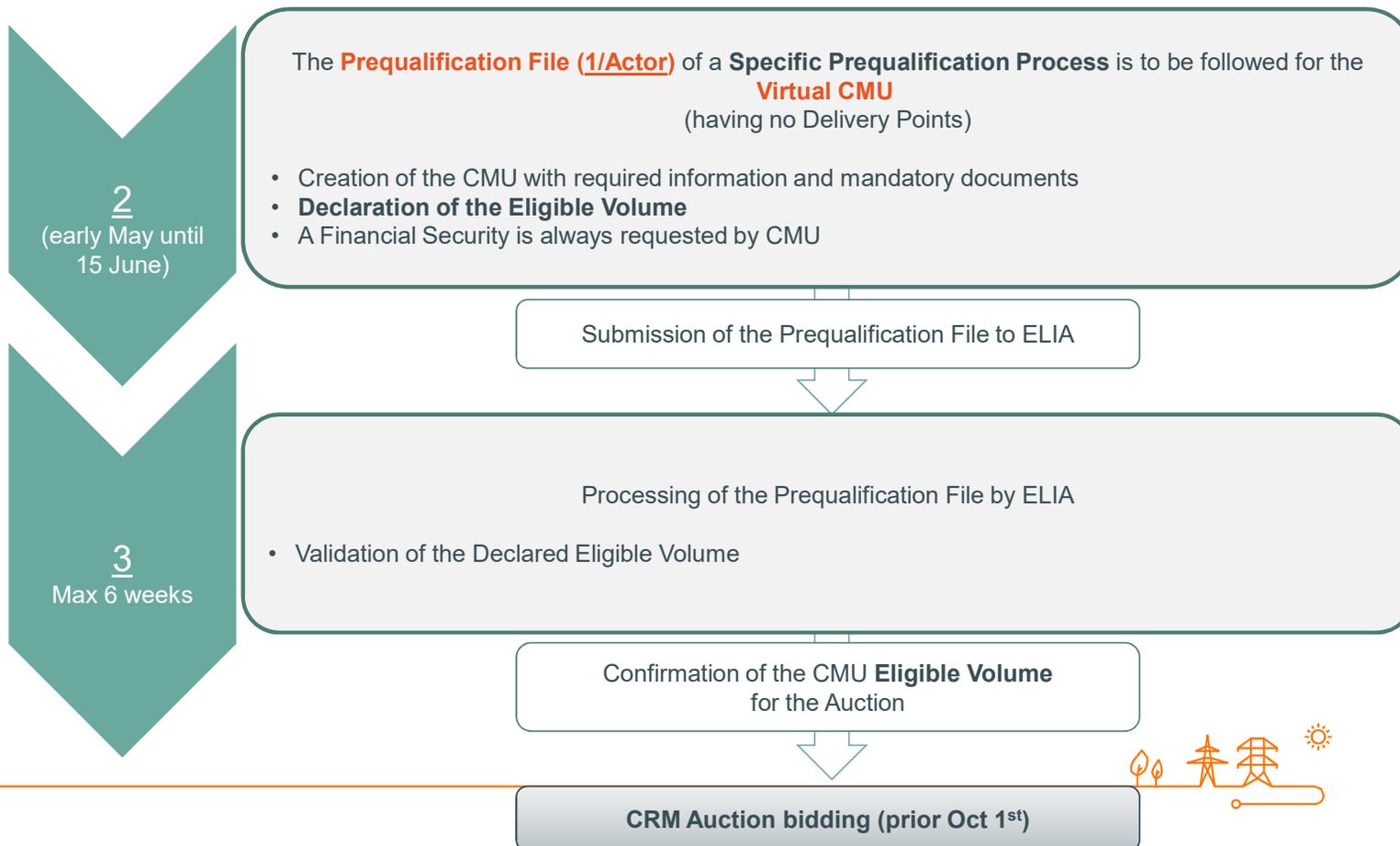
In this Framework, the CRM actor **has plan to offer** volume in the Auction **with determined Delivery Points**: operational **effort in function of CMU**



**A dedicated
Standard
Prequalification
Reference card
indicating the
steps to follow
is provided on
Elia website**

SCN3. Specific Prequalification Process for VIRTUAL CMU

In this Framework, the CRM actor **has plan to offer** volume in the Auction **with No Delivery Points (yet)**: operational **effort is very limited**



A maximum of 200 MW of Virtual CMUs shall be selected in the Y-4 Auction (parameter)

A dedicated Specific Prequalification Reference card indicating the steps to follow is provided on Elia website



CRM Prequalification - Key requirements to participate (according to Functioning Rules proposal & current framework)

The CRM financial support is only accessible through a successful selection in an Auction or Secondary Market for which a prequalification applies.

The prequalification process and data requirements are highly dependent on the capacity features but in all standard Prequalification files, it requires those 4 elements to reach the Auction:

- 1 - The respect of a **max CO2 thresholds** with official documents or attests
 - FPS Economy judges the pertinence of such data (Elia may only refer)

- 2 - The **refusal of cumul with other variable subsidies** (mainly the Green ones) on the Delivery Period (e.g. on 2026-2027) – conditional waiver template of the FPS Economy

- 3 - Financial security valid until approximately Oct/Nov 2027 (Auction '22): Each candidate to the Auction or Secondary Market provide a sufficient collateral for the CRM
 - Existing units: 10k€/ Eligible Volume MW
 - New units: up to 20k€ / Eligible Volume MW (11k€; 15k€ or 20k€/MW depending on the project phase)

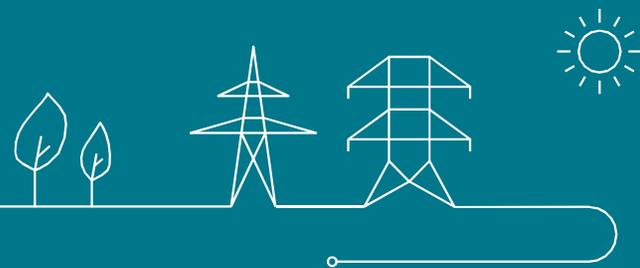
Bank Guarantee, a PCG (or affiliate guarantee) - Template to be followed and signed by a company with a sufficient Rating (S&P or Moodys).

This step may take time for a customer.

- 4 – The **regional Permit in the last administrative instance for the construction and/or exploitation** is to be provided in the prequalification file



CRM Auction



CRM Auction

→ 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
- 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 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

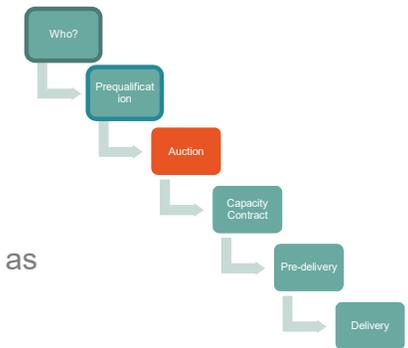
→ The selected offers are listed in a Capacity Contract under 'transactions'

→ Two Auctions are organized for each Delivery Period

→ Yearly Auctions are organized for the next Delivery Periods

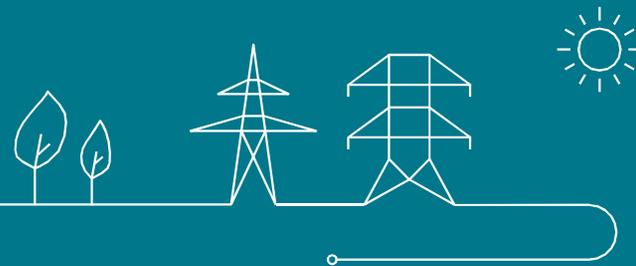
- A Y-4 Auction ('4 years ahead')
- A Y-1 Auction ('1 year ahead')

2021	2022	2023	2024	2025	2026	2027	...
Auction Y-4 2025			Auction Y-1 2025	Delivery Period 2025			
	Auction Y-4 2026			Auction Y-1 2026	Delivery Period 2026		
		Auction Y-4 2027			Auction Y-1 2027	Delivery Period 2027	
			Auction Y-4 2028			Auction Y-1 2028	Delivery Period 2028



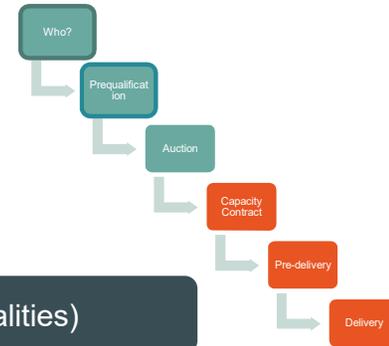
A dedicated Reference card indicating the Auction modalities is provided on Elia website

Capacity Contract



The Pre-Delivery and Delivery Period

→ Capacity Contract with Elia for the Service



Payments of the Transaction(s) after the month of Delivery Period 2026-2027 (settlement and invoicing modalities)



Contractual obligations (Service)

[Q4 '22 until Q3 '26]

As of Nov '26

Pre-delivery Period:

All contracted CMU become Existing CMU prior Nov'26.

Reports on capability for additional / virtual CMU each quarter.
Information on Work plan, permits, yards,
+ Availability tests for all CMU prior '26.

Penalties to pay in case of delays or missing capacities.

Availability Obligations:

As of Nov'26, the Delivery Points Availability in the Energy Markets is monitored.

Availability is to be considered in SoS and tests moments.

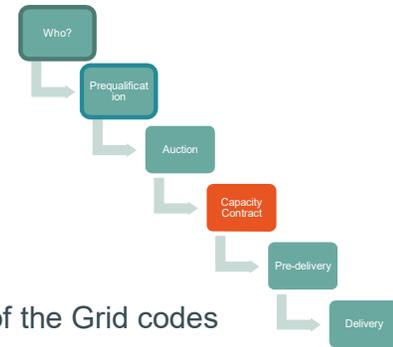
Penalties to pay in case of unavailable capacities.

Payback Obligations in the Delivery Period as of Nov '26:

If DAM Price > 300€/MWh and the asset is activated in the Market, the Capacity Provider reimburses the delta for its contracted capacity.

The Capacity Contract (proposal)

- Following a positive selection of the offers, 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 timelimits 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 2026)
 - And its respective Pre-Delivery period: between auction results and delivery period
- For the transactions (selected offers) listed in the contract Annex A
- 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-imbusement of undue market revenues).



Thank you !

