

#### **DISCLAIMER**



This document provides different **fictive examples**, so-called use cases, related to the Capacity Remuneration Mechanism being developed in Belgium. It has, as sole purpose, to explain the **Functioning Rules** and the functioning of the **CRM IT Interface** by means of examples.

The use cases developed in this document are based on the chapters **Prequalification Process** & **Auction Process** of the Functioning Rules of the Capacity Remuneration Mechanism published in **November 2020**.

By no means, the use cases replace the rules in the relevant Laws, Royal Decrees, and regulatory approved documents.

The choices in the examples are only made for **illustrative** purposes and do not imply any judgement. All the figures and numbers used for these use cases are purely fictive. These numbers nor the use cases presented should be interpreted as representing a concrete case or a concrete situation of the Belgian capacity market or an implied proposal for any CRM parameter. The **timings** and the dates represented in the use cases are **not realistic**.

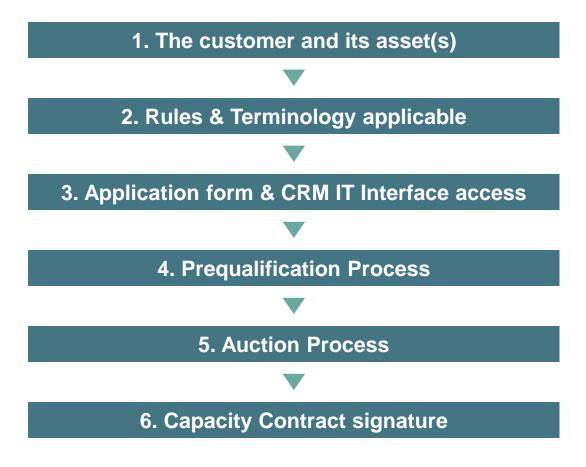
The **tool** is **still under construction**. Therefore, the wording used in the presented screenshots is not definitive (phrasing to review, errors in the use of capital letters, etc.) and some fields are still missing or erroneous. As announced in TF CRM of March 2, 2021, the submitted version of **Functioning Rules** is still being **challenged** by the CREG. This might also lead to minor changes in the Functioning Rules and therefore the CRM IT interface.

In addition to these theoretic use cases, the CRM Candidate is invited to train itself via the **demo platforms** where he will be able to develop tailored use cases in the prequalification **test** module and the auction test module.

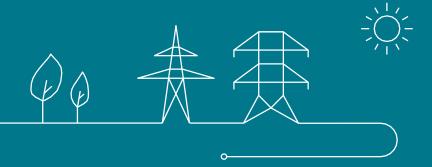
ELIA also also welcomes any feedbacks on the CRM IT Interface → customer.crm@elia.be

#### **USE CASE STRUCTURE**







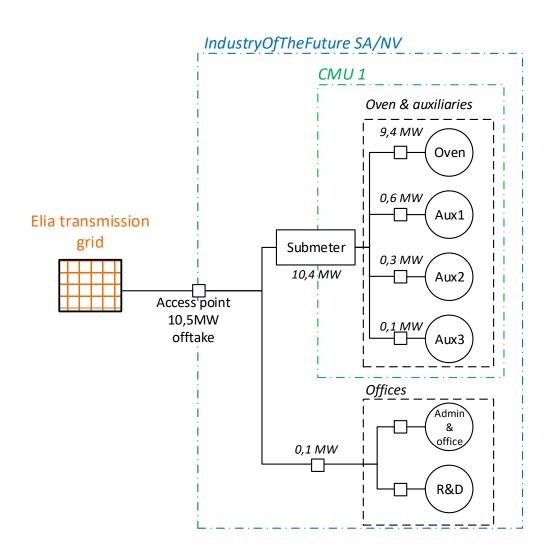




- IndustryOfTheFuture is a factory located in Belgium and connected to the TSO grid
- IndustryOfTheFuture is not the Grid User
- This factory is composed of a large oven & some melting equipment
- The oven and the melting equipment consume electricity
- The oven represents more than 80% of the consumption of the site and other related processes are highly dependent of its auxiliaries:
  - An estimate of 10MW on the 10,1MW usually consumed almost in baseload are expected to decrease in case of oven shutdown
  - The rest (10,1MW 10MW = 0,1MW) covers the R&D department, offices, site safety and other facilities
- IndustryOfTheFuture has no obligation to prequalify the factory (cf. article 7undecies §14 alinea 1er of the Electricity Act)
- IndustryOfTheFuture decides to prequalify an Existing CMU to participate in the 2021 Y-4 auction







	CMU1 – CMU-2V4Q5			
Company information:				
	Owner: IndustryOfTheFuture			
	Location: Belgium			
	Connection: TSO grid			
	Prequalification parameters:			
	Existing CMU1:			
CMU	Existing DP1			
	CMU1: Individual CMU			
Tachnology	Electrical load: Oven & melting process (main part of the load) + Offices			
Technology	Demand Side Management (DSM)			
Volumes	• CMU1:			
Volumes	Expected Nominal reference power of DP1: 10 MW			
Investment file	No investment file foreseen			
Auction parameters:				
Grid constraints	No grid constraints to be taken into account as the load is existing			
Auction	Participate to 2021 Y-4 Auction			
Contract duration	Contract duration: 1 year (no investment file submitted to CREG)			

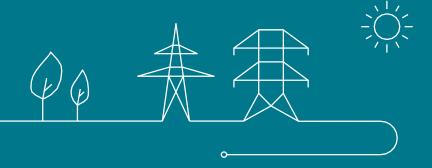


- The CMU is not subject to a Daily Schedule obligation (NRP of the Existing DP < 25 MW & TSO-connected)</li>
- The CMU is not an Energy Constrained CMU
- The CMU is not an aggregated CMU
  - → Category I
  - → Sub-category: **SLA unlimited (24h)**
  - → Derating Factor: 100%

Category I: SLA			
Sub-Category	Derating Factor [%]		
SLA-1h	11		
SLA-2h	19		
SLA-3h	28		
SLA-4h	36		
SLA-6h	52		
SLA-8h	65		
SLA unlimited	100		
Category II: Thermal technologies with	n daily schedule		
Sub-Category	Derating Factor [%]		
ссст	91		
OCGT	90		
Turbojets	96		
IC Gas Engines	95		
IC Diesel Engines	93		
CHP	93		
Biomass	93		
Waste	93		
Nuclear	96		
Coal	90		
Category III: Energy-limited technologies	with daily schedule		
Sub-Category	Derating Factor [%]		
Large-scale storage	11		
PSP	19		
Category IV: Weather-dependent t	echnologies		
Sub-Category	Derating Factor [%]		
Offshore Wind	15		
Onshore Wind	6		
Solar	4		
Hydro Run-of-River	34		
Category V: Thermal DSO- or CDS- connected technologies without daily schedule			
Sub-Category	Derating Factor [%]		
Aggregated thermal technologiesd	62		



# 2. Rules & Terminology applicable





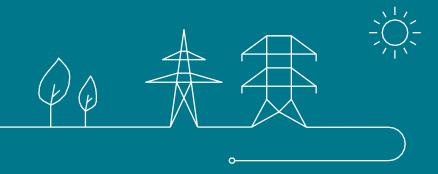


The reference document used by ELIA for the Use Case is the *Functioning Rules of the Capacity Remuneration Mechanism* published on 13/11/2020

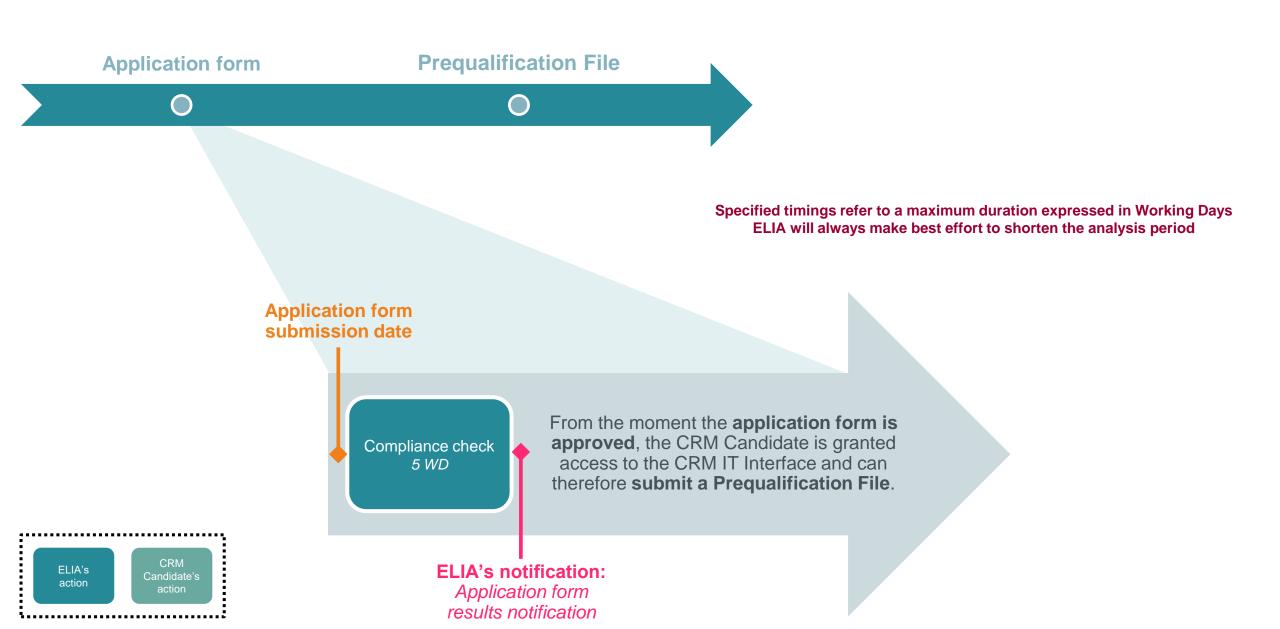
Prequalification Process	Financial Security	Auction Process	Capacity Contract signature
<ul> <li>Terminology: Chapter 3 &amp; section 5.2</li> <li>Eligibility conditions: Sections 5.3.1 &amp; 5.3.2</li> <li>Prequalification File requirements: Section 5.4.1.1</li> <li>Prequalification review process: Sections 5.5.1 &amp; 5.5.2</li> <li>Volumes determination: Sections 5.6.1.1, 5.6.2, 5.6.3 &amp; 5.6.4.1</li> <li>Prequalification results notification: Section 5.7.1</li> </ul>	• Financial Security: Chapter 10	<ul> <li>Bid: Section 6.3.1 &amp; 6.3.2.1</li> <li>Bid price: Section 6.3.2.1.1</li> <li>Bid volume: Section 6.3.2.1.2</li> <li>Capacity contract duration: Section 6.3.2.1.3</li> <li>Linked bids: Section 6.3.2.2</li> <li>Mutually exclusive bids: Section 6.3.2.1.3</li> <li>Mutually exclusive bids: Section 6.3.2.1.3</li> <li>Mutually exclusive bids: Section 6.3.1</li> </ul>	Capacity Contract signature:     Section 7.2.2



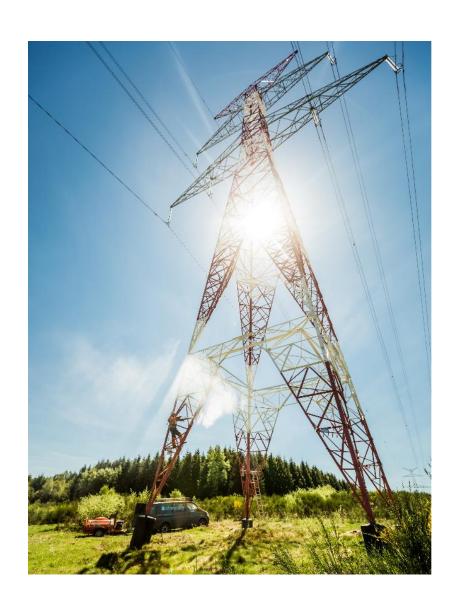
# 3. Application form & CRM IT Interface access











## Welcome to the access portal of ACC

TODO generic app description EN



Already have an account?

Sign in to AdeMar directly



No account yet?

Submit your information and get an account





1 Company information — 2 Bank details for invoicing — 3 Contact details		Company information — 2	Bank details for invoicing —	3 Contact details	Company information — 2 Ba	nk details for invoicing — (3) Contact details
STEP 1 Company information		STEP 2 Bank details for invoicing			STEP 3 Contact details	
COMPANY INFO Company name *	Legal Status *	You shall provide a company name and an at a different address than the one provide			CONTACT 1	^
IndustryOfTheFuture.SA/NA	•	Company Name *	Bank name *		Civil Stat Firstname *	Lastname *
Registration number *	Business number	IBAN *	SWIFT/BIC *	Currency *	Please choose a civil status Telephone	Mobile *
Energy Identification Code (EIC)				<b>*</b>		
Telephone Fax		Street		House Number	Language *	*
Email address *		Zip code City	Cour	ntry	Function *	
					Email *	
COMPANY ADDRESS  Street *  Zip code * City *	House number *  Country *					form, ELIA asks for the contact details of at least one of the one needed in case of investment file):
	•					
		← BACK		SUBMIT 🗸	☐ Investment file (for submission to reg ☐ Point of contact published on ELIA w	

Dear,

Your request was sent on 04/03/2021 15:19. We will now verify and validate it. This will take maximum 5 working days.



Dear,

Your Application Form has been approved. Please find your user ID and password below:

User ID: ISOEXT\CRM000001018

Password: 9dhnhSohJi3jNbySmNohqw==



## 3. Application form & CRM IT Interface access | Compliance checks



#### Compliance Checks



Please read and indicate your acknowledgment with the following legal documents before using this application.

You are allowed to go through the standard, the specific and/or the fast track Prequalification Process with your CMU(s)

#### Compliancy checks for participation to a fast track Pregualification Process:

#### Functioning Rules for fast track Prequalification Process

Acknowledgment of the Functioning Rules for the Capacity Remuneration Mechanism related to the fast track Pregualification Process

#### Compliancy checks for participation to a standard or a specific Prequalification Process:

#### Functioning Rules

- Acknowledgment of the Functioning Rules for the Capacity Remuneration Mechanism (this include the functioning rules related to the fast track.)

#### Capacity Contract

- Acknowledgment of the Capacity Contract conditions in case of Contracted Capacity for the forthcoming Auction

#### Eligibility criteria

- The compliance of each Delivery Point with the eligibility criteria, as defined in the Electricity Act (cr. Art 7 undercies \$4, 1\*, 2\* and 3\*) and ...

#### Production license requirements

- The compliance of each Delivery Point with an Existing status with the production license requirements as defined in article 4 of the Electricity Act

#### Maximal CO2 mission thresholds

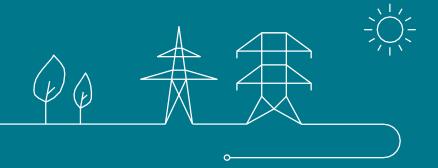
The compliance of each Delivery Point with an Existing status with the maximal CO2 emission thresholds set by the Regulation (EU) 2019/943

#### Legal and regulatory framework

The compliance of each Delivery Point with any other relevant legal and regulatory framework

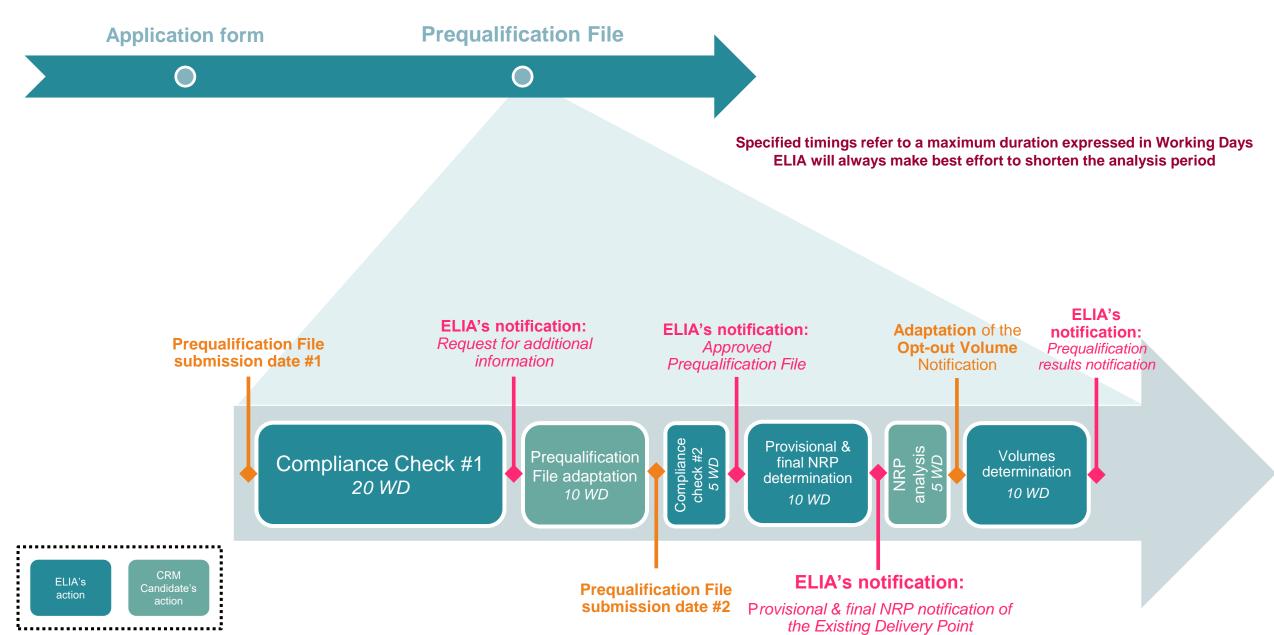


# 4. Prequalification Process



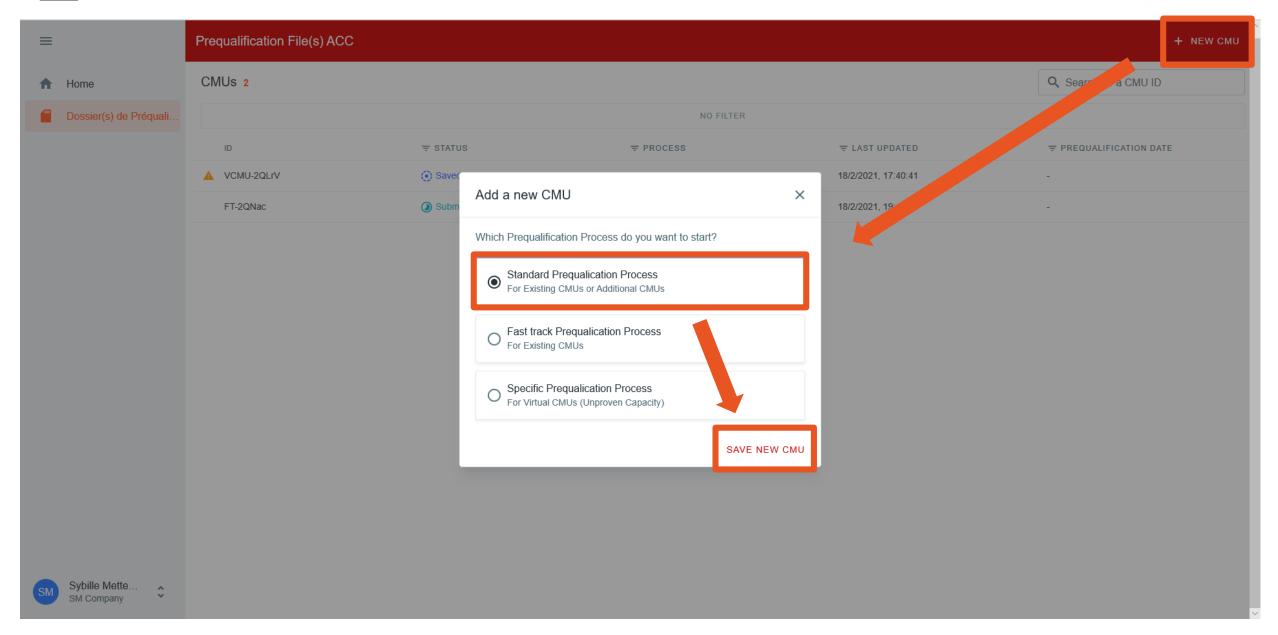


## 4. Prequalification Process | Timeline



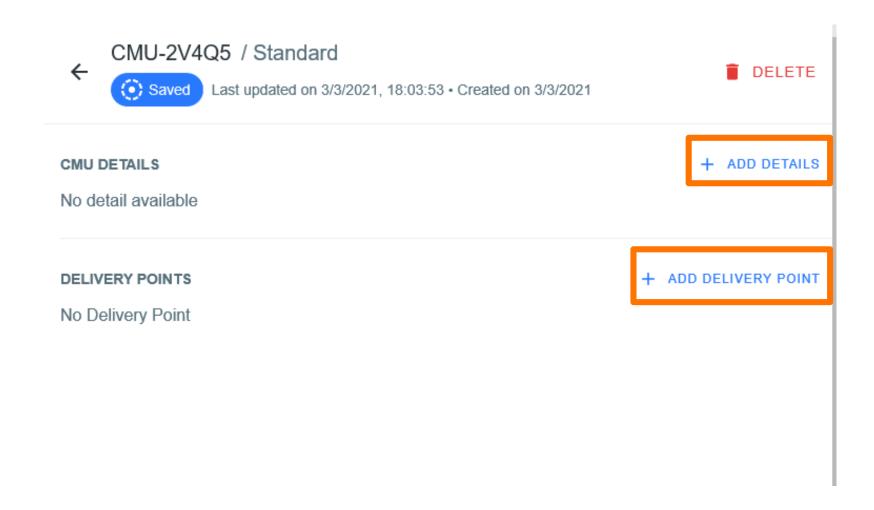


## 4. Prequalification Process | Prequalification File creation



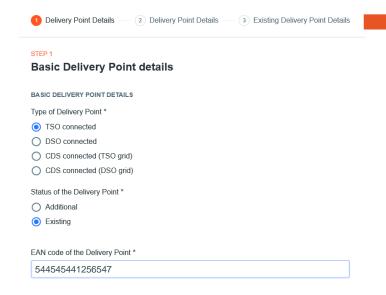


## 4. Prequalification Process | Prequalification File creation

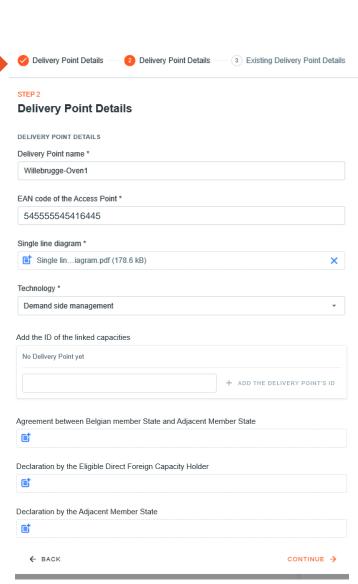


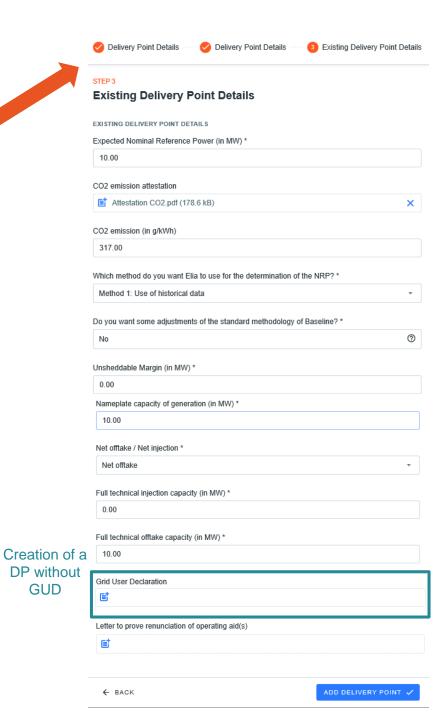


### 4. Prequalification Process | Delivery Point creation



NB: The access of the DP ID is still under construction in the CRM IT Interface. For this use case, we considered that the ID of the Delivery Point is « DP1 »





**GUD** 



## 4. Prequalification Process | Grid User Declaration

- As the CRM Candidate is not the Grid User, a Grid User Declaration is to be signed (annex A.6 of the Functionning Rules)
- The CRM Candidate signs this declaration before his Prequalification File submission date
- The declaration will include the information required for Prequalification File submission

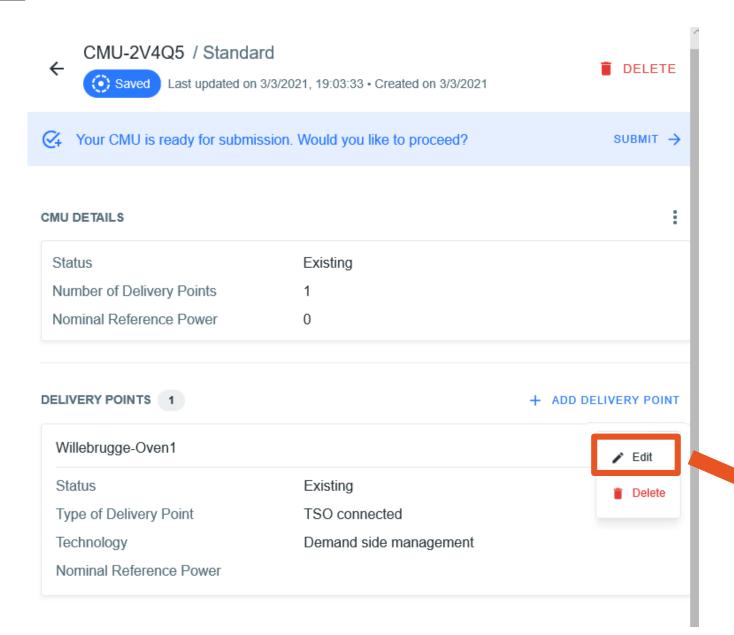
Delivery Point name	Delivery Point identification (EAN code if applicable)	CRM ID of the Delivery Point	Expected Nominal Reference Power (in MW)
Willebrugge-Oven1	544545441256547	DP1	300 MW

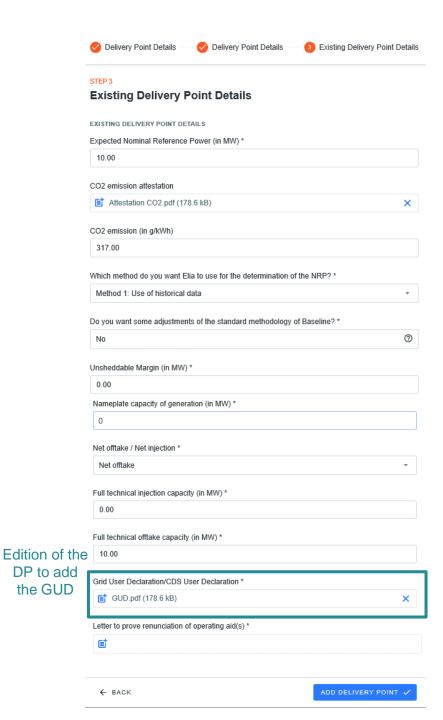
As the Delivery Point participates to a Prequalification Process for the first time, it is the CRM Candidate who provides the ID of the Delivery Point. To get this ID, the CRM Candidate creates and saves the concerned Delivery Point in the CRM IT Interface (cf. previous slide).

 NB: The access of the DP ID is still under construction in the CRM IT Interface (For this use case, we considered that the ID of the DP was « DP1 »)



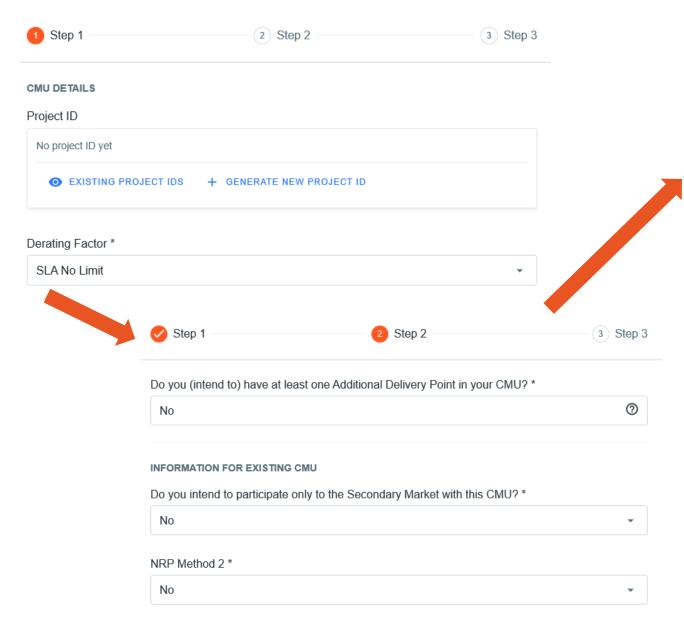
#### 4. Prequalification Process | Delivery Point edition







# 4. Prequalification Process | CMU creation



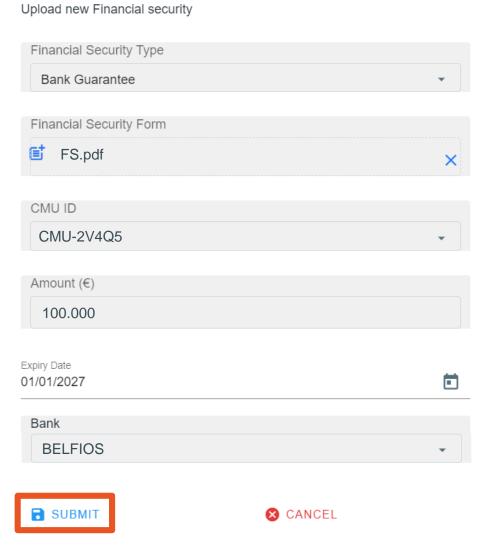
Step 1	Step 2	3 Step 3
OPT-OUT NOTIFICATION		
Delivery Period to which the Op	t-out Notification (for a Y-4 Auction) relat	es:
2025-2026		
Opt-out Volume (in MW) *		
0.00		
← BACK		SAVE 🗸



## 4. Prequalification Process | Financial Security submission

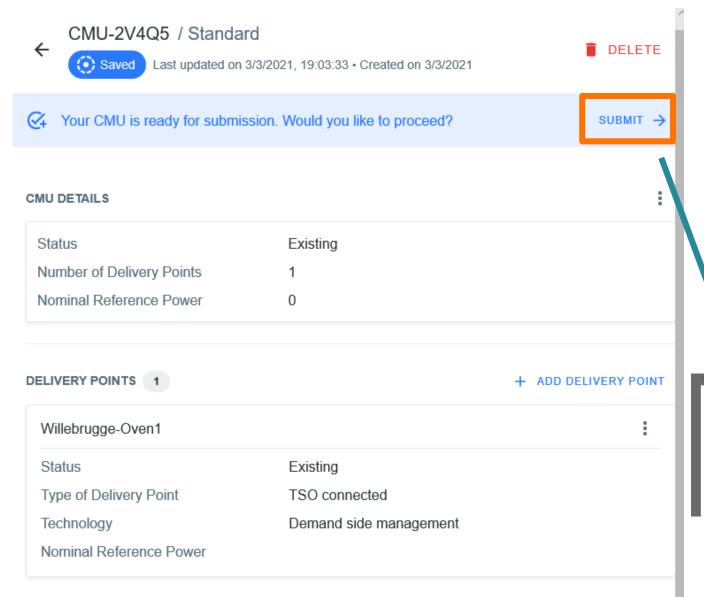
For ELIA to approve your Prequalification File, a Financial Security is to be submitted before the submission of the Prequalification File itself.

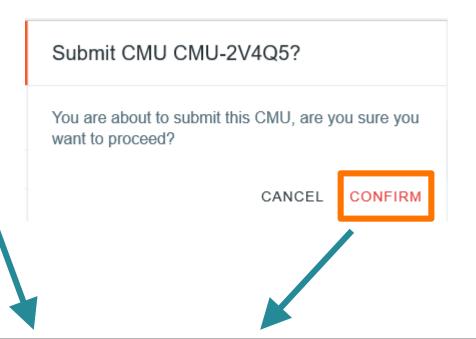
Secured amount = Required Level  $\times$  Financial Security Volume =  $10.000 \left(\frac{\text{EUR}}{MW}\right) \times 10MW \times 100\%$ = 100.000 EUR





## 4. Prequalification Process | Prequalification File submission





Dear,

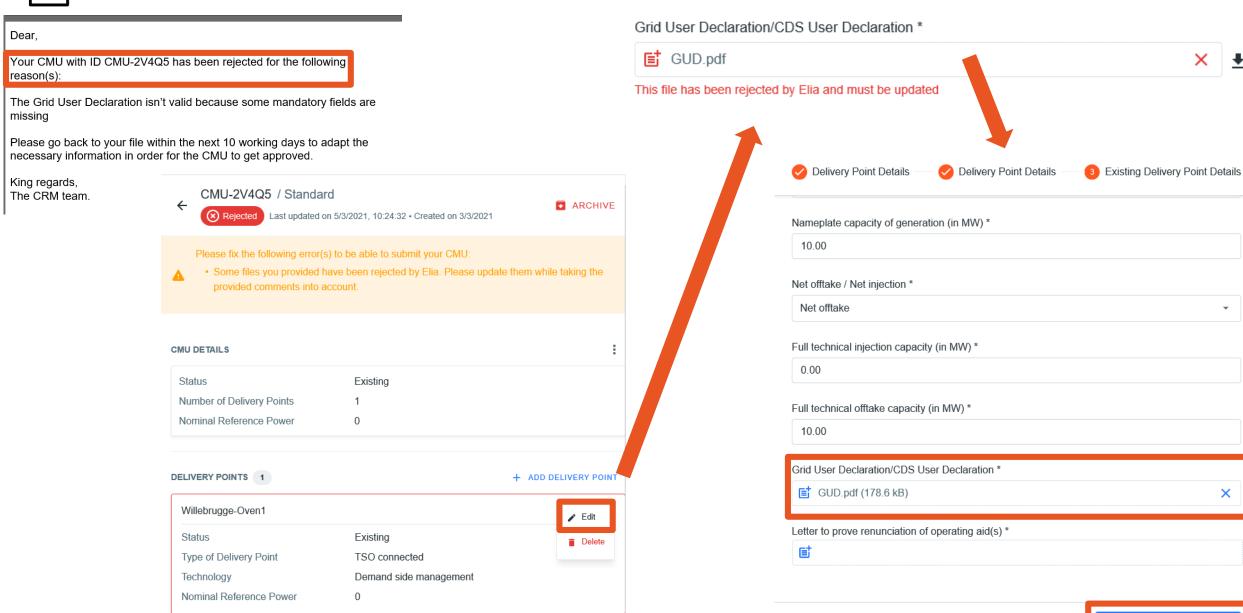
Your CMU with ID CMU-2V4Q5 has been submitted.

Elia will inform you within the next 20 working days whether the CMU is approved or rejected.



#### 4. Prequalification Process | Prequalification review process

The Grid User Declaration isn't valid because some mandatory fields are missing

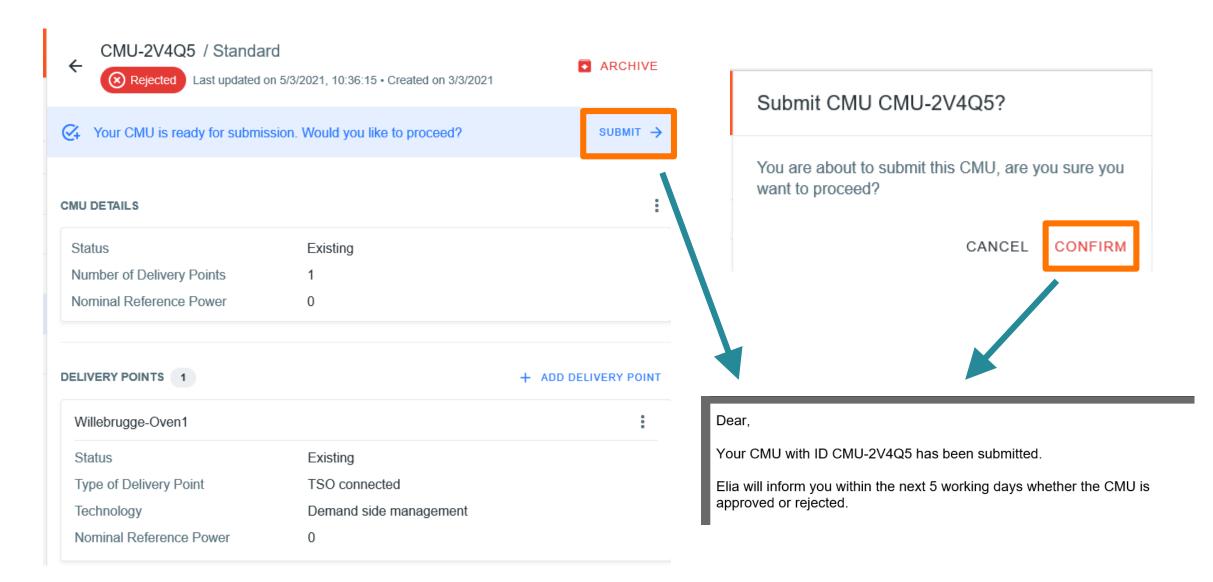


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**EDIT DELIVERY POINT** 



#### 4. Prequalification Process | Prequalification review process



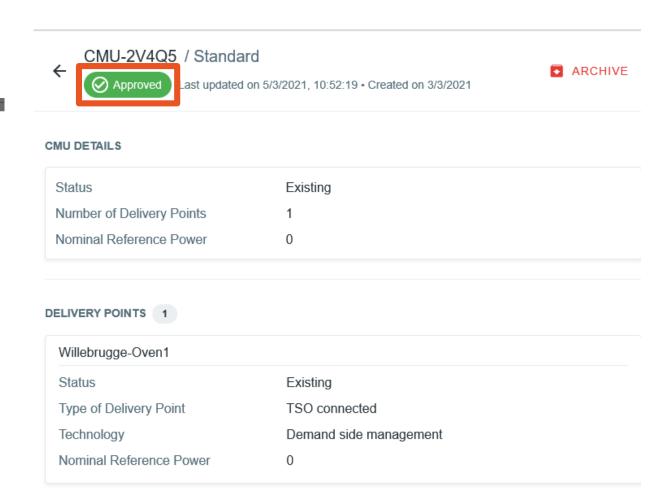
### 4. Prequalification Process | Prequalification review process

Dear,

Your CMU with ID CMU-2V4Q5 has been approved.

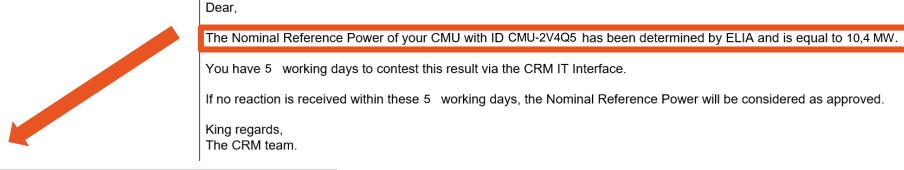
The process of Nominal Reference Power determination will now start.

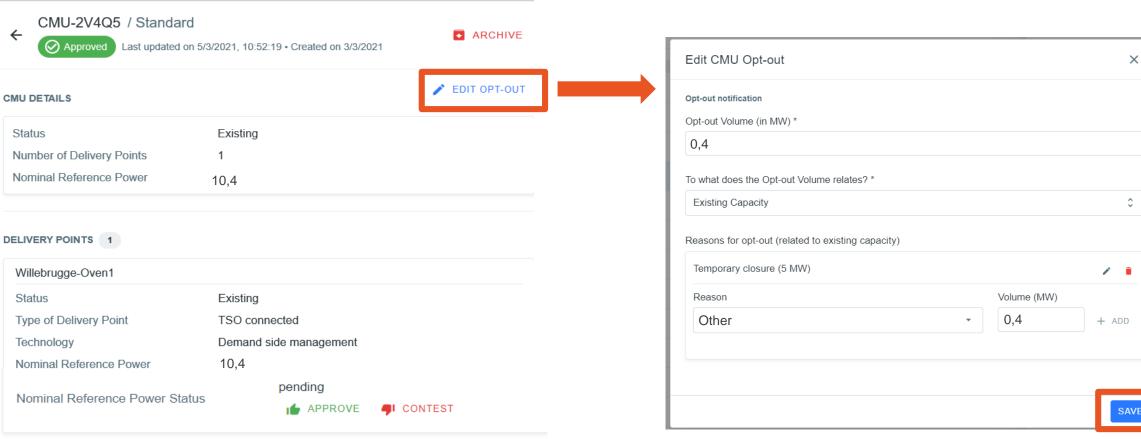
An e-mail will follow with the results of this determination within maximum 10 working days starting from this notification.





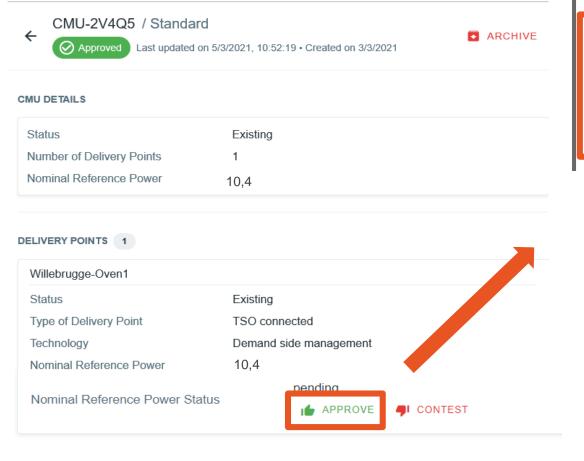
#### 4. Prequalification Process | NRP notification - Opt-out Notification adapatation







#### 4. Prequalification Process | Prequalification results notification



Dear,

Your Existing CMU with CMU ID CMU-2V4Q5 has been prequalified on 08/03/2021 22:37:57. It corresponds to your Prequalification File approval date.

Please find the prequalification results below:

Nominal Reference Power: 10,4 MW

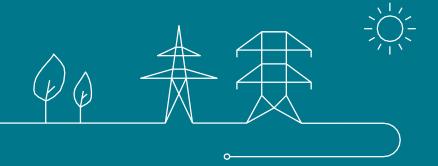
Reference Power: 10 MW

Opt-out Volume: 0,4 MW

Eligible Volume: 10 MW



## **5. Auction Process**





## 5. Auction | Bids rules relevant to the present use case<sup>2</sup>



		CMU 1	
Amount of bids		0 ≤ n <sub>bids</sub> ≤ 5	
Bid price		0 ≤ Price <sub>bid</sub> ≤ IPC¹	
Bid volume		■ 0 < Volume <sub>bid</sub> ≤ 10 MW	
		<ul> <li>At least 1 bid or 1 sum of non- mutually exclusive bids = 10 MW</li> </ul>	
Capacity Contract Duration		Duration <sub>bid</sub> = 1 year	
Bids relationship	Linked bids	<ul> <li>IndustryOfTheFuture has only prequalified 1 CMU</li> <li>No linked bids as no linked capacities validated by the prequalification process</li> </ul>	
	Mutually Exclusive bids	No restriction	

<sup>&</sup>lt;sup>1</sup>Intermediate Price Cap

<sup>&</sup>lt;sup>2</sup>Rules are defined in several sets of documents. Other conditions may be applicable even not developed here



#### 5. Auction | Bidding strategy

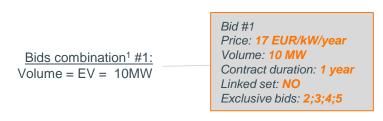


- IndustryOfTheFuture decides to offer the maximum of bids (5).
- IndustryOfTheFuture proposes the lowest price for the eligible volume (Bid N°1) among other bids.

Bid #2

IndustryOfTheFuture proposes different volumes (Bids N°2-5), because his factory is flexible. Lower is the proposed volume, higher is
the price. The bids are mutually exclusive.

#### IndustryOfTheFuture Bidding strategy:



Other bids

Other bids

Other bids

Other bids

Other bids

Contract duration: 1 year
Linked set: NO
Exclusive bids: 1;3;4;5

Bid #3
Price: 18 EUR/kW/year
Volume: 8 MW
Contract duration: 1 year
Linked set: NO
Exclusive bids: 1;2;4;5

Bid #4
Price: 18,5 EUR/kW/year
Volume: 7 MW
Contract duration: 1 year
Linked set: NO

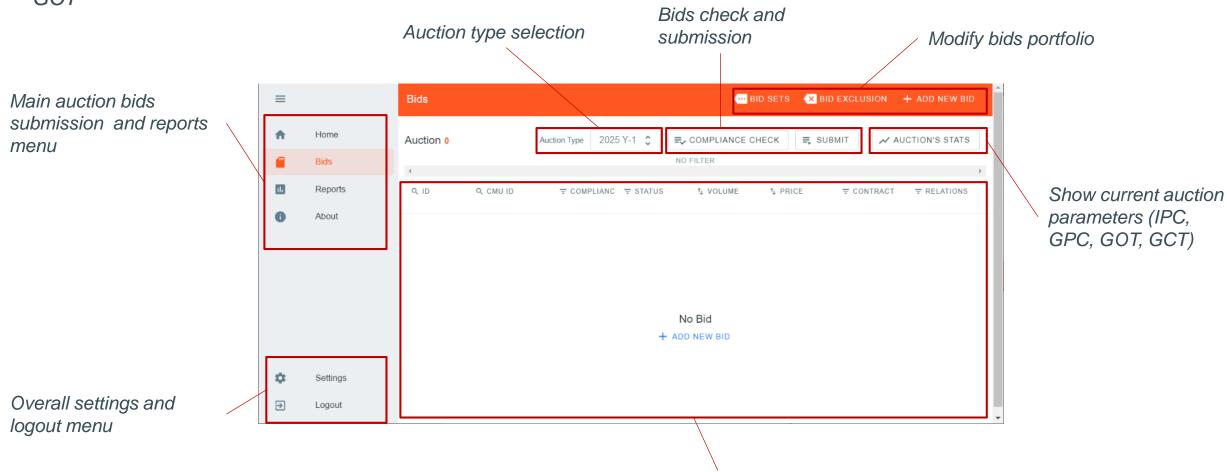
Exclusive bids: 1;2;3;5

Bid #5
Price: 19 EUR/kW/year
Volume: 6 MW
Contract duration: 1 year
Linked set: NO

Exclusive bids: 1;2;3;4

# 5. Auction | Bid submission User interface main screen

After successful login and prequalification, CRM candidate can access auction submission interface between GOT and GCT



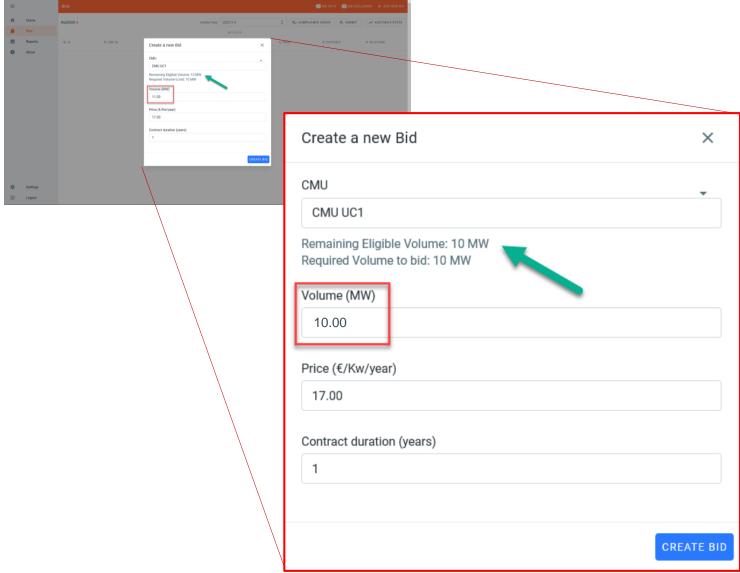
# 5. Auction | Bid submission Bid creation



- New bids can be added via the "Add new bid" menu
- Bid creation feature is accessible any time between GOT and GCT
- New bids need to be linked to successfully prequalified CMUs for the current auction







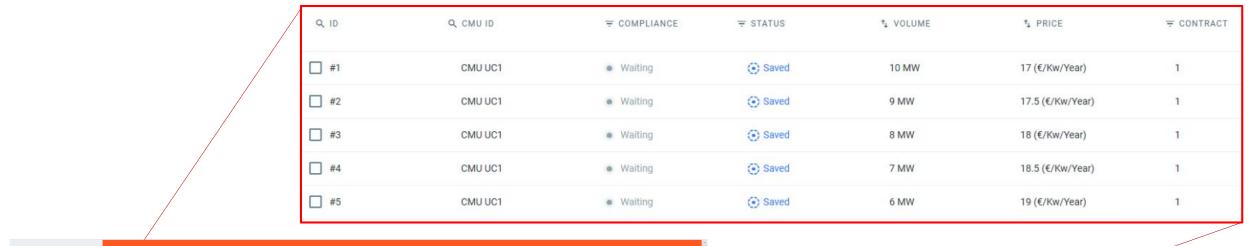


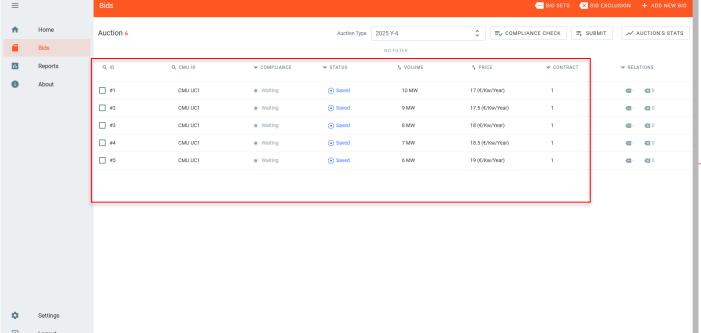
- User has to chose a CMU in drop list of prequalified CMUs belonging to the CRM candidate
- Required volume to bid is dynamically computed for information
- Remaining eligible volume based on previous auctions is provided for information
- No compliancy check is performed at bid creation stage
- "Create bid" leads to bid with status "Saved"



# **5. Auction | Bid submission** Overview of bids portfolio

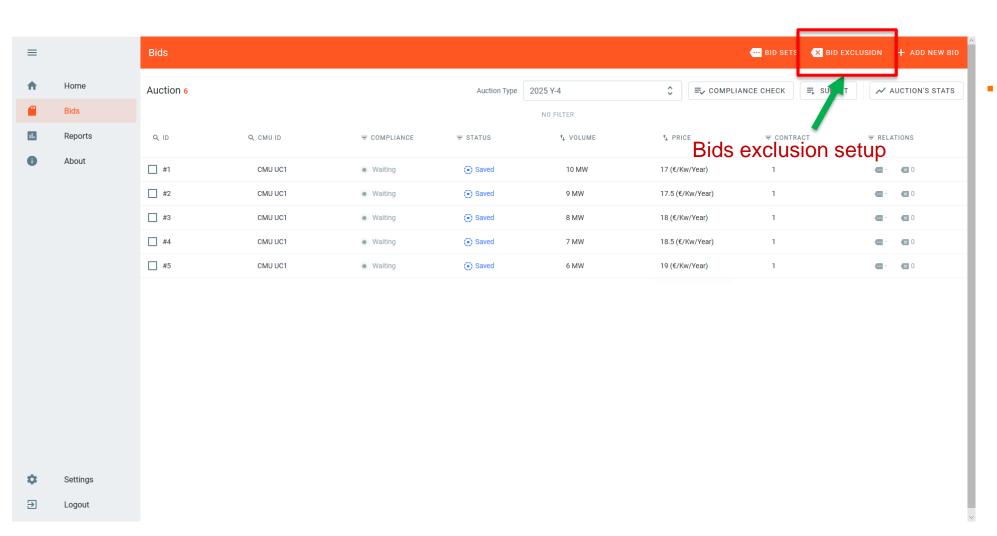










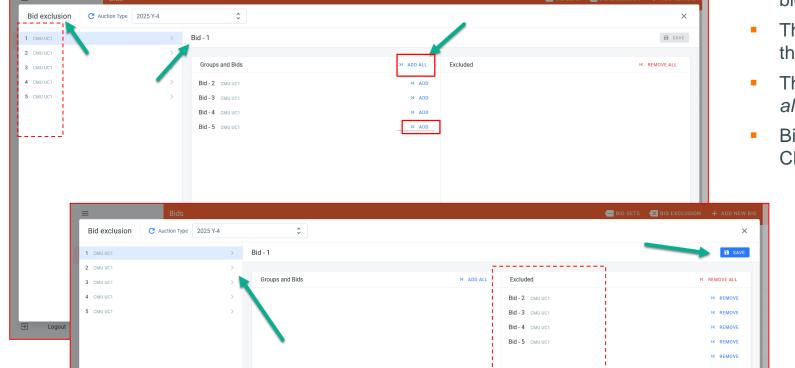


Bid exclusion menu may be used once the bids are created and visible in user dashboard



#### Create exclusive set of bids





- Bids #1 can be defined as being mutually exclusive with bids 2 to 5, appearing on the left side of the table
- The bid exclusion properties can be added to each of the bids
- The bid exclusion can be added one by one or with Add all button.
- Bids #1 is mutually exclusive with all bids related to CMU "CMU UC1"

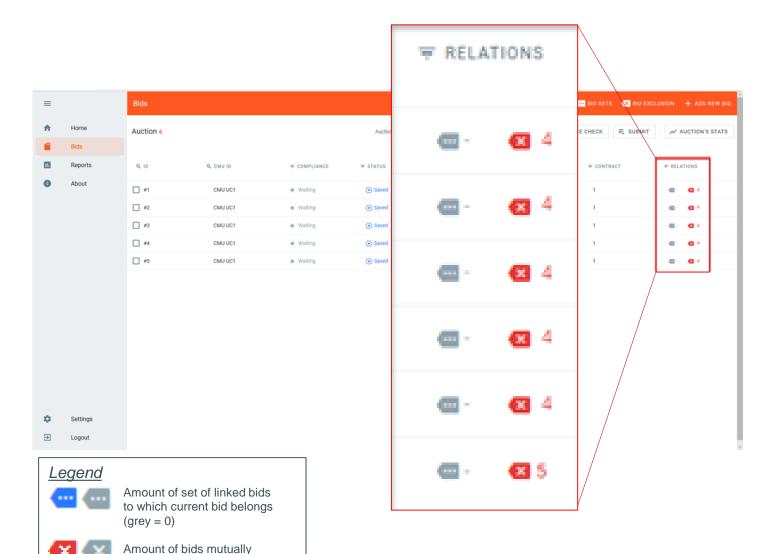


#### Create mutually exclusive bids

exclusive with current

(grey = 0)



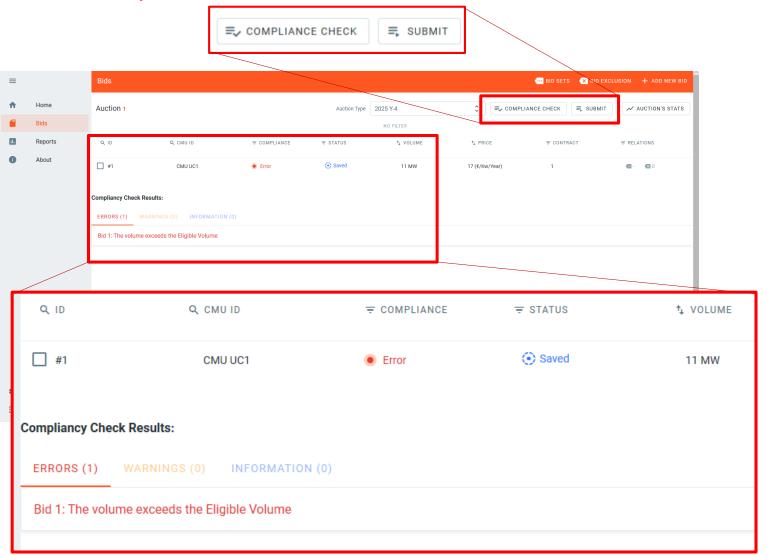


- Bids relationships overview is available in the main dashboard
- Amount of mutually exclusive bids for each bid is visible
- Amount linked bids in each set is visible, in this case, none
- In this Use case, all bids are exclusive with 4 others



#### Compliance check

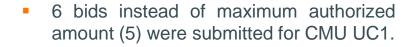


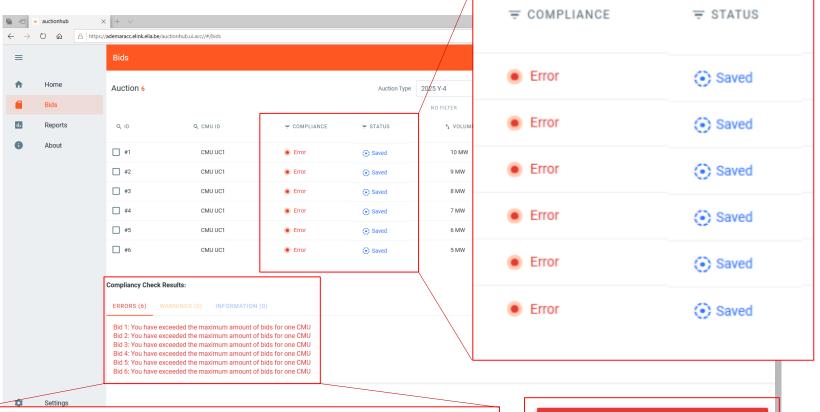


- "Compliance check" of "Submit" triggers a check on data provided by the user against FR and prequalified data.
- Any error or warning is sent to user via the error log ("Compliancy check results")
- In this use case, the Eligible volume is 10 MW → 0 < Volume<sub>bid</sub> ≤ 10 MW → bid #1 is non compliant
- Bid #1 stays in status "saved" as long as the user has not solved the error.
- Bid #1 cannot be submitted as long as the error has not been solved.









ERRORS (6) WARNINGS (0) INFORMATION (0)

Bid 1: You have exceeded the maximum amount of bids for one CMU

Bid 2: You have exceeded the maximum amount of bids for one CMU

Bid 3: You have exceeded the maximum amount of bids for one CMU

Bid 4: You have exceeded the maximum amount of bids for one CMU

Bid 5: You have exceeded the maximum amount of bids for one CMU

Bid 6: You have exceeded the maximum amount of bids for one CMU

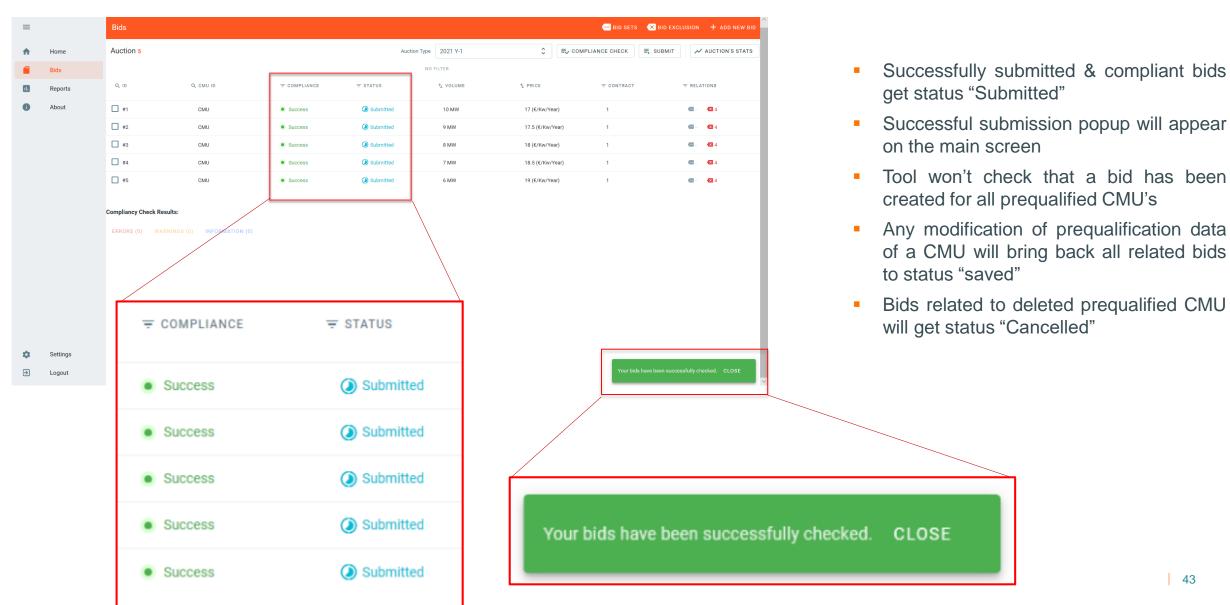
An error occurred when checking your bids. Please consult the error log CLOSE

An error occurred when checking your bids. Please consult the error log CLOSE



#### Submit bids

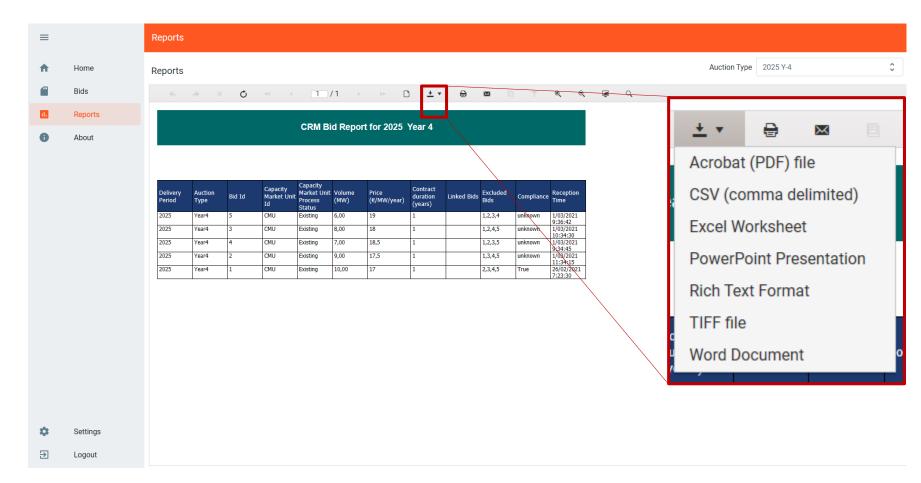






#### Bidding session auction report





- Every user may generate bidding report for internal use
- Bidding report gathers all bids and related information created by CRM candidate (all bids statuses are reported)
- Report may be printed, exported or send
- Report format may be exported on a tailored format to meet user's preferences





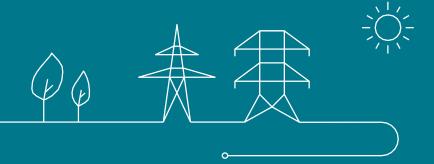
Bid #1
Price: 17 EUR/kW/year
Volume: 10 MW
Contract duration: 1 year
Linked set: NO
Exclusive bids: 2;3;4;5

Auction results			
Selected bids			
	Selected Bid volumes	10 MW	
	Related Price	17€/kW/year	
	Capacity contract duration	1 year	
CMI	J Remaining Eligible Volume	0 MW¹	
Issu	ance date of the 1st quarterly report	/	

- Bid 1 is selected in the Auction after global optimization
- Result validation according to modalities set in Royal Decree Control
- Result communication to IndustryOfFuture at latest 31/10/2021



# 6. Capacity Contract signature





## 6. Capacity Contract signature



- To officially become a Capacity Provider, IndustryOfTheFuture shall sign the Capacity Contract
- Once the Capacity Contract is signed, IndustryOfTheFuture enters the Pre-delivery Period

