# **Pre-delivery Use Case 3**

Unproven Capacity project



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 its annexes by means of examples.

Given that the CRM process consists of several steps, and for each of these steps, several layers of information and details are relevant, it is to be understood that this document focuses on most pertinent <u>pre-delivery aspects</u>.

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 use cases developed in this document are based on the chapter *Pre-delivery Control* of the Functioning Rules as known at the moment of writing and shared with market parties on 28/08/2020. It also obviously follows the context set by the Electricity Law.

# **USE CASE STRUCTURE**

 $\odot$ 

\$

~⊐ ×=

~\_\_ ~\_

• 1. Terminology related to pre-delivery control & financial securities

- 2. Prequalified CRM Candidate and his related CMU(s)
- 3. Results of the Auction
- 4. Process to become an Existing CMU
- 5. Pre-delivery Control for Virtual CMU
- 6. Pre-delivery Control for Existing CMU

### • 1. Terminology related to pre-delivery control & financial securities

• 2. Prequalified CRM Candidate and his related CMU(s)

• 3. Results of the Auction

 $\bigcirc$ 

Ś

 $\rangle\rangle\rangle$ 

- 4. Process to become an Existing CMU
- 5. Pre-delivery Control for Virtual CMU
- 6. Pre-delivery Control for Existing CMU

# 1. Terminology related to pre-delivery control & Financial Security



#### **Definitions from the Functioning Rules:**

- Financial Security: The security provided to cover a CMU's obligations during one or more Validity Period(s) in the form of a bank guarantee, a parent company guarantee or a cash payment.
- Financial Security Volume: The volume (in MW) to be secured by a permissible type of Financial Security as determined pursuant to section 10.4.2 (of the Functioning Rules), associated to a CMU and at a moment t that is part of one (or more) Validity Period(s).
- **Missing Volume**: The volume of a CMU considered as non-available as a result of one of the pre-delivery controls.
- Pre-delivery Measured Power: The capacity measured during a pre-delivery control and associated to an Existing Delivery Point.
- **Pre-delivery Obligation** : The capacity for a CMU that a Capacity Provider is obliged to make available during a pre-delivery control.
- Required Level: The level (in EUR/MW) to be secured by a permissible type of Financial Security pursuant to section 10.4.1 (of the Functioning Rules) associated to a CMU and at a moment t that is part of one (or more) Validity Period(s).
- Secured Amount: The amount (in EUR) to be secured by a permissible type of Financial Security pursuant to section 10.4., associated to a CMU and at a moment t that is part of one (or more) Validity Period(s).
- Transaction: An agreement about the contractual rights and obligations resulting from the Service, closed in the form of a Capacity Contract between a Capacity Provider and the Contractual Counterparty, in the Primary Market or the Secondary Market at a Transaction Date, identified by a transaction identification number, for a Contracted Capacity and covering a Transaction Period.
- Transaction Validation Date: For a Transaction on the Primary Market, the date and time at which the results of the related Auction are published (after validation by the CREG). For a Transaction on the Secondary Market, the date and time at which it is validated by the Contractual Counterparty.
- Validity Period: The period of time for which a permissible type of Financial Security is to be provided by a (Prequalified) CRM Candidate or a Capacity Provider, as a condition to make a Transaction on the Primary Market or the Secondary Market.



• 2. Prequalified CRM Candidate and his related CMU(s)

• 3. Results of the Auction

\_\_L

 $\bigcirc$ 

Ś

 $\rangle\rangle\rangle$ 

- 4. Process to become an Exiting CMU
- 5. Pre-delivery Control for Virtual CMU
- 6. Pre-delivery Control for Existing CMU

# 2. Prequalified CRM Candidate and his related CMU(s)



**RollingEnergy.SA/NV** intends to offer **50 MW** in 2021 for the Y-4 Auction associated to the Delivery Period 2025-206.

Those 50MW have **no Delivery Point** yet but RollingEnergy.SA/NV is looking for industrials who might want to get more revenues from their processes by participating via RollingEnergy.SA/NV pool into the CRM.

As those industrials are not yet identified, it's not possible to identify their Delivery Points neither, which means that RollingEnergy intends to prequalify 50 MW of Unproven Capacity.

This Capacity can potentially become a Virtual CMU if successfully prequalified







- The CMU has not made a Transaction yet, so no Financial Security has been submitted so far
- The Secured Amount is calculated by multiplying the Required Level (EUR/MW) by the Financial Security Volume:
  - As it is an Unproven CMU, the **Required Level** = EUR 20,000/MW.
  - The evolution of the **Financial Security Volume** is presented in the table below.

	Financial Security Volume	Secured Amount
At Prequalification File submission	Eligible Volume = Declared Eligible Volume = 50 MW	EUR 20.000/MW x 50 MW = EUR 1.000.000
After the Prequalification Process	Eligible Volume = Declared Eligible Volume = 50 MW	EUR 20.000/MW x 50 MW = EUR 1.000.000



- The Financial Security Volume is calculated **as the maximum Total Contracted Capacity in the forthcoming Delivery Periods**. As it is the CMU's first Transaction, maximum TCC is only determined by this Transaction.
- During the Prequalification Process, the maximum Total Contracted Capacity is calculated on the assumption that the full prequalified volume is selected in the Auction.



The Eligible Volume does not change, so the Financial Security Volume is not updated.



• 2. Prequalified CRM Candidate and his related CMU(s)

• 3. Results of the Auction

 $\bigcirc$ 

Ś

 $\rangle\rangle\rangle$ 

• 4. Process to become an Existing CMU

• 5. Pre-delivery Control for Virtual CMU

• 6. Pre-delivery Control for Existing CMU





The Capacity Provider participated to the Y-4 Auction in October 2021.

The results of the Auction are detailed below:

Auction r	related to the same	
Volumes of the selected Bids	Selected volume 1: 20 MW Selected volume 2: 10 MW Selected volume 3: 20 MW	Capacity Contract and Virtual CMU
Related Price	Price 1: 17€/kW/year Price 2: 18€/kW/year Price 3: 18,5€/kW/year	As the entire Eligible Volume of the has been selected in the Auction
Capacity contract duration	Capacity contract duration 1: 1 year Capacity contract duration 2: 1 year Capacity contract duration 3: 1 year	Financial Security Volume and the S Amount remain unchanged.
Transaction Periods	Transaction Period 1: Nov 2025 – Oct 2026 Transaction Period 2: Nov 2025 – Oct 2026 Transaction Period 3: Nov 2025 – Oct 2026	
Remaining Eligible Volume for the Transaction Period	NA <sup>1</sup>	
Issuance date of the 1 <sup>st</sup> quarterly report	01/01/2022	
	Auction r         Volumes of the selected Bids         Related Price         Capacity contract duration         Transaction Periods         Remaining Eligible Volume for the Transaction Period         Issuance date of the 1 <sup>st</sup> quarterly report	Auction resultsVolumes of the selected BidsSelected volume 1: 20 MW Selected volume 2: 10 MW Selected volume 3: 20 MWRelated PricePrice 1: 17€/kW/year Price 2: 18€/kW/year Price 3: 18,5€/kW/yearCapacity contract durationCapacity contract duration 1: 1 year Capacity contract duration 2: 1 year Capacity contract duration 3: 1 yearTransaction PeriodsTransaction Period 1: Nov 2025 – Oct 2026 Transaction Period 3: Nov 2025 – Oct 2026 Transaction Period 3: Nov 2025 – Oct 2026Remaining Eligible Volume for the Transaction PeriodNA1Issuance date of the 1st quarterly report01/01/2022

1: The CMU(s) is(are) not created yet as the selected Bids are issued from a Virtual CMU. It is therefore impossible for ELIA to link the results to a Remaining Eligible Volume at that moment of the CRM Process.

<u>ity:</u>

. .

~ \_

e CMU n, the ecured



• 2. Prequalified CRM Candidate and his related CMU(s)

• 3. Results of the Auction

 $\bigcirc$ 

Ś

 $\rangle\rangle\rangle$ 

- 4. Process to become an Existing CMU
- 5. Pre-delivery Control for Virtual CMU
- 6. Pre-delivery Control for Existing CMU





- Each selected volume on the VCMU is related to a Transaction:
  - The selected volume 1 (20 MW) is related to Transaction 1
  - The selected volume 2 (10 MW) is related to Transaction 2
  - The selected volume 3 (20 MW) is be related to Transaction 3
- The Capacity Provider shall prequalify one or several Existing CMUs during the Pre-delivery Period in order to make Contracted Capacities available before the start of the Delivery Period DP
- > Each time an Existing CMU is prequalified, the Capacity Provider shall indicate to which Transaction it is related.
- The CMUs that will be prequalified by the Capacity Provider shall follow the entire standard Prequalification Process related to an Existing CMU
- The link with the VCMU associated to the Transaction(s) is done during this standard Prequalification Process. However, the effective transfer of the Contracted Capacity from the Virtual CMU to the Existing CMU happens via the Secondary Market.





- This Use Case considers that 3 Existing CMUs are prequalified by the Capacity Provider during the Pre-delivery Period, prior the first moment of control (t<sub>control 1</sub>).
  - CMU 1 is related to Transaction 1 (20 MW)
  - CMU 2 is related to Transaction 2 (10 MW)
  - CMU 3 is related to Transaction 2 (10 MW)
- > The Capacity Provider decides to start the process to prequalify his Existing CMUs on:
  - 31/01/2022 for CMU 1
  - 30/04/2022 for CMU 2
  - 30/09/2022 for CMU 3
- > The following slides summarize the information the Capacity Provider needs to provide to ELIA to get Prequalified CMUs.





As the evolution in time of the Derating Factors is important in this use case, the following values are used as examples:

	Evolution in time of the Derating Factors		
	CMU 1	CMU 2	CMU 3
31/03/2021 - 30/03/2022	0,8	0,62	0,78
31/03/2022 - 30/03/2023	0,81	0,6	0,8
31/03/2023 - 30/03/2024	0,81	0,6	0,81
31/03/2024 - 30/03/2025	0,82	0,63	0,81
31/03/2025 - 30/03/2026	0,83	0,64	0,85



4.2 Submission of the Prequalification File – Delivery Points information

	Information related to Delivery Points		
	CMU 1	CMU 2	CMU 3
	DP 1 (Existing)	DP 2 (Existing)	DP 3 (Existing)
Type of Delivery Point	TSO-connected	TSO-connected	TSO-connected
Delivery Point's name	Willebroek_RE_1	Willebroek_RE_2	Willebroek_RE_3
Single line diagram	SLD.pdf	SLD2.pdf	SLD3.pdf
Technology	Large-scale battery	СНР	Diesel Generator
Linked Capacities	NA	NA	NA
CDSO Declaration	NA	NA	NA
EAN code of the Access Point	545555545416456	545555545316456	545555545426456
Agreement between Belgian member State and Adjacent Member State	NA	NA	NA
Declaration by the Eligible Direct Foreign Capacity Holder	NA	NA	NA
Declaration by the Adjacent Member State	NA	NA	NA
EAN code(s) of the Delivery Point	544545441256558	544545441256568	544545441257558

Renouncing the operating aid

4.2 Submission of the Prequalification File – Delivery Points information

	Information related to Delivery Point		
	CMU 1	CMU 2	CMU 3
	DP 1	DP 2	DP 3
Expected Nominal Reference Power	25 MW	5 MW	5 MW
CO <sub>2</sub> emission attestation	CO2 attest_1.pdf	CO2 attest_2.pdf	CO2 attest_3.pdf
CO <sub>2</sub> emission	225g/kWh	400 g/kWh	400 g/kWh
Preferred Nominal Reference Power determination methodology	Method 1	Method 3	Method 3
Prequalification test profile for method 3	NA	15/05/2022	26/10/2022
Baseline adjustment	Standard	Standard	Standard
Unsheddable Margin	0 MW	0 MW	0 MW
Nameplate capacity of generation	25 MW	5 MW	5 MW
Net offtake/net injection	Net injection	Net injection	Net injection
Full technical injection Capacity	25 MW	5 MW	5 MW
Full technical offtake Capacity	NA	NA	NA
Grid User Declaration	GUD_1.pdf	GUD_2.pdf	GUD_3.pdf

NA

NA



NA

4.3 Submission of the Prequalification File – CMUs information



	Information related to CMU		
	CMU 1	CMU 2	CMU 3
Information linked to Financial Security	NA <sup>1</sup>	NA <sup>1</sup>	NA <sup>1</sup>
Opt-out Notification Volume	0 MW	0 MW	0 MW
Project ID	NA <sup>2</sup>	NA <sup>2</sup>	NA <sup>2</sup>
Link(s) (an)other CMU(s) in case of multiple use of a same Delivery Point	NA	NA	NA
Choice of a Derating Factor	0,8 (7h of availability)	0,6	0,8
Information for method 2 (for Nominal Reference Power determination)	NA	NA	NA
Link with a VCMU	VCMU of RollingEnergy	VCMU of RollingEnergy	VCMU of RollingEnergy
Participation to the Primary Market or the Secondary Market	Primary Market and Secondary Market	Primary Market and Secondary Market	Primary Market and Secondary Market
Declared Day Ahead Price	NA <sup>3</sup>	250 €/MWh	600 €/MWh
NEMO	EPEX	EPEX	EPEX

1: No Financial Security is asked at that moment given that Financial Security is only to be provided during the Prequalification Process related to the Virtual CMU.

2: A project ID would only be needed during the Prequalification Process of the VCMU (but a VCMU cannot provide an investment file to CREG so a project ID can never be asked in the context of processes related to a VCMU)

3: A Declared Day Ahead Price is needed only for a Capacity non subject to a Daily Schedule





- > The Capacity Provider selected:
  - Method 1 for DP 1
  - Method 3 for DP 2
  - Method 3 for DP 3
- The way of determining the Nominal Reference Power for each Delivery Point is not illustrated in this Use (Examples of Nominal Reference Power determination can be found in Use Cases 1, 2 & 4)
- After having applied method 1 & 3, ELIA determines the following Nominal Reference Powers:
  - → Nominal Reference Power<sub>DP1</sub> = 25 MW
  - → Nominal Reference Power<sub>DP2</sub> = 4,5 MW
  - → Nominal Reference Power<sub>DP3</sub> = 5,15 MW

- > The Nominal Reference Power of the CMU is equal to :
  - $\sum_{i=1}^{n} [Declared Nominal Reference Power]_{Additional DP i} + \sum_{i=1}^{n} [Nominal Reference Power]_{Existing DP i}$ 
    - → Nominal Reference Power<sub>CMU1</sub> = 25 MW
    - → Nominal Reference Power<sub>CMU2</sub> = 4,5 MW
    - → Nominal Reference Power<sub>CMU3</sub> = 5,15 MW





> As a reminder of the *Functioning Rules* :

*Reference Power* = *Nominal Reference Power* - *OptOut Volume* 

*Eligible Volume = Reference Power × Last Published Derating Factor* 

*Remaining Eligible Volume* = Max(0; [*Eligible Volume* - *Total Contracted Capacity*])





>The ex-ante Secondary Market Remaining Eligible Volume is equal to:

• If the CMU is an Non-energy Constrained CMU:

Secondary Market Remaining Eligible Volume =  $SMREV(CMU, TP, t_{notif})$ 

 $= Max(0; Remaining Maximum Capacity_{min} (CMU, TP, t_{notif}) - Total Contracted Capacity_{max} (CMU, TP, t_{notif})$ 



4.4 Volumes determination

	Results of the volumes determination		
	CMU 1 (Energy Constrained CMU)	CMU 2 (Non-Energy Constrained CMU)	CMU 3 (Non-Energy Constrained CMU)
Nominal Reference Power	25 MW	4,5 MW	5,15 MW
Opt-Out Volume	0 MW	0 MW	0 MW
Reference Power	25 – 0 = 25 MW	4,5 – 0 = 4,5 MW	5,15 – 0 = 5,15 MW
Derating Factor	0,8	0,6	0,8
Eligible Volume	25 x 0,8 = 20 MW <sup>1</sup>	4,5 x 0,6 = 2,7 MW <sup>1</sup>	5,15 x 0,8 = 4,12 MW <sup>1</sup>
Secondary Market Eligible Volume	$(25 - 0 - 0) \times 0.8 = 20 \text{ MW}^2$	$4,5-0-(0 \ge 0,6) = 4,5 \text{ MW}^2$	5,15 – 0 – (0 x 0,8) = 5,15 MW <sup>2</sup>

1: The Derating Factors chosen here comes from the list of Derating Factors that were valid at the time the Capacity Provider started a process to create his Existing CMU (Cf. slide 14)

# **4. Process to become an Existing CMU** 4.5 Results notification



	Results of the volumes determination		
	CMU 1	CMU 2	CMU 3
	DP 1	DP 2	DP 3
Nominal Reference Power of the CMU	25 MW	4,5 MW	5,15 MW
Reference Power of the CMU	25 MW	4,5 MW	5,15 MW
Opt-Out Volume of the CMU	0 MW	0 MW	0 MW
Eligible Volume	20 MW	2,7 MW	4,12 MW
Secondary Market Eligible Volume	20 MW	4,5 MW	5,15 MW







#### The timing applicable in this Use Case for CMU 1 is as follows:

31/01/2022	28/02/2022	15/03/2022	25/03/2022
The Capacity Provider submits his	<ul> <li>ELIA considers the file as compliant and notifies it</li> </ul>	<ul> <li>The NRP is notified to the Capacity Provider (the test</li> </ul>	ELIA notifies the prequalification
Prequalification File	<ul> <li>to the Capacity Provider (ELIA did not request additional information to the Capacity Provider)</li> <li>The Volumes determination starts</li> </ul>	<ul> <li>dates for the NRP was chosen by the Capacity Provider)</li> <li>The Capacity Provider does not contest the NRP</li> <li>ELIA continues the determination of the Volumes</li> </ul>	results

### → The CMU 1 is considered as an Existing CMU from the results notification on 25/03/2022







### The timing applicable in this Use Case for CMU 2 is as follows:

30/04/2022	31/05/2022	15/06/2022	30/06/2022
The Capacity Provider submits his Prequalification File	<ul> <li>ELIA considers the file as compliant and notifies it to the Capacity Provider (ELIA did not request additional information to the Capacity Provider)</li> </ul>	<ul> <li>The NRP is notified to the Capacity Provider (the test dates for the NRP was chosen by the Capacity Provider)</li> <li>The Capacity Provider does not contest the NRP</li> </ul>	ELIA notifies the prequalification results
	<ul> <li>The Volumes determination starts</li> </ul>	<ul> <li>ELIA continues the determination of the Volumes</li> </ul>	

### → The CMU 2 is considered as an Existing CMU from the results notification on 30/06/2022







### The timing applicable in this Use Case for CMU 3 is as follows:

30/09/2022	31/10/2022	15/11/2022	30/11/2022
The Capacity Provider submits his Prequalification File	<ul> <li>ELIA considers the file as compliant and notifies it to the Capacity Provider</li> </ul>	<ul> <li>The NRP is notified to the Capacity Provider (the test dates for the NRP was chosen by the Capacity Provider)</li> </ul>	ELIA notifies the prequalification results
	<ul> <li>(ELIA did not request additional information to the Capacity Provider)</li> <li>The Volumes determination starts</li> </ul>	<ul> <li>The Capacity Provider does not contest the NRP</li> <li>ELIA continues the determination of the Volumes</li> </ul>	

### → The CMU 3 is considered as an Existing CMU from the results notification on 30/11/2022

# From the moment the Existing CMUs are prequalified, the Capacity Provider uses the Secondary Market to transfer the Contracted Capacities related to the Transaction(s) on the VCMU towards the associated Existing CMU(s) :

- → The Capacity Provider prequalified 3 CMUs: CMU 1, CMU 2 and CMU 3
- 3 Transactions are made on the Secondary Market to realize this transfer on the Secondary Market (Transaction 4, 5 and 6)
- → The Total Contracted Capacity of the Virtual CMU is therefore reduced accordingly
- → The Total Contracted Capacity of CMU 1, CMU 2 and CMU 3 is therefore increased accordingly



### **5. Link the Virtual CMU with the Existing CMU(s)** 5.1 Taking over the Contracted Capacities related to the Transactions made by the VCMU

5. Link the Virtual CMU with the Existing CMU(s)

5.1 Taking over the Contracted Capacities related to the Transactions made by the VCMU



> The process followed to take over the obligations of the VCMU via the Secondary Market is as follows:

	Buyers of Obligation (CMUs)		
	CMU 1	CMU 2	CMU 3
Secondary Market Eligible Volume	(25 – 0 – 0) x 0,8 = 20 MW	4,5 – 0 – (0 x 0,6) = 4,5 MW	5,15 – 0 – (0 x 0,8) = 5,15 MW

2: The derating factor of the Secondary Market Transaction is the last published derating factor applicable at the time of the transfer (Cf. slide 14)

	Seller of Obligation (VCMU)		
	Selected volume 1	Selected volume 2	Selected volume 3
Contracted Capacity	20 <i>MW</i>	10 <i>MW</i>	20 <i>MW</i>

- ➤ Transaction 4 → CMU 1 takes over all the obligations (20 MW) of Transaction 1 on 28/03/22 : Contracted Capacity of selected volume 1 becomes equal to [20 20] = 0 MW
- ➤ Transaction 5 → CMU 2 takes over 4,5 MW of the obligations of Transaction 3 on 02/07/22: Contracted Capacity of selected volume 3 becomes equal to [19,98 4,5] = 15,48 MW
- ➤ Transaction 6 → CMU 3 takes over 5,15 MW of the remaining obligations of Transaction 3 on 02/12/22: Contracted Capacity of selected volume 3 becomes equal to [15,48 5,15] = 10,33 MW



#### Impact of the creation of the Existing CMUs:

- As, at the moment the three Existing CMUs follow the Prequalification Process, the maximum Total Contracted Capacity for each of these three CMUs is equal to 0 MW and these CMUs are linked to the Virtual CMU (input given as part of the Prequalification File), no Financial Security is to be provided at the moment the Existing CMUs are submitted.
- As, at the moment the three Existing CMUs follow the Prequalification Process, the Virtual CMU still has a maximum Total Contracted Capacity of 50 MW, the Financial Security Volume and the Secured Amount remain unchanged.

#### Impact of the transfer via the Secondary Market

- Part of the Total Contracted Capacity of the Virtual CMU will be taken over by Existing CMU1, CMU 2 and CMU 3 through Transactions on the Secondary Market.
- At the moment of the notification of the Secondary Market transactions to ELIA, no Financial Security is to be provided by the Existing CMUs (= Buyer of Obligation):

→ The Financial Security provided for the Virtual CMU will be transferred to the newly created Existing CMUs to cover the obligations of these Existing CMUs.



5. Link the Virtual CMU with the Existing CMU(s)

5.2 Impact on the Financial Security Volume and the Secured Amount

- As the Required Level (in EUR/MW) for Existing CMUs is 10,000 EUR/MW, compared to 20.000 EUR/MW for a Virtual CMU, the following amount of the Financial Security is released from the moment the Secondary Market Transaction is validated by ELIA:
  - Related to Transaction 4: 20 MW \*  $10.000 \frac{\text{EUR}}{\text{MW}}$  = 200.000 EUR
  - Related to Transaction 5 : 4,5 MW \*  $10.000 \frac{\text{EUR}}{\text{MW}}$  = 45.000 EUR
  - Related to Transaction 6 : 5,15 MW \*  $10.000 \frac{\text{EUR}}{\text{MW}} = 51.500 \text{ EUR}$
- > The Financial Security Volume of the VCMU is now equal to [50 20 4, 5 5, 15] = 20,35 MW



- 1. Terminology related to pre-delivery control & financial securities
- 2. Prequalified CRM Candidate and his related CMU(s)
- 3. Results of the Auction

 $\odot$ 

Ś

- 4. Process to become an Existing CMU
- 5. Pre-delivery Control for Virtual CMU
- 6. Pre-delivery Control for Existing CMU



#### The pre-delivery control is organized in two phases:

- Prior to t<sub>control 1</sub> 75 % of the Contracted Capacities on the VCMU must be prequalified and transferred to one or several Existing CMU(s)
- Prior to t<sub>control 2</sub> 25 % of the remaining Contracted Capacities on the VCMU must be prequalified and transferred to one or several Existing CMU(s)

t<sub>TCC</sub> illustrates an example of moment in time when ELIA can determine the maximum Total Contracted Capacity over the Delivery Period DP





The process to be followed by ELIA when performing a pre-delivery control for a Virtual CMU is represented in the following diagram:







The Pre-delivery Obligation is the volume of the VCMU that may be subject to the pre-delivery control:

### **PreDelivery** *Obligation*<sub>1</sub>

- $= 75\% \times Total Contracted Capacity_{max}(CMU, DP)$
- $= 75\% \times (20\,MW + 10\,MW + 20\,MW)$
- = 37,5 MW





The prequalified volume represents the volume share of a CMU which followed the required process to get the "Existing" status at time t<sub>control 1</sub>:

### $prequalified \ volume_1$

$$= \sum_{i=1}^{n} [Reference Power (CMU_i) \times Derating Factor(CMU_i; t_{bid})]$$

- $= [25 \times 0,8] + [4,5 \times 0,62] + [5,15 \times 0,78]$
- = 20 + 2,79 + 4,02
- = 26,81 *MW*

**5.** Pre-delivery control for Virtual CMU 5.4 Determination of the Missing Volume



#### $Missing Volume_1$

 $= Max(0; [PreDelivery Obligation_1] - [prequalified volume_1])$ 

= Max (0; [37,5 - 26,81])

- = Max (0; [10,69])
- = 10,67 *MW*

#### %Missing volume<sub>1</sub>



#### Financial penalty 1

- =  $75\% \times 20.000 \times Missing Volume_1 \times Total Contracted Capacity_{max}(CMU, DP)$
- $= 75\% \times 20.000 \times 28{,}51\% \times (20 + 10 + 20)$

#### = 213.800 €



In case the penalties remain unpaid, Elia/Contractual Counterparty will invoke the Financial Security for an amount of 213.800€





- In pre-delivery control phase 1, a Missing Volume also leads (in addition to the financial penalty) to an adaptation of the Contracted Capacities by the corresponding volume
- In case the contracted capacities for a Virtual CMU are associated to more than one Transaction, the adaptation of the Contracted Capacities is done pro-rata on the remaining volume of the Contracted Capacities related to the VCMU
- From the information of slide 28, the remaining volume of the Contracted Capacities related to the VCMU are:
  - → Related to Transaction 1 : 0 MW
  - → Related to Transaction 2 : 10 MW
  - → Related to Transaction 3 : 10,33 MW
- The contracted capacities are adapted pro-rata by the missing volume (10,67 MW):
  - → Related to Transaction 1 : The new Contracted Capacity is equal to 0 MW
  - → Related to Transaction 2 : The new Contracted Capacity is equal to  $\left[10 \frac{10,69 \times 10}{10+10,33}\right] = 4,74 \, MW$
  - → Related to Transaction 3 : The new Contracted Capacity is equal to  $\left[10,33 \frac{10,69 \times 10,33}{10+10,33}\right] = 4,90 \, MW$

As a result of the decrease of the Contracted Capacities, the Financial Security Volume related to the VCMU reduces from 20,33 (= 10 + 10,33) MW to 9,66 (= 20,33 - 10,67) MW. The corresponding part of the Secured Amount (= 20,000 x 10,67 EUR) is released, but only after a possible claim of the penalties.





	Results of the pre-delivery control at t <sub>control 1</sub>
Pre-delivery Obligation	37,5 MW
Prequalified volume	26,83 MW
Missing Volume	10,67 MW
%Missing Volume	28,45%
Financial penalties	213.375€
Updated Contracted Capacity	Related to Transaction 2 : 4,74 MW Related to Transaction 3: 4,90 MW



#### Pre-delivery control is organized in two phases:

- Prior to t<sub>control 1</sub> 75 % of the Contracted Capacity on the VCMU must be prequalified and transferred to one or several Existing CMU(s)
- Prior to t<sub>control 2</sub> 25 % of the remaining Contracted Capacity on the VCMU must be prequalified and transferred to one or several Existing CMU(s)

t<sub>TCC</sub> illustrates an example of moment in time when ELIA can determine the maximum Total Contracted Capacity over the Delivery Period DP | 38



- The process followed by the Capacity Provider to prequalify another CMU follows the same modalities as those detailed in the previous slides and is therefore not repeated here.
- The main input of this process are gathered below:
  - ✓ A new Existing CMU (CMU 4) is successfully prequalified on 18/06/2025
  - ✓ It is a CHP
  - ✓ His Nominal Reference Power equals 17 MW
  - ✓ His Eligible Volume equals 10,54 MW
  - ✓ His Secondary Market Eligible Volume equals 17 MW
  - ✓ His Opt-Out Volume equals 0 MW
  - The CMU is a Non-energy Constrained CMU
  - ✓ His Derating Factors follows the evolution presented in the table below<sup>1</sup>:

	Evolution in time of the Derating Factors
31/03/2021 - 30/03/2022	0,62
31/03/2022 - 30/03/2023	0,6
31/03/2023 - 30/03/2024	0,6
31/03/2024 - 30/03/2025	0,63
31/03/2025 - 30/03/2026	0,64

Disclaimer: CMU 4 will not be considered in

the other use cases.

1: The Derating Factors chosen for the CMU 4 are the same as for CMU 2 as there are both CHP.







• Secondary Market transactions are made with this CMU4 to take over the remaining obligations related to the VCMU:

Transaction 7 → CMU 4 takes over all the obligations (4,74 MW) of Transaction 2: Contracted Capacity of selected volume 2 becomes equal to [4,74 – 4,74] = 0 MW

Transaction 8  $\rightarrow$  CMU 4 takes over all the obligations (4,90 MW) of Transaction 3: Contracted Capacity of selected volume 3 becomes equal to [4,9-4,9] = 0 MW

- The Remaining Eligible Volume of the CMU 4 for the Delivery Period 2025-2026 is equal to [10,54 4,74 4,9] = 0,9 MW
- The Secondary Market Remaining Eligible Volume of the CMU4 for the Delivery Period 2025-2026 is equal to [17 4,74 4,9] = 7,36 MW
- The impact on the Financial Security follows the same rules as the ones described on the previous slides







The process to be followed by ELIA when performing a pre-delivery control for a Virtual CMU is represented in the following diagram:







The Pre-delivery Obligation is the volume of the CMU that may be subject to the pre-delivery control:

### **PreDelivery** *Obligation*<sub>2</sub>

- = 25% × (Total Contracted Capacity<sub>max</sub>(CMU, DP))
- $= 25 \% \times (20 MW + 10 MW + 20 MW 10,69)$
- = 9,83 *MW*

As the Capacity Contract have been adapted (cf. slide 36), the maximum Total Contracted Capacity associated to the CMU over the Delivery Period DP at the time of the pre-delivery control is therefore evaluated with the volumes associated to the new Capacity Contracts





The prequalified volume represents the volume share of a CMU which followed the required process to get the "Existing" status at time t<sub>control 2</sub>:

### $prequalified \ volume_2$

$$= \sum_{i=1}^{n} [Reference Power (CMU_i;) \times Derating Factor(CMU_i;t_{bid})]$$

 $= [17 \times 0,62]$ 

= 10,54 MW

**5.** Pre-delivery control for Virtual CMU 5.4 Determination of the Missing Volume



Missing volume<sub>2</sub>

 $= Max(0; [PreDelivery Obligation_2] - [prequalified volume_2])$ 

= Max (0; [9,83 - 10,54])

= Max (0; [0,71])

= 0 MW

#### %*Missing volume*<sub>2</sub>



#### Financial penalty 2

- =  $25\% \times 20.000 \times Missing \ volume_2 \times (Total \ Contracted \ Capacity_{max}(CMU, DP))$
- $= 25\% \times 20.000 \times 0\% \times (20 + 10 + 20)$

= 0 €





	Results of the pre-delivery control at t <sub>control 2</sub>
Pre-delivery Obligation	9,83 MW
Prequalified volume	10,54 MW
Missing Volume	0 MW
%Missing Volume	0%
Financial penalties	0€
Updated Contracted Capacity	NA



• 2. Prequalified CRM Candidate and his related CMU(s)

• 3. Results of the Auction

 $\bigcirc$ 

\$

- 4. Process to become an Existing CMU
- 5. Pre-delivery Control for Virtual CMU
- 6. Pre-delivery Control for Existing CMU

As pre-delivery control for Existing CMU has already been illustrated in other use cases, it is not further elaborated here.