Pre-delivery Use Case 4

New Project with two possible configurations: CCGT or 2 OCGT on a site



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

\$

25 *=

~__ ~_

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

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

\$

₽ ₩

- 4. Pre-delivery Control for Additional CMU
- 5. Process to become an Exiting 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

₹ } }

₽ ₩

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

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



- EnergyProducer.SA/NA is owner of a site on which three projects located in Belgium, are currently investigated
- The three projects will be connected to the Fluxys grid for the gas connection and the ELIA Grid for the electrical connection
 - Project 1 (CCGT 2on1): 2GT of **350MW** each and one ST of **300MW** connected to both GT → Total: 1000MW Installed Capacity

Operational efficiency expected 60% at normal temperature



- Project 2 (OCGT): 1GT of **350MW** → Total: 350 MWW Installed Capacity

Operational efficiency expected 40% at normal temperature



- Project 3 (OCGT): 1GT of **350MW** → Total: 350 MWW Installed Capacity

Operational efficiency expected 40% at normal temperature



• The 3 different projects represent 3 different business plans in terms of CAPEX and OPEX







| | Information related to the project | |
|----------------------------|--|--------|
| Company | EnergyProducer.SA/NA Location: Belgium | Projec |
| Technology | DP1: CCGT / DP2: CCGT / DP3: CCGT / DP4: OCGT / DP5: OCGT | |
| Status | DP1: Additional / DP2: Additional / DP3: Additional / DP4: Additional / DP5: Additional CMU1: Additional / CMU2: Additional / CMU3: Additional / CMU4: Additional / CMU5: Additional | |
| Connection | DP1: TSO-connected / DP2: TSO-connected / DP3: TSO-connected / DP4: TSO- connected / DP5: TSO-connected | |
| Nominal Reference Power | DP1: 350 MW / DP2: 350 MW / DP3: 300 MW / DP4: 350MW / DP5: 350 MW CMU1: 350 MW / CMU2: 350 MW / CMU3: 300 MW / CMU4: 350MW / CMU5: 350 MW | Proje |
| Opt-Out Volume | CMU1: 0 MW / CMU2: 0 MW / CMU3: 0 MW / CMU4: 0MW / CMU5: 0 MW | |
| Reference Power | CMU1: 350 MW / CMU2: 350 MW / CMU3: 300 MW / CMU4: 350MW / CMU5: 350 MW | Proje |
| Derating Factor | DP1: 0,9 / DP2: 0,9 / DP3: 0,9 / DP4: 0,92 / DP5: 0,92 | |
| Eligible Volume | CMU1: 315 MW / CMU2: 315 MW / CMU3: 270 MW / CMU4: 322MW / CMU5: 322 MW | |
| Energy Constrained CMU | Non-energy Constrained CMUs | |







- The 5 CMUs have not made any Transaction yet, so no Financial Security has been submitted yet.
- The Secured Amount is calculated at CMU level, by multiplying the Required Level (EUR/MW) by the Financial Security Volume:
 - The 5 CMUs are Additional CMUs with major permitting requirements, so the Required Level = EUR 20.000/MW for every CMU.
 - The evolution of the **Financial Security Volume** for the 5 CMUs is presented in the table on the next slide
 - For every CMU, the Financial Security Volume is calculated **as the maximum Total Contracted Capacity in the forthcoming Delivery Periods**. As it is the first Transaction for the 5 CMUs, maximum TCC is only determined by this Transaction.

During the Prequalification Process, for every CMU, the maximum Total Contracted Capacity is calculated on the assumption that the full prequalified volume for that CMU is selected in the Auction.





The evolution of the Financial Security Volume is presented in the table below:

| | | Financial Security Volume | Secured Amount (Required Level x Financial Security Volume) |
|---|--------------|---|--|
| At Prequalification File submission Provisory EV = Declared NRP x DF | CMU1 / CMU 4 | Max (350 MW x 0,9 ; 350 MW x 0,92) = 322 MW | 322 MW x EUR 20,000/MW = EUR 6,440,000 |
| | CMU2 / CMU 5 | Max (350 MW x 0,9 ; 350 MW x 0,92) = 322 MW | 322 MW x EUR 20,000/MW = EUR 6,440,000 |
| | CMU3 | 300 MW x 0,9 = 270 MW | 300 MW x EUR 20,000/MW = EUR 6,000,000 |
| After the Prequalification Process EV = (Declared NRP – Opt-Out Volume) x DF | CMU1 / CMU 4 | Max (350 MW x 0,9 ; 350 MW x 0,92) = 322 MW | 322 MW x EUR 20,000/MW = EUR 6,440,000 |
| | CMU2 / CMU 5 | Max (350 MW x 0,9 ; 350 MW x 0,92) = 322 MW | 322 MW x EUR 20,000/MW = EUR 6,440,000 |
| | CMU3 | 300 MW x 0,9 = 270 MW | 300 MW x EUR 20,000/MW = EUR 6,000,000 |

- In this case, 2 Delivery Points are included in more than 1 CMU:
 - CMU 1 and CMU 4 represent the same turbine/Delivery Point
 - CMU 2 and CMU 5 represent the same turbine/Delivery Point
 - As a general principle, no double Financial Security requirement applies to the same Delivery Point as it can only be selected once in the Auction.

The volume to be covered by the Financial Security for this Delivery Point equals the highest (provisional) Eligible Volume amongst the different CMUs in which the Delivery Point is included (calculated in function of the Derating Factor applicable to these CMUs).



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

• 3. Results of the Auction

 \bigcirc

Ś

₹ } }

₽ ₩ • 4. Pre-delivery Control for Additional CMU

• 5. Process to become an Exiting CMU

• 6. Pre-delivery Control for Existing CMU





The Capacity Provider participated to a Y-4 Auction in October 2021. The results of the Auction are detailed below:

| Auction results | | | | |
|---|---|--|--|--|
| Volumes of the selected Bids | CMU1: 315MW CMU2: 315MW CMU3: 270MW | | | |
| Related Prices | 50€/kW/year | | | |
| Capacity Contract Duration | 15 years | | | |
| Transaction Period | Nov 2025 – Oct 2040 | | | |
| Remaining Eligible Volume for the Transaction Period | 0 MW ¹ | | | |
| Issuance date of the 1 st quarterly report | 01/01/2022 | | | |

1: The entire Eligible Volume of the CMUs has been selected



Impact on the Financial Security:

• The Financial Security Volume for CMU 1 & 4, as well as for CMU 2 & 5 is reduced from 322 MW to 315 MW.

→ Elia/Contractual Counterparty will release the corresponding part of the Secured Amount: (322 MW – 315 MW) * EUR 20.000/MW = EUR 140.000.

• The Financial Security Volume for CMU 3 remains unchanged as the full Eligible Volume has been selected in the Auction.



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

• 3. Results of the Auction

 \bigcirc

Ś

č S S

₽ ₩

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





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







| Transaction Validation Date 31/10/2021 | | t _{control 1} 30/10//2023 | | | t _{TCC} Transaction Period – CMU 1 – Contracted Capacity: 315 MW | | | | | | | | | | | | | |
|--|------------|---------------------------------------|--------|---|---|---|---|------------------------------------|------------------------------------|------------------------------------|------------------------------------|------------------------------------|------------------------------------|------------------------------------|--|---|------------------------------------|------------------------------------|
| Transaction Validation Date 31/10/2021 | | t _{control 1} 30/10/2023 | | | Transaction Period – CMU 2 – Contracted Capacity: 315 MW | | | | | | | | | | | | | |
| Transaction Validation Date 31/10/2021 | | t _{control 1} 30/10/2023 | | | Transaction Period – CMU 3 – Contracted Capacity: 270 MW | | | | | | | | | | | | | |
| | | | | Delivery Period Nov 25 – Oct 26 | Delivery Period Nov 26 – Oct 27 | Delivery Period Nov 27 – Oct 28 | Delivery Period Nov 28 – Oct 29 | Delivery Period Nov 29 – Oct 30 | Delivery Period Nov 30 – Oct 31 | Delivery Period Nov 31 – Oct 32 | Delivery Period Nov 32 – Oct 33 | Delivery Period Nov 33 – Oct 34 | Delivery Period Nov 34 – Oct 35 | Delivery Period Nov 35 – Oct 36 | Delivery Period Nov 36 – Oct 37 | Delivery Period Nov 37 – Oct 38 | Delivery Period Nov 38 – Oct 39 | Delivery Period Nov 39 – Oct 40 |
| Pro | e-delivery | / Perioc | Delive | ery Perio | od DP | In the eac The eac The in the in the each | his use e examp ch CMU e Capac he sam | case, c ble of pr city Prov | only one re-deliv vider m | e exam ery cor ay gath | ple of p htrol tak | re-deliv es plac state of | very cor e at the progre | ntrol is i same ss of th | llustrate time t _{co} e proje | ed per (_{ontrol 1} (3 ct relate | CMU 30/10/20 ed to th | 023) for e 3 CMl |
| | | | | In the same quarterly report The pre-delivery control illustrated in the use case consists of the analysis of the last quarterly report sent by the Capacity Provider to ELIA before t_{control 1} t_{TCC} illustrates an example of moment in time when ELIA can determine the maximum Tor Contracted Capacity over the Delivery Period DP | | | | | ast ium Tota | | | | | | | | | |







As the 3 CMUs are Non-energy-Constrained CMU, the Pre-Delivery Obligation is represented by the following formula:

 $[PreDelivery Obligation] = Total Contracted Capacity_{max}(CMU, DP) - \sum_{i=1}^{n} [Contracted Capacity (CMU, Transaction_{i}, t_{control}, t_{TCC})]$

> The Pre-Delivery Obligation of each CMU are evaluated in the table below:

| | CMU 1 | CMU 2 | CMU 3 |
|-----------------------------------|--------|--------|--------|
| Total Contracted Capacity | 315 MW | 315 MW | 270 MW |
| ΣContracted Capacity ¹ | 0 MW | 0 MW | 0 MW |
| Pre-Delivery Obligation | 315 MW | 315 MW | 270 MW |

1: Σ Contracted Capacity is equal to zero because there is no Contracted Capacity associated to a Transaction related to the CMUs and to a Transaction Period that overlaps the time t_{TCC} and $t_{control 1}$





Determination of the Predelivery Obligation

Quarterly report analysis

Missing volume analysis

Pre-delivery control results notification

4. Pre-delivery control for Additional CMU *4.3 Quarterly report analysis*

| Determination of the Pre-delivery Obligation | Quarterly report analysis | Pre-delivery control results notification |
|--|------------------------------|---|
| | | |

| Extract of the last quarterly sent before t _{control 1} | | | | | | |
|--|---|--|---|--|--|--|
| Key milestones | Key milestone date provided during the Prequalification Process | Key milestone date provided in the quarterly report <u>without a</u> <u>mitigation plan</u> | Key milestone date provided in the quarterly report <u>with a mitigation</u> <u>plan</u> | | | |
| Spatial Plan | 20/11/2021 | 20/11/2021 | 20/11/2021 | | | |
| Workforce and Capacity Planning | 20/12/2021 | 20/12/2021 | 20/12/2021 | | | |
| Permitting | 30/01/2022 | 30/01/2022 | 30/01/2022 | | | |
| Commencement of construction works | 10/02/2022 | 10/02/2022 | 10/02/2022 | | | |
| Final purchase order for the main equipment | 10/06/2023 | 10/11/2023 | 10/11/2023 | | | |
| Mechanical Completion | 20/05/2024 | 20/10/2024 | 20/05/2024 | | | |
| Commissioning tests | 30/06/2024 | 30/11/2024 | 30/06/2024 | | | |
| Final Completion | 31/07/2024 | 31/12/2025 | 31/11/2024 | | | |

By analyzing the quarterly report, ELIA noticed that a delay has been notified by the Capacity Provider:

- The delay is mainly due to a delayed purchase order for the main equipment
- The delay will have a impact on the availability of the Contracted Capacities related to the 3 CMUs during the 2 first months of the Delivery Period DP (from 01/11/2025 to 31/12/2025)
- A mitigation plan is proposed by the Capacity Provider to catch up with the delay (Example: the Capacity Provider will increase the number of FTE on the field to overcome the delay encountered once the purchase order of the main equipment has been validated)





Determination of the Predelivery Obligation

Quarterly report analysis

Missing volume analysis

Pre-delivery control results notification





In his quarterly report, the Capacity Provider declares no residual delay as:

- The delay is linked to Project Works and not to Infrastructure Works
- Missing Volume = 315 + 315 + 270 = 900 MW → It impacts more than 1 MW of the maximum Total Contracted Capacity (= 900 MW)
- <u>A solution to compensate it has been found</u> by the Capacity Provider and detailed in his mitigation plan as part of a quarterly report
- The delay causes an unavailability of 2 months (> 1 month) starting from the first day of Delivery Period DP

→ Missing Volume = 0 MW







Quarterly report analysis

Missing volume analysis

Pre-delivery control results notification





As a mitigation plan has been proposed by the Capacity Provider to cover the delay, ELIA notifies the pre-delivery control results:

| | The results of the pre-delivery control | | | | |
|------------------------------------|---|---|---|--|--|
| | CMU 1 | CMU 2 | CMU 3 | | |
| Missing Volume | 0 MW | 0 MW | 0 MW | | |
| %Missing Volume | $\frac{0}{315} = 0 \%$ | $\frac{0}{315} = 0 \%$ | $\frac{0}{270} = 0 \%$ | | |
| Financial Penalty | $\frac{EUR}{MW} 15.000 \times 0\%$ $\times 315 = 0 EUR$ | $\frac{EUR}{MW} 15.000 \times 0\%$ $\times 315 = 0 EUR$ | $\frac{EUR}{MW} 15.000 \times 0\%$ $\times 270 = 0 EUR$ | | |
| Impact on the Capacity Contract | NA | NA | NA | | |

%Missing Volume (in %) = $\frac{Missing Volume}{[PreDelivery Obligation]}$

Financial penalty (in EUR) = $\beta \times \%$ Missing Volume \times Total Contracted Capacity_{max}(CMU, DP)_{CMU}



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

• 3. Results of the Auction

 \bigcirc

Ś

₽ ₩

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





- > All 3 CMUs can become Existing CMUs once the project is finished (end date: 31/07/2024)
- The Capacity Provider starts to fill-in the needed information in the CRM IT interface in order to change his 3 CMUs from Additional CMUs to Existing CMUs
- The following slides gather the information the Capacity Provider needs to provide to ELIA to have Existing CMUs

5.2 Submission of the Delivery Point information



| | Information related to Delivery Point | | | | |
|---|---------------------------------------|-----------------|-----------------|--|--|
| | CMU 1 | CMU 2 | CMU 3 | | |
| | DP 1 | DP 2 | DP 3 | | |
| Type of Delivery Point | NA | NA | NA | | |
| Delivery Point's name | NA | NA | NA | | |
| Single line diagram | NA | NA | NA | | |
| Technology | NA | NA | NA | | |
| Linked Capacities | NA | NA | NA | | |
| CDSO Declaration | NA | NA | NA | | |
| EAN code of the Access Point | 545555559316456 | 545555545429556 | 545555545526656 | | |
| 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 | | |
| FAN code(s) of the Delivery Point | 544545491256568 | 544545541386558 | 543545441268558 | | |

Information already provided during the Prequalification Process of the Additional CMU

elia Elia Group

5.2 Submission of the Delivery Point information

| | Information related to Delivery Point | | | | | |
|--|---------------------------------------|------------------|------------------|--|--|--|
| | CMU 1 | CMU 2 | CMU 3 | | | |
| | DP 1 | DP 2 | DP 3 | | | |
| Expected Nominal Reference Power | NA | NA | NA | | | |
| CO ₂ emission attestation | CO2 attest_1.pdf | CO2 attest_2.pdf | CO2 attest_3.pdf | | | |
| CO ₂ emission | 400 kg/MWh | 400 kg/MWh | 400 kg/kWh | | | |
| Preferred Nominal Reference Power determination methodology | Method 3 | Method 3 | Method 3 | | | |
| Prequalification test profile for method 3 | 10/09/2024 | 10/09/2024 | 10/09/2024 | | | |
| Baseline adjustment | Standard | Standard | Standard | | | |
| Unsheddable Margin | NA | NA | NA | | | |
| Nameplate capacity of generation | 350 MW | 350 MW | 300 MW | | | |
| Net offtake/net injection | Net injection | Net injection | Net injection | | | |
| Full technical injection Capacity | 350 MW | 350 MW | 300 MW | | | |
| Full technical offtake Capacity | NA | NA | NA | | | |
| Grid User Declaration | GUD_1.pdf | GUD_2.pdf | GUD_3.pdf | | | |
| Renouncing the operating aid | NA | NA | NA | | | |

This information is used to evaluate the amount for the Financial Security and a Financial Security is required during the Prequalification Process (not when you change from an Additional to an Existing CMU)

However, at the moment the Additional CMU receives the status of Existing, the Required Level (in EUR/MW) is reduced to 10,000 EUR/MW

5.3 Submission of the CMU information



- The Financial Security is required starting from the Prequalification Process (not when you change from an Additional to an Existing CMU)
- However, at the moment the Additional CMU receives the status of Existing, the Required Level (in EUR/MW) is reduced to 10,000 EUR/MW

Information already provided during the Prequalification Process of the Additional CMU

| | Information related to CMU | | | | | |
|--|----------------------------|-------|-------|--|--|--|
| | CMU 1 | CMU 2 | CMU 3 | | | |
| Information linked to Financial Security | NA | NA | NA | | | |
| Opt-out Notification Volume | NA | NA | NA | | | |
| Project ID | NA | NA | NA | | | |
| Choice of a Derating Factor | NA | NA | NA | | | |
| Link(s) (an)other CMU(s) in case of multiple use of a same Delivery Point | NA | NA | NA | | | |
| Information for method 2 (for Nominal Reference Power determination) | NA | NA | NA | | | |
| Link with a VCMU | NA | NA | NA | | | |
| Participation to the Primary Market or the Secondary Market | NA | NA | NA | | | |
| Declared Day Ahead Price | NA | NA | NA | | | |
| NEMO | EPEX | EPEX | EPEX | | | |



5.4 Volume determination

- The Capacity Provider selected the method 3 to determine the Nominal Reference Power of each CMU
- Each CMU including only one Delivery Point: [Nominal Reference Power]_{DP} = [Nominal Reference Power]_{CMU}
- This slide illustrates the method 3 for the CMU 1
 - \rightarrow Nominal Reference Power_{CMU1} = 349MW
- The same method can be used to determine the Nominal Reference Power for CMU 2 & 3:
 - \rightarrow Nominal Reference Power_{CMU2} = 352MW
 - \rightarrow Nominal Reference Power_{CMU3} = 305MW

Metering data from 09/09/24 12:00 to 10/09/24 23:45



Nominal Reference Power = 349 MW





> The Reference Power and the Eligible Volume are determined as follows:

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

Eligible Volume = Reference Power × Last Published Derating Factor

If the CMU is a Non-energy Constrained CMU, the Secondary Market Eligible Volume is equal to :

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

 $= Max \begin{pmatrix} 0 ; Remaining Maximum Capacity_{min} (CMU, TP, t_{notif}) - Total Contracted Capacity_{max} (CMU, TP, t_{notif}) \\ -[OptOut Volume_{max} (CMU, TP, t_{notif}) * Last Published Derating Factor(CMU, t_{notif})] \end{pmatrix}$

| | CMU 1 | CMU 2 | CMU 3 |
|--|----------------------------|----------------------------|-----------------------------|
| Reference Power | 349 - 0 = 349 MW | 352 – 0 = 352 MW | 305 - 0 = 305 MW |
| Eligible Volume ¹ | 349 x 0,9 = 314,1 MW | 352 x 0,9 = 316,8 MW | 305 x 0,9 = 274,5 MW |
| Secondary Market Eligible Volume ¹ | 349 – 0 – 0 x 0,9 = 349 MW | 352 – 0 – 0 x 0,9 = 352 MW | 305 – 0 – 0 x 0, 9 = 305 MW |

1: The Derating Factor chosen here is the one considered as valid at the time the Capacity Provider prequalified his Additional CMU





5.5 Results notification

>The Remaining Eligible Volume is determined as follows:

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

| | Results ot the volumes determination | | | | | | | |
|---|--------------------------------------|-------------------------------|--------------------------------|--|--|--|--|--|
| | CMU 1 | CMU 2 | CMU 3 | | | | | |
| Nominal Reference Power of the CMU | 349 MW | 352 MW | 305 MW | | | | | |
| Reference Power of the CMU | 349 MW | 352 MW | 305 MW | | | | | |
| Opt-Out Volume of the CMU | 0 MW | 0 MW | 0 MW | | | | | |
| Eligible Volume for a forthcoming Delivery Period other than those included in the Transaction Period | 314,1 MW | 316,8 MW | 274,5 MW | | | | | |
| Secondary Market Eligible Volume for a forthcoming Delivery Period other than those included in the Transaction Period | 349 MW | 352 MW | 305 MW | | | | | |
| Remaining Eligible Volume for the Transaction Period | 314,1 – 315 = 0 MW | 316,8 – 315 = 1,8 MW | 274,5 – 270 = 4,5 MW | | | | | |
| Secondary Market Remaining Eligible Volume for the Transaction Period | 349 – 315 – (0 x 0,9) = 34 MW | 352 – 315 – (0 x 0,9) = 37 MW | 305 – 270 – (0 x 0, 9) = 35 MW | | | | | |

Volume available if the Capacity Provider wants to make a new Transaction in the Primary Market or the Secondary Market during the Transaction Period related to his Additional CMU





The timing applicable in this Use Case for the process is as follows:

| 15/08/24 | 15/ | 09/24 | 16/09/2024 | 4 | 30/09 | /2024 | 15/10/2024 | |
|--|---|--|---|------------------|---|--|---|--|
| | | | | | | | | |
| The Capacity Provider subm the information the 3 CMUs | / ELIA co its files as co for notifie Capacit (ELIA did additiona to the Pro | nsiders the ompliant and s it to the ty Provider not request l information Capacity ovider) | The Volume determinatio starts for the CMUs starts | s n 3 s | The NRPs for notified to the Provider (the to NRPs was che Capacity Prov The Capacity not contest the ELIA continue determination | the 3 CMUs is Capacity test dates for the osen by the ider: 10/09/2024) Provider does e NRP s the of the Volumes | ELIA notifies the results of the Volumes determination | |

→ The 3 CMUs are considered as Existing CMUs from the results notification on 15/10/2024





5.7 Impact on the Financial Security Volume and the Secured Amount

At the moment the CMUs become Existing CMUs (as of the results notification on 15/10/2024)

- → Required Level (in EUR/MW) decreased from EUR 20,000/MW¹ to EUR 10,000/MW.
- No correction of the Contracted Capacity has been made, so the Financial Security Volume remains unchanged.
- → Elia/Contractual Counterparty will release the corresponding part of the Secured Amount:
 - CMU 1 : 315 MW * (EUR 20,000/MW EUR 10,000/MW) = EUR 3.150.000
 - CMU 2 : 315 MW * (EUR 20,000/MW EUR 10,000/MW) = EUR 3.150.000
 - CMU 3 : 270 MW * (EUR 20,000/MW EUR 10,000/MW) = EUR 2.700.000.

1: Not shown in this presentation, but at the moment the key milestone "Permitting" is reached, the Required Level would be reduced from EUR 20,000 / MW to EUR 15,000 / MW.



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

• 3. Results of the Auction

 \bigcirc

Ś

₹ } }

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





- ➤ The 3 CMUs of the Capacity Provider are Existing CMU → The Capacity Provider can participate to an Auction of make a Transaction in the Secondary Market with these CMUs
- > The Capacity Provider decides to become a Buyer of an Obligation:
 - Transaction Validation Date : 30/12/2025
 - Transaction Period : 01/11/2025 31/10/2026
 - Contracted Capacity : 30 MW
- The Transaction on the Secondary Market increases the maximum Total Contracted Capacity for Delivery Period Nov 25 – Oct 26 with 30 MW.

→ A Financial Security is to be provided for 30 MW * EUR 10.000/MW= 300.000 EUR







As a reminder of the chapter 7 of the Functioning Rules, the partial existing pre-delivery control for an Additional CMU having become an Existing CMU:

- Is realized at CMU level (one CMU at a time)
- Is related to one Delivery Period DP
- Is performed once by ELIA at : t_{control 2} (01/11/25)
- The use case only details the partial existing pre-delivery control on CMU 1
- > The partial existing pre-delivery control follows the process below:



6. Pre-delivery control for Existing CMU

| Transa Validation From Y-4 (CC = 31 | ction n Date Auction 5 MW) | Transac from a | ction Valida Secondary Transactio (CC= 30 MV | tion Date Market n V) t | control 2 | t _{TCC} | | | | | | | | | | | | | |
|--|-------------------------------------|------------------------------------|---|---|------------------------------------|------------------------------------|------------------------------------|------------------------------------|------------------------------------|------------------------------------|------------------------------------|------------------------------------|------------------------------------|------------------------------------|------------------------------------|------------------------------------|------------------------------------|------------------------------------|------------------------------------|
| | | | | | - | | | | | Tran | saction | Period | 1 – CN | /IU 1 | | | | | |
| | | | | | Transaction Period 2 CMU 1 | | | | | | | | | | | | | | |
| Delivery Period Nov 20 – Oct 21 | Delivery Period Nov 21 – Oct 22 | Delivery Period Nov 22 – Oct 23 | Delivery Period Nov 23 – Oct 24 | Delivery Period Nov 24 – Oct 25 | Delivery Period Nov 25 – Oct 26 | Delivery Period Nov 26 – Oct 27 | Delivery Period Nov 27 – Oct 28 | Delivery Period Nov 28 – Oct 29 | Delivery Period Nov 29 – Oct 30 | Delivery Period Nov 30 – Oct 31 | Delivery Period Nov 31 – Oct 32 | Delivery Period Nov 32 – Oct 33 | Delivery Period Nov 33 – Oct 34 | Delivery Period Nov 34 – Oct 35 | Delivery Period Nov 35 – Oct 36 | Delivery Period Nov 36 – Oct 37 | Delivery Period Nov 37 – Oct 38 | Delivery Period Nov 38 – Oct 39 | Delivery Period Nov 39 – Oct 40 |

Determination of the Pre-delivery



As the CMU is a Non-energy-Constrained CMU, the Pre-Delivery Obligation is determined as follows

PreDelivery Obligation =
$$80\% \times \left(Total Contracted Capacity_{max}(CMU, DP) - \sum_{i=1}^{n} [Contracted Capacity (CMU, Transaction_i, t_{control}, t_{TCC})] \right)$$

= $80\% \times ([315 \ MW + 30 \ MW] - 0 \ MW)$
= $276 \ MW$

t_{control 2} illustrates the moment in time when ELIA realizes the pre-delivery control

t_{TCC} illustrates an example of moment in time when ELIA can determine the maximum Total Contracted Capacity over the Delivery Period | 38 DP (28/07/2026 is randomly chosen for this use case)





The CMU 1 includes only one Delivery Point

➤As the Delivery Point injects electricity into the Grid since less more than 10 calendar days, ELIA will use method 1 to determine the Pre-Delivery Measured Poser of the CMU 1

➤The Delivery Point injects electricity into the Grid since 09/09/24 → ELIA will analyze the 15-minutes measurements of the Delivery Point over the period going from 09/09/24 to 08/01/25

≻This slide illustrates the 15-minutes measurements over one of the time series of 36h between 09/09/24 and 08/01/25

 \rightarrow PreDelivery Measured Power_i = 349MW

>The Pre-Delivery Measured Power of the Delivery point is determined as follows:

[Pre · delivery Measured Power]_{Delivery Point}

 $= Max \left(PMP_{period 1}; PMP_{period 2}; ...; PMP_{period X} \right) = 349 MW$

Metering data from 07/12/24 12:00 to 08/12/24 23:45



 $[Pre \cdot delivery Measured Power]_{period n} = 349 MW$





As the CMU includes only one Delivery Point, the Pre-delivery Measured Power of the CMU equals the Pre-delivery Measured Power of the Delivery Point:

$$[Pre \cdot delivery Measured Power]_{CMU} = \sum [Pre \cdot delivery Measured Power]_{Delivery Point}$$

= 346 MW





 $\begin{aligned} Missing \ Volume &= Max \ (0 \ ; \ [Pre-delivery \ Obligation] - [pre \cdot delivery \ Measured \ Power]_{CMU}) \\ &= Max \ (0 \ ; \ 276 \ MW - 349 \ MW) \end{aligned}$

= 0MW

- \rightarrow No penalty will apply
- \rightarrow The Financial Security is not invoked and is released at the start of the Delivery Period *DP*





| The provisional results of the pre-delivery control | | | | | | | |
|---|--------|--|--|--|--|--|--|
| Pre-delivery Obligation of the CMU | 276 MW | | | | | | |
| Pre-delivery Measured Power _{Delivery Point} | 349 MW | | | | | | |
| Pre-delivery Measured Power _{CMU} | 349 MW | | | | | | |
| Missing Volume | 0 MW | | | | | | |
| Penalties | / | | | | | | |

The Capacity Provider does not contest the results of the pre-delivery control \rightarrow The results are deemed final