CRM DESIGN Note: Secondary Market

February 2025

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1 Introduction

1.1 Purpose of the design note

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This design note goes through the specificities of the Secondary Market, it provides a clear view of the process of a Secondary Market Transaction. The purpose is to give the reader a full understanding of the rules governing the Secondary Market transaction as described in detail in the Functioning Rules.

1.2 Structure of the design note

First, the Secondary Market design will be described by giving an overview of the Obligation transfer taking place during a Secondary Market Transaction in section 2.1. Second, this note elaborates on the eligible capacities which can be transferred section 2.3. Finally, transactions processing will be detailed as well as the different statuses in section 3.

2 Secondary Market design

The purpose of the Secondary Market is to give Capacity Providers the possibility to transfer their CMU's Obligation to another CMU. This exchange allows parties to manage their risk and avoid penalties. Transferring volumes on the Secondary Market increases the liquidity of the CRM auctions as it allows market parties to reduce their risk premiums in the Primary Market in case of failing to deliver the Contracted Capacity. Consequently, the Secondary Market helps decreasing the cost of the CRM.

The Secondary Market allows transfer of Obligations, it is technology-neutral, meaning any CMU can assume the obligations of a CMU of a different technology type, provided the eligibility criteria are met. As long as a contribution to the Belgian adequacy is ensured, participation is allowed for all technologies including energy storage and demand side management. The Eligible Capacity of each technology will be detailed in the section 2.3.

Different volumes can be traded in the Secondary Market, they must answer specific requirements, indeed they need to be excluded from the demand curve built for the Primary Market, the eligibility of these volumes will be detailed in the section 2.3.2.

This topic has strong links with most of the other processes in the CRM, notably: the Prequalification Process, Derating Factors, Pre-Delivery monitoring, Opt-out treatment, Availability Obligation, Penalties and Payback Obligation. These links will explicitly be mentioned in the document.

The Secondary Market is an open market, all market parties can participate without a central exchange or a third party. It is up to the parties finding a counterparty for a Transaction. Nevertheless, Elia gives the possibilities to market parties to call on an Exchange to make the necessary procedures for a Transaction. The Market is open 24/7 and takes place in the CRM IT Interface. Therefore, the notification for a transaction can be submitted at any moment.

2.1 Transfer of Obligation

2.1.1 Rights and Obligations of parties

Parties are free to participate to the Secondary Market, yet they need to find the counterparty for a possible Transaction, either as a Buyer or a Seller. The transfer of an Obligation can be done through several Transactions with multiple counterparties. Elia verifies the feasibility of the Transactions and executes the contractual implementation. It will check if the notifications contain all the necessary information for the validity of the Transactions. Transaction information can be communicated to the CREG in case of suspicion of Market Abuse or if it can constitute an anti-competitive behaviour. The process is described in detail in the section 3.2.

The Secondary Market is a title transfer facility which means that through this market

Capacity Providers have the possibility to transfer their rights and their Obligations after participating to the Primary Market of the CRM and being selected for a capacity or after a previous Secondary Market Transaction.

In Figure 1, rights related to the payment of the Capacity Remuneration by Elia that is transferred to the Buyer as well as for the obligations which relate to: Pre-Delivery if applicable (refer to the design note describing the Pre-delivery for the details [1]), Availability Monitoring (refer to the design note describing the Availability Monitoring for the details[1]) and finally the Payback Obligation (refer to the design note describing the Payback Obligation for the details[1]).
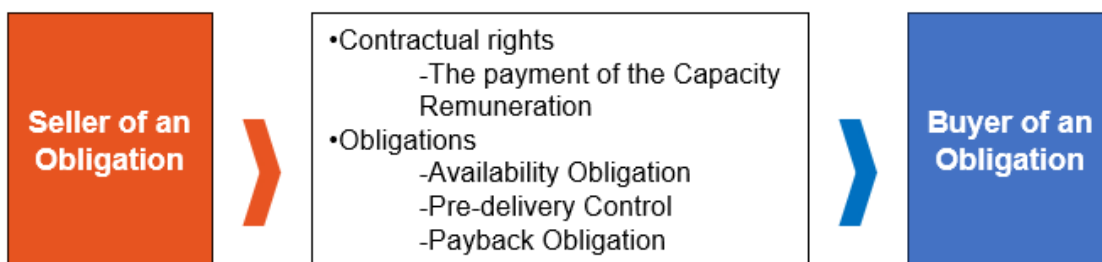

Figure 1 Transfer of rights and obligations

A Transaction made on the Primary Market is defined by a list of parameters and information mentioned in the Annex A of its Capacity Contract, as represented in the Figure 2.

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[1] Capacity Remuneration Mechanism

Figure 2 Contractual Parameters per Transaction contained in Annex A

It should be noted that the rules regarding the retro-active application of design changes in the CRM as described in Annex 18.8 H of the CRM Functioning Rules remain applicable after a Secondary Market Transaction. In other words, the rules applicable on the Buyer of the obligation depend on the Transaction Date of the Primary Transaction.

Being technology-neutral, a Secondary Market Transaction can be made between an OCGT and a DSM as represented in the Table 1. Indeed, the Strike Price and the Capacity Remuneration will remain the same whereas for Payback Obligation, it is adapted to the Buyer and the relevant Transaction Period following the latest version of the Functioning rules. In the example we assume that the Primary Market Transaction for the OCGT took place in 2024, meaning that DSM would be exempted from the Payback Obligation.

Parameters	Seller		Buyer

Technology	OCGT	≠	DSM
Derating Factor	94%	≠	45%
Strike Price	384 €/MWh	=	384 €/MWh
Capacity Remuneration	45 000 €/MW/y	=	45 000 €/MW/y
Payback	Obligated	≠	Exempted
SLA	NA	≠	3h

Table 1 Example of a transfer between a Seller and a Buyer with different parameters

2.1.1.1 Rights

The Capacity Remuneration associated to the CMU selling its obligation is transferred to the Buyer through the Transaction.

2.1.1.2 Obligations

Three different Obligations are transferred to the Buyer of the Contract.

1. Pre-Delivery: the Buyer will need to go through the Pre-Delivery process before the Delivery Period starts and abide by the rules related to it. He might need to adjust his Financial Securities level. The Secondary Market Transaction can take place only when the CMU becomes Existing.

2. Availability Obligation: in exchange of the Capacity Remuneration, the CMU has the Obligation to be present during AMT (Availability Monitoring Trigger) moment with the Contracted Capacity transferred through a Secondary Market Transaction. The Availability Obligation depends on whether the CMU is Energy constrained or non-Energy Constrained, it is essential for the Buyer to know in which conditions the Contracted Capacity needs to apply. For instance, Energy Constrained units are obligated to their non-derated Contracted Capacities as explained in the Design Note Availability Obligation[2]. In the example given in Table 1, if the volume transferred is 20MW, the DSM unit is Obligated by the 20MW divided by its Derating Factor, but only during its SLA period.

3. Payback Obligation: The Strike Price for the Payback Obligation is always the

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[2] Capacity Remuneration Mechanism

one defined by the Primary Market Transaction and will stay the same whatsoever the number of Transactions on the Secondary Market. The Strike Price is conserved whereas the obligation depends on the technology. In the example in Table 1, the Strike Price will be mentioned in the Capacity Contract at 384 €/MWh but the DSM will be exempted from this obligation as described in the latest Functioning Rules. If another transfer is made back to a CCGT for example, it will be obligated to Payback.

2.1.2 Timing to respect

The Notification Date is defined as the date a party sends a notification for a Secondary Market Transaction; it will be considered as the reference date for the continuity of the process. As a reminder, the Transaction Period is defined as the period with a start date/time and end date/time linked to a Transaction. A Transaction on the Secondary Market can be notified ex-ante or ex-post. Ex-post transactions can be notified at the latest 10 WD after the Transaction Period start date and ex-ante at any moment before. Notifying for a Transaction is sufficient to respect the delays. The possible Transactions have diverse granularities, they can be of fifteen minutes up to a Delivery Year and have a minimum Capacity and granularity of 0.01MW. Elia uses the Notification Date to define in which category the transaction will fall (ex-ante or ex-post).

If a party wants to make an ex-post Transaction in the Secondary Market, it needs to respect the 10 WD after the start of the Transaction Period otherwise the Transaction is rejected. It is the responsibility of the parties to cover the Transaction Period concerned by their Secondary Market Transactions. Once the deadline for a Secondary Market Transaction has passed, the party remains subject to Pre-delivery, Availability and Payback Obligations and can no longer transfer these Obligations.

Under specific circumstances, it is not possible to notify for a Transaction 15 WD ahead of the Bid submission deadline, so during the Auction process, till the publication of the results for the concerned Delivery periods.

The process after a notification for a Transaction is described in the section 3.1.

2.2 Conditions to participate to the Secondary Market

2.2.1 Secondary Market Transactions Requirements

Requirements are at a CMU level, as it is the volume of the CMUs that is bid in the Primary Market. Table 2 contains the specific requirements for a notification of a Transaction. This table can be consulted in the Functioning Rules section 10.4 for more details.

Secondary Market transaction ID	The automatically generated ID of the Secondary Market transaction
Seller of an Obligation	Identification of the Capacity Provider considered as the Seller of an Obligation

CMU of the Seller of an Obligation	Identification of the CMU of the Seller of an Obligation
Country of the CMU of the Seller of an Obligation	Country of the CMU of the Seller of an Obligation
Transaction of the Seller of an Obligation's CMU	Identification of the Transaction from which the obligation is deducted for the CMU of the Seller of an Obligation
Buyer of an Obligation	Identification of the Capacity Provider or Prequalified CRM Candidate considered as the Buyer of an Obligation
CMU of the Buyer of an Obligation	Identification of the CMU taking over the obligation
Country of the CMU of the Buyer of an Obligation	Country of the CMU taking over the obligation
Secondary Market Capacity	The volume of the Secondary Market Capacity that is transferred
Transaction Period	The Transaction Period indicating the start date/time until the end date/time (included)
Capacity Remuneration	The Capacity Remuneration of the identified Transaction of the CMU of the Seller of an Obligation
Strike Price of the Transaction	The Strike Price of the identified Transaction of the CMU of the Seller of an Obligation
Auction year for the monthly actualization of the Strike Price	The monthly actualization of the Strike Price in time represented by its parameter Auction year
Auction type for the monthly actualization of the Strike Price	The monthly actualization of the Strike Price in time represented by its parameter Auction type Y-4, Y-2 or Y-1

Table 2 – Requirement on the notification content of a Secondary Market transaction

It is mandatory to provide all the information required before launching the notification process. Parties are advised to get familiarized with this table. As mentioned before, the Capacity Remuneration is fixed during all the Transaction Period. It is partially representing the value of the Transaction along with the Strike price. The Secondary Market does not allow the transfer of the Obligation modifying the value of the Contract. The purpose is to avoid market abuse and keep the cost structure of the Primary Market.

2.2.1.1 Conditions for the Seller

Only Capacity Providers can be entitled to be Sellers of an Obligation.

2.2.1.2 Conditions for the Buyer

The Buyer of an Obligation needs to be a Capacity Provider with a Prequalified CMU under the latest Functioning Rules for the Transaction Period in question. Any CMU without a prequalified status is not eligible for the Secondary Market. In case the Buyer is a Capacity Provider; if due to the consequences of the Availability Obligation the CMU is subject to a downwards revision of the Capacity, the CMU is not Eligible for a new

Secondary Market Transaction (refer to the design note describing the Availability Obligation for the details[3]).

2.2.2 Requirements for Financial Securities

In case of ex-ante Transactions, the existing CMU buying the Obligation will need to adjust his Financial Securities according to the volume he wishes to acquire through a Secondary Market Transaction.

Figure 3 Example of Financial Securities adjustment after a Transaction.

During the Delivery Period, Financial Securities are not applicable anymore.

2.3 Secondary Market Eligible Volume

2.3.1 Volume transfer

The capacity to be transferred during a Secondary Market Transaction cannot exceed the Contracted Capacity of the Seller. Eligible volumes for the Buyers are described in the next section. A single CMU can sell its full or partial Contracted Capacity to different Buyers; the total volume to be traded can be split and transferred through different Transactions. The Transaction is based on CMUs not on market parties, which means that different Transactions needs to be initiated if the Seller transfers its Obligation to different CMUs within the same portfolio.

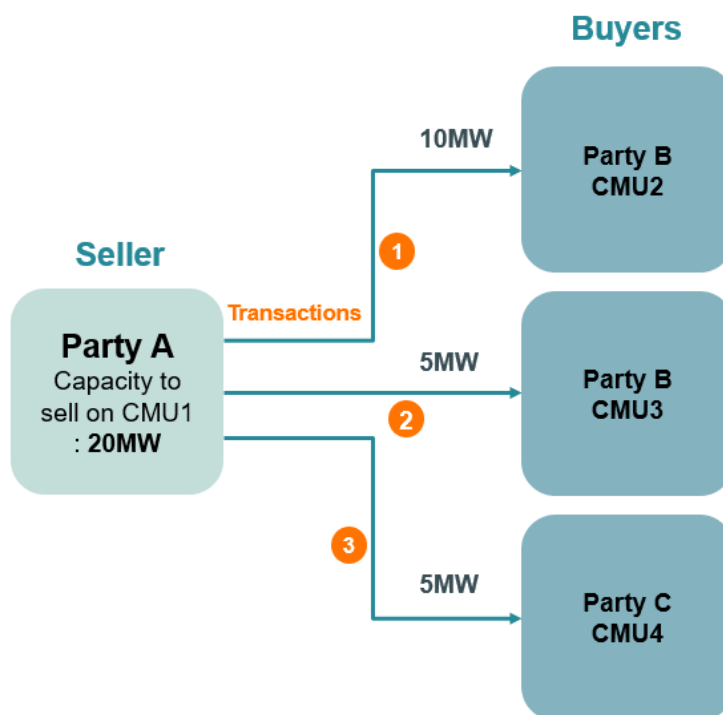[3] Capacity Remuneration Mechanism

Figure 4 Example of Transactions with different Buyers

On a similar way a Buyer can take over volumes from different CMUs.

2.3.2 Eligible Volume

Eligible Volumes for a Secondary Market Transaction are all the volumes not considered contributing to Security of Supply during the Primary Market volume calculation.

As follows, they fall in different categories listed below:

- extra-available capacities which mean capacities that provide a higher volume than their Nominal Reference Power,
- non-derated capacities,
- Energy-Constrained CMUs running outside of their SLA MTUs,
- Opt-out "OUT" volumes (as indicated during the prequalification process):
    - Art4bis. Structural reduction of capacity
    - Art4bis. temporary reduction of capacity
    - Capacity is connected to the grid with a flexible connection
    - Grid connection not commissioned in time
    - Capacity not commissioned in time
    - New build capacity
    - Capacity has no obligation to prequalify
    - Motivational letter (if accepted)

All volumes that fall outside from the list are considered as contributing to Adequacy.

More specifically, these volumes are evaluated differently for Buyers and Sellers if the volumes are from an Energy Constrained or a Non-energy Constrained CMU. In the boxes below, the Secondary Market Capacity is defined depending on if it's the Seller or the Buyer and if it's an Energy Constrained or a non-Energy Constrained CMU. All the parameters and characteristics in the formulas are evaluated at the time of the notification of the Secondary Market Transaction.

2.3.2.1 For a Seller of an Obligation

The Seller can only sell his Contracted Capacity.

2.3.2.2 For a Buyer of an obligation:

$$Secondary\ Market\ Capacity \leq Secondary\ Market\ Remaining\ Eligible\ Volume$$

The Eligible Volume that a Buyer can take is expressed by the Secondary Market Remaining Eligible Volume (SMREV). This value is computed differently if the CMU is Energy Constrained or not and if the Transaction is ex-post or ex-ante.
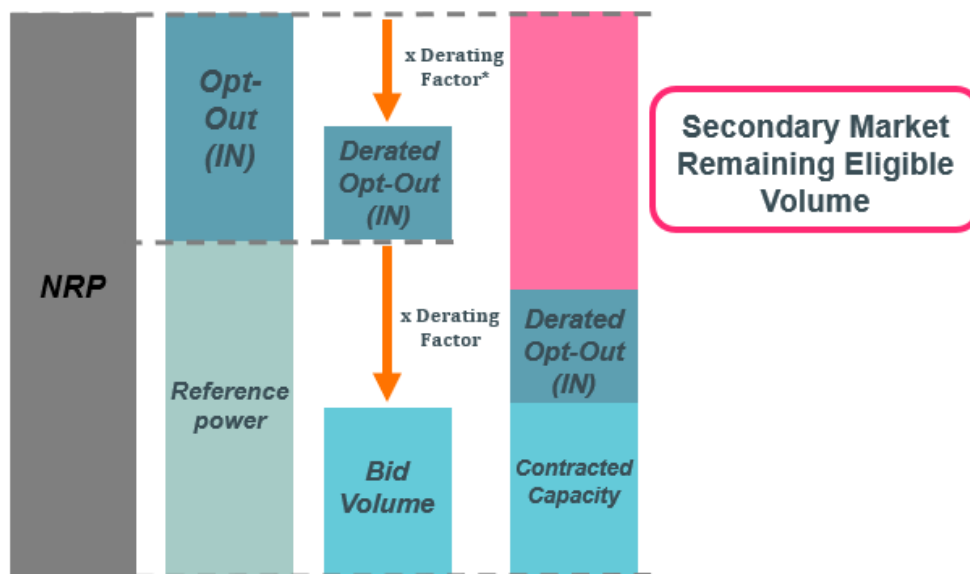
2.3.2.2.1 Non-Energy Constrained

Non-Energy Constrained

Ex-post and ex-ante transactions

$$SMREV(CMU, TP)$$
$$= Max\{0; Remaining\ Maximum\ Capacity - OptOut\ Volume$$
$$\cdot Last\ Published\ Derating\ Factor -\ Total\ Contracted\ Capacity\}$$

For non-Energy Constrained CMUs, the SMREV is evaluated the same way whether it is an ex-post or an ex-ante Transaction. Figure 5 allows to visualize the SMREV in case of a non-Energy Constrained CMUs.

To compute the SMREV from the initial Nominal Reference Power (NRP), we need to split it in Opt-out and Reference Power, after that we can compute the final Contracted Capacity and the SMREV.

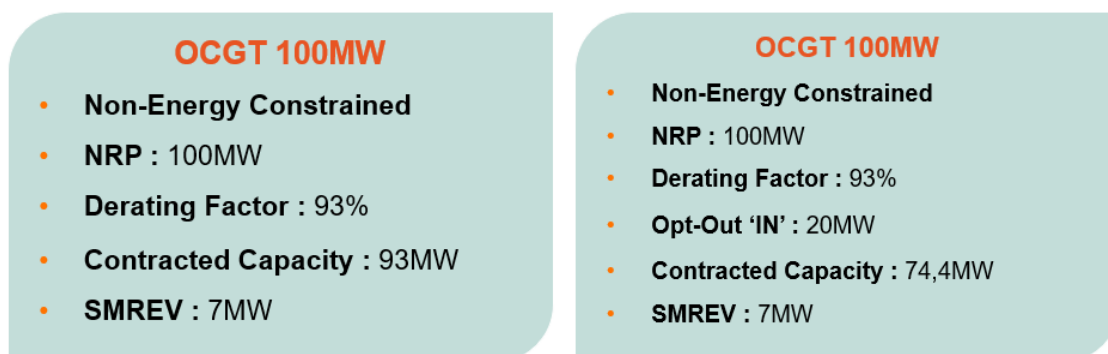*Figure 5 SMREV deduction from NRP for a non-Energy Constrained CMU.*

OCGT 100MW
- **Non-Energy Constrained**
- **NRP :** 100MW
- **Derating Factor :** 93%
- **Contracted Capacity :** 93MW
- **SMREV :** 7MW

OCGT 100MW
- **Non-Energy Constrained**
- **NRP :** 100MW
- **Derating Factor :** 93%
- **Opt-Out 'IN' :** 20MW
- **Contracted Capacity :** 74,4MW
- **SMREV :** 7MW

Figure 6 Example of SMREV calculation for a non-Energy Constrained CMU.

For Non-energy Constrained CMUs, the calculation leads to a similar SMREV as Opt-out 'IN' does not impact the volume not contributing to adequacy.

2.3.2.2.2 Energy Constrained

Energy Constrained CMUs are characterized by their SLA, determining how long they can contribute with their non-derated capacity to adequacy. Figure 7 illustrates this principle for a CMU with an SLA of 1 hour. Even though the AMT Moment lasts for 2 hours (i.e. 8 MTUs) the CMU only has an Obligated Capacity for the duration of its SLA. For all other MTUs, no Obligated Capacity is applied. The unit might "re-charge" during AMT MTU 5-7 to supply a small amount of excess capacity during AMT MTU 8.
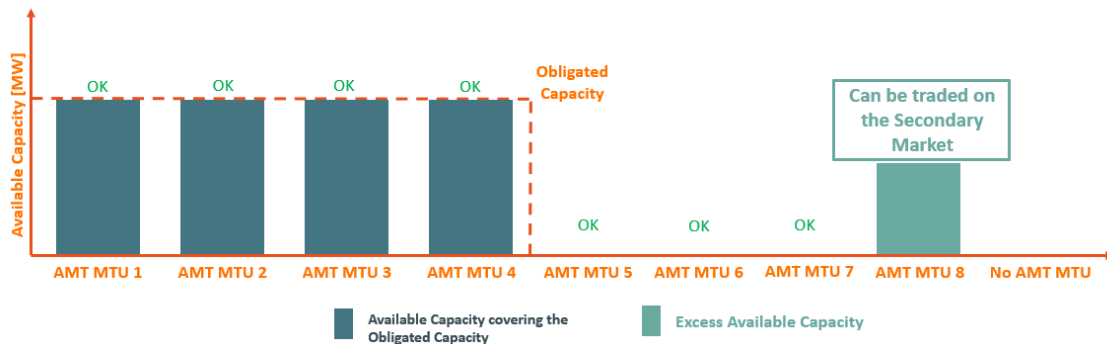
Figure 7 Available Capacity for an Energy Constrained CMU

The volume at MTU 8 can be traded on the Secondary Market. This volume concerns volumes traded ex-post only. Moreover, similar to non-Energy Constrained CMUs the volumes exceeding the Contracted Capacity can be traded on the Secondary Market.

2.3.2.2.2.1 Ex-ante Transactions

Ex-ante Transactions are calculated by dividing the Contracted Capacity by the Derating Factor.

Energy Constrained

Ex-ante

$$SMREV(CMU, TP)$$
$$= Max \left(0 \; ; Remaining \; Maximum \; Capacity \right.$$
$$\left. - OptOut \; Volume \; * Last \; Published \; Derating \; Factor - \frac{Total \; Contracted \; Capacity}{Derating \; Factor} \right)$$
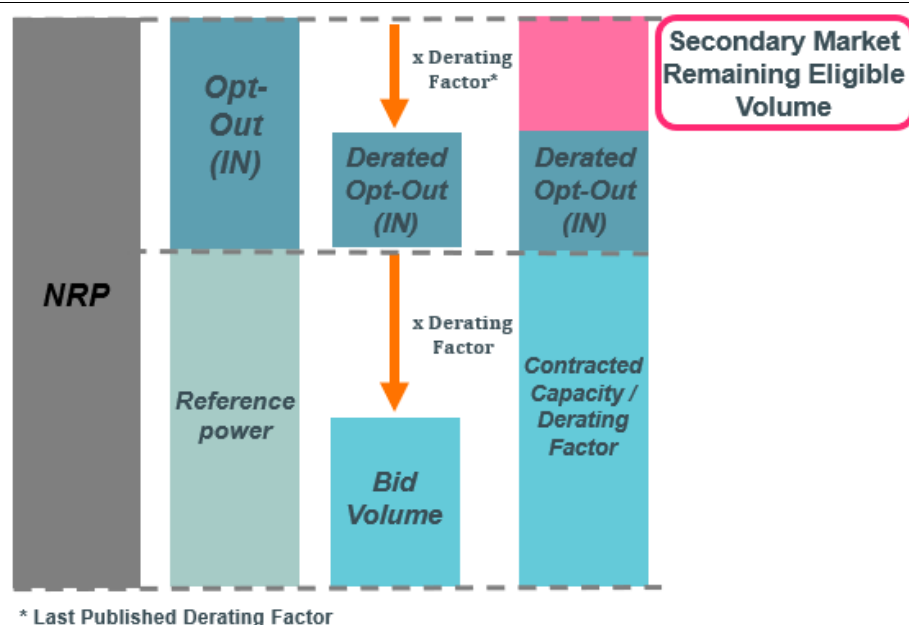

Figure 8 SMREV deduction from NRP for an Energy Constrained CMU ex-ante.

Without an Opt-out, the SMREV for an Energy Constrained CMU for an ex-ante transaction is always 0MW.

Storage
- **Energy Constrained SLA 2h**
- **NRP :** 100MW
- **Derating Factor : 60**%
- **Contracted Capacity :** 60MW
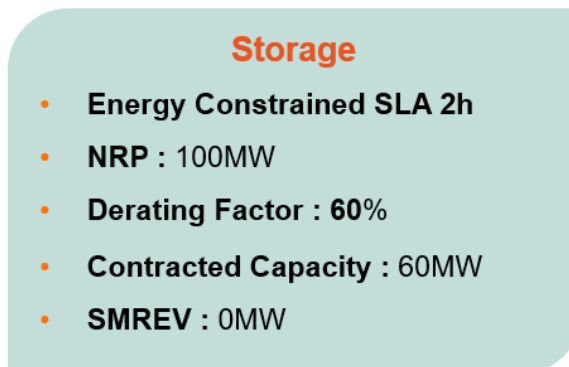- **SMREV :** 0MW

Figure 9 Example of SMREV calculation for an Energy Constrained CMU.

For the same example with an Opt-out, the calculation leads to a SMREV of 8MW. The non-derated Contracted Capacity and the derated Opt-Out 'IN' are used to deduce the SMREV.
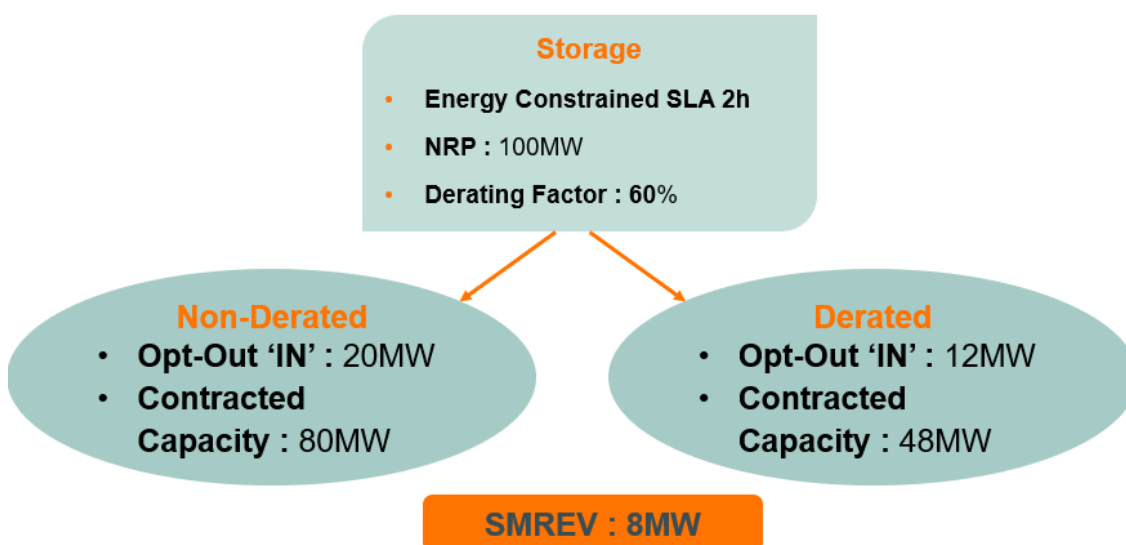

Storage
- **Energy Constrained SLA 2h**
- **NRP :** 100MW
- **Derating Factor : 60**%

Non-Derated
- **Opt-Out 'IN' :** 20MW
- **Contracted Capacity :** 80MW

Derated
- **Opt-Out 'IN' :** 12MW
- **Contracted Capacity :** 48MW

SMREV : 8MW

Figure 10 Example of SMREV calculation for an Energy Constrained CMU ex-ante Transaction.

2.3.2.2.2.2 Ex-post Transactions

For ex-post Transactions, the Obligated Capacity needs to be used to compute the real extra capacity available for the Transaction. To fully understand the concept of the Obligated Capacity, it is important to consult the Design Note of the Availability

Obligation[4].

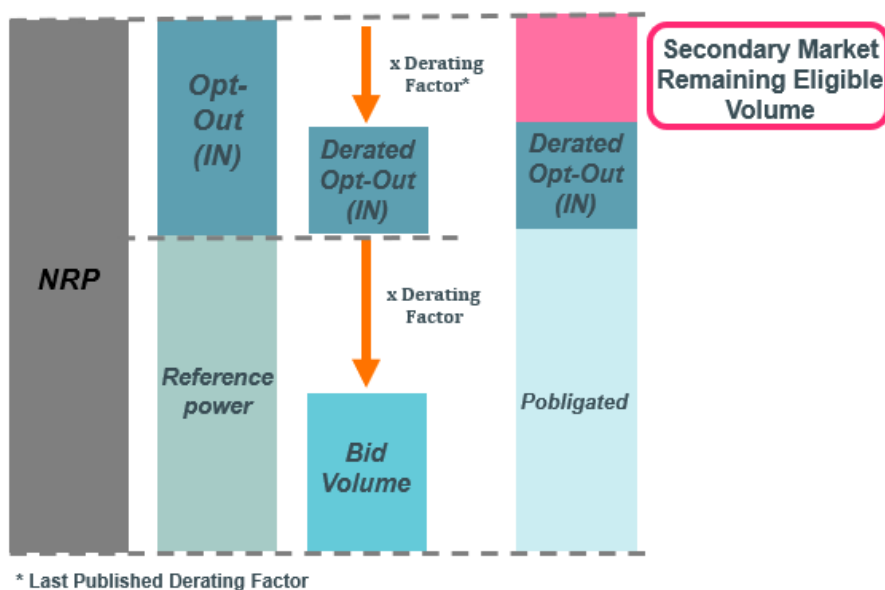<div style="border:1px solid black; padding:10px;">

Energy Constrained

Ex-post

$SMREV(CMU, TP)$
$= Max\big(0\,;Remaining\ Maximum\ Capacity - P_{Obligated,max} - OptOut\ Volume$
$* Last\ Published\ Derating\ Factor\big)$

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Figure 11 SMREV deduction from NRP for an Energy Constrained CMU ex-post Transaction.
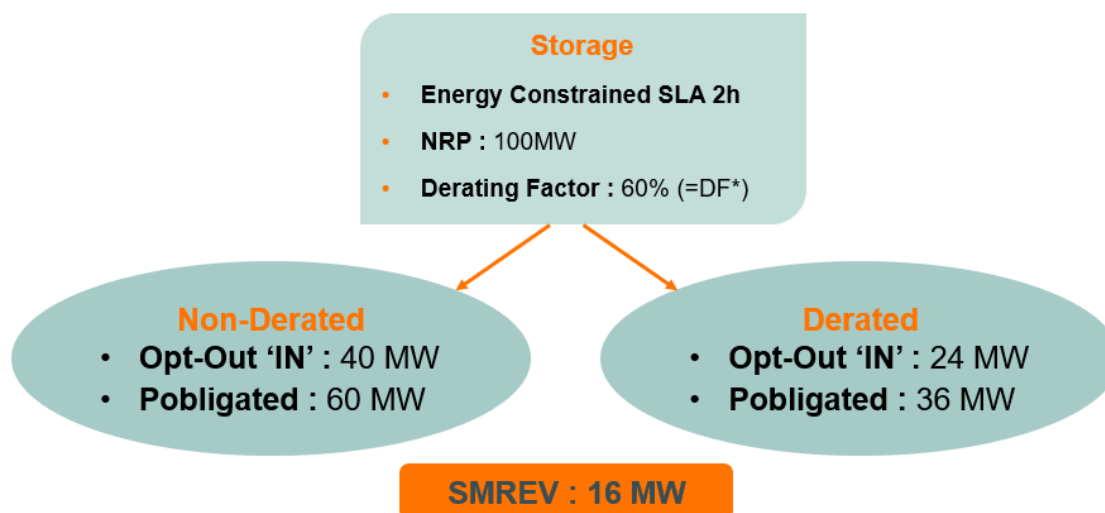

Figure 12 Example of SMREV calculation for an Energy Constrained CMU ex-post Transaction.

2.3.2.3 For Foreign CMUs

For Foreign Capacities, the Secondary Market Capacity depends on which country the Transaction takes place. For Secondary Market Transactions involving a Buyer of an Obligation in an adjacent European country to Belgium and a Seller of an Obligation in another country (in Belgium or in another adjacent European country to Belgium) the Remaining Maximum Entry Capacity at the specific border is defined as follow:

$$RMEC(border, TP)$$
$$= Max(0; Foreign\ volume\ selected\ in\ Auction(border, TP)$$
$$- Total\ Contracted\ Capacity_{max}(border, TP))$$

The RMEC considers the volume already contracted during the previous auctions. It is the residual volume that can be used for a Secondary Market Transaction.

3 Secondary Market Transactions

3.1 Notification of a transaction

The principle of the notification is to inform Elia of the will to make a Secondary Market Transaction. The notification can either be made by the first party or by an exchange. Notification of a Secondary Market Transaction can be made through the CRM IT Interface. In case the Seller is submitting a notification for a Secondary Market Transaction, the Buyer needs to confirm or reject the information contained in the Transaction. If the Seller and the Buyer are the same Capacity Provider no approval is needed. If the notification is made by an Exchange, no approval from parties is expected in that case.

The Transaction needs to be confirmed by the Counterparty at the latest 3 WD after the

notification is made otherwise Elia will automatically reject the Transaction and inform the parties.

Finally, in the case of an ex-ante transaction, the Buyer might need to specify the initial choice of NEMO and/or the initial choice of Declared Day-ahead prices (DDAP). If the NEMO is missing, the Day-ahead Market Price will be used as a fallback. If the DDAP is missing, the Remaining Maximum Capacity will be considered zero.

3.2 Processing of the Transaction by Elia

Elia acknowledges the receipt of the notification at latest 1 WD after the submission of a notification. The processing of a Transaction can have different statuses on the CRM IT Interface depending on the step the Transaction is in. In the Figure 13, the status flow is represented per case encountered.
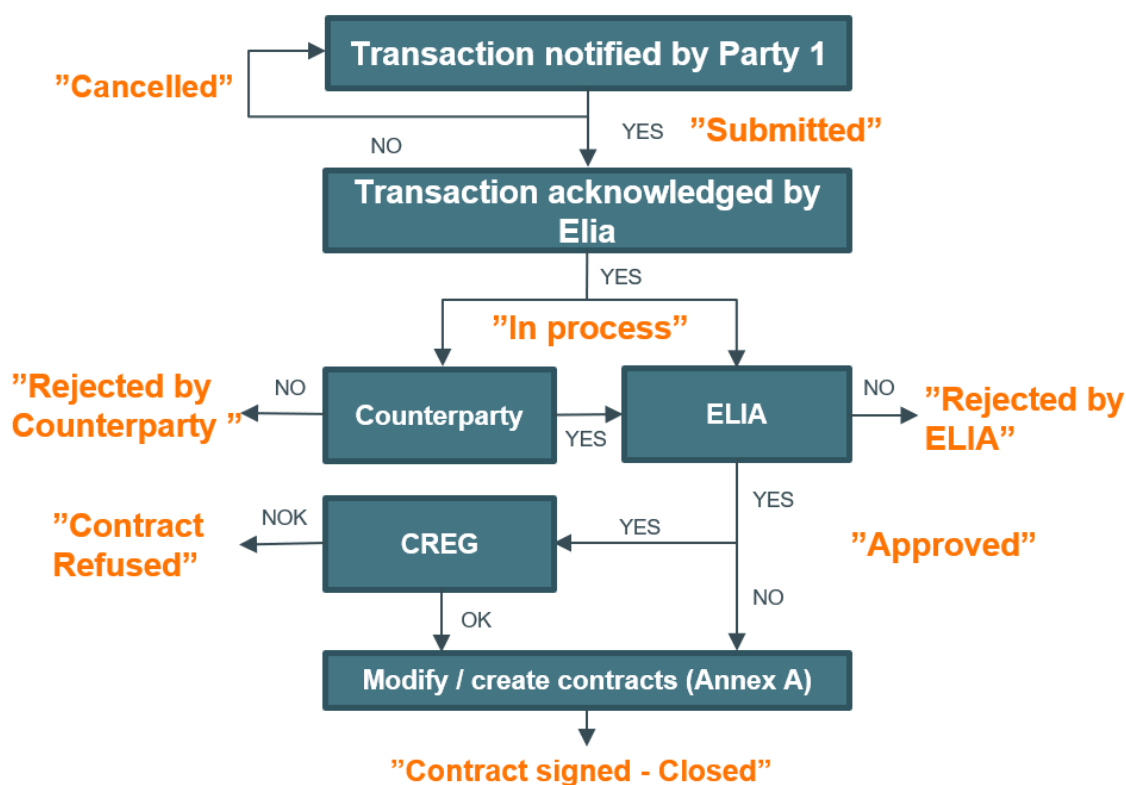

Figure 13 Transaction status flow

Elia will communicate the Transactions' details in case of doubt of anti-competitive behaviour or market abuse that the transaction can constitute to the CREG and to the Capacity Market Auditor.

3.2.1 Approved Transaction

ELIA processes transactions on the Secondary Market according to their Transaction Date. In the Figure 14, the approval process flow is represented.
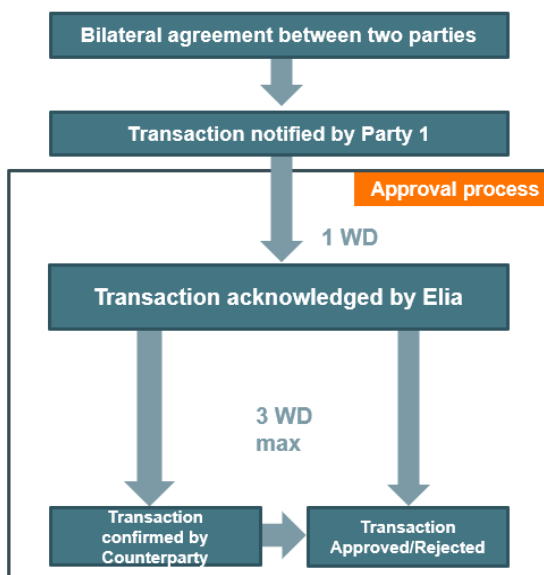
Figure 14 Approval process

If all requirements as described in the Functioning Rules and in section 2 are respected the transaction is approved by Elia. Elia communicates to both parties, in separate emails or to the exchange if applicable, the 'approved' status of the transaction and the details of the transaction concerning each party.

3.2.2 Rejected Transaction

In case of rejected transaction, the Seller of the Obligation remains responsible for his obligations. A resubmission of a Secondary Market Transaction can always be carried out after the rejection. Elia informs by email parties of the reason of the rejection. Contestation of rejection is possible through the process described in Chapter 14 of the Functioning Rules.

In case the CREG asks Elia to cancel the Transaction in accordance with article 20 of the Royal Decree on "Monitoring", the status of the Transaction becomes "Contract Refused".

3.2.3 Signature Process

The contractual implementation starts 15 WD after the approval of a Transaction. The signature process is launched at once for several Transactions. The Figure 15 shows the starts of the contractual implementation at the level of the batch, which is triggered every 15WD to lead to the generation of the Contracts.
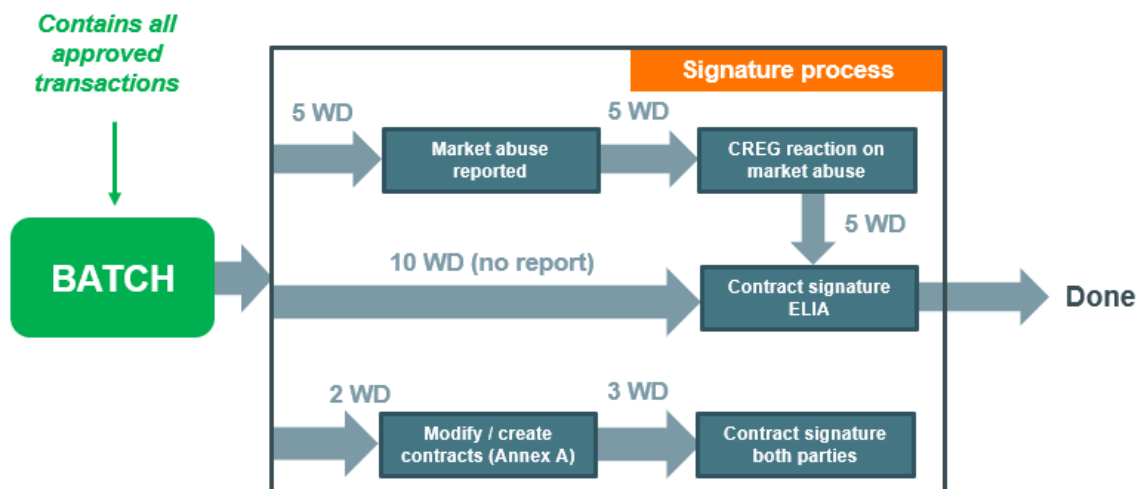
Figure 15 Signature process

3.3 Impact of the transaction on parties

Elia sends to both parties a new annex A of the Capacity Contract 2 WD after the approval of the Secondary Market Transaction. As the Seller is already a Capacity Provider, he will receive an updated Annex A whereas the Buyer if he not yet a Capacity Provider he will receive a new Capacity Contract. It is important to mention that at the signature of the contract, it is the latest version of the contract that will be signed. The contract can be consulted on the Elia Website[5]. The updated/new Annex A should be signed by the parties at the latest 3 WD after reception of the Contract. If one of the parties do not respect the delays, Elia cancels the Transaction. For parties that already signed a Contract in the past, they need to sign the updated Annex A otherwise they must sign the latest version of the Contract. Finally, Elia signs the Annex A or Contract of both parties at the latest 10 WD after the last signature.

After approval of the Transactions, the Seller remains liable if he did not trade away all his Contracted Capacity. All Capacity Remuneration for the transferred obligation will be transferred as well as Availability Obligations and Payback Obligation towards the Buyer. As mentioned before the Seller needs to sign an updated Annex A, in case the Seller does not have any Contracted Capacity left, he still needs to sign the updated Annex A as other obligations can still be active like penalties that were issued before the Secondary Market Transaction. Finally, the Buyer is liable to the latest version of the Functioning Rules at the exception of the provisions of the rules mentioned in the Annex H of the Functioning Rules.

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[5] Capacity Remuneration Mechanism