

Prequalification Use Case 1

Offtake: Industrial process on a site – Oven & Melting

Task Force Implementation CRM – 05/05/2020

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 its Annexes by means of examples.

Given that the CRM process consists of several steps and for each of these steps several layer of information and details are relevant and will be presented sequentially to market parties via the Implementation Task Forces, it is to be understood that this document focuses on most pertinent prequalification aspects (including Opt-Out consideration).

By no means, the use cases replaces 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 section “Prequalification Processes” of the Functioning Rules as known at the moment of writing and shared with market parties on 24/04/2020. It also builds on the proposals related to the minimum threshold and obviously follows the context set by the Electricity Law.

The purposed slide pack has the objective to facilitate the Functioning Rules comprehension for the Prequalification Processes.

The use case slide pack is arranged to correspond to the structure of the updated and informal version of Functioning Rules sent to market parties on 24/04/2020 in preparation of the Implementation Task Force planned on 05/05/2020.

4 specific uses cases are proposed to illustrate 4 possible Capacity Market Unit configuration and by doing so; hopefully increase the understanding of the proposed set of rules.

The use cases are not oriented, fictive and for didactic and support purpose only. In case of apparent contradiction with the rule described the Functioning Rules, the Functioning Rules prevail.

ELIA's objective is to build on these 4 example when approaching the next steps of the CRM process. In this way, the layers related to the auction process, pre-delivery monitoring, secondary market and availability monitoring will be added later on.

Use case structure

The Prequalification Process will be described following the operational & Prequalification Functioning Rules document flow:

1. The customer and his asset(s)



2. Terminology of the prequalification



3. Application form & Prequalification Platform access



4. Prequalification File(s)



5. Prequalification review process



6. Volume determination



7. Prequalification results notification



8. Evolution in time of the prequalification

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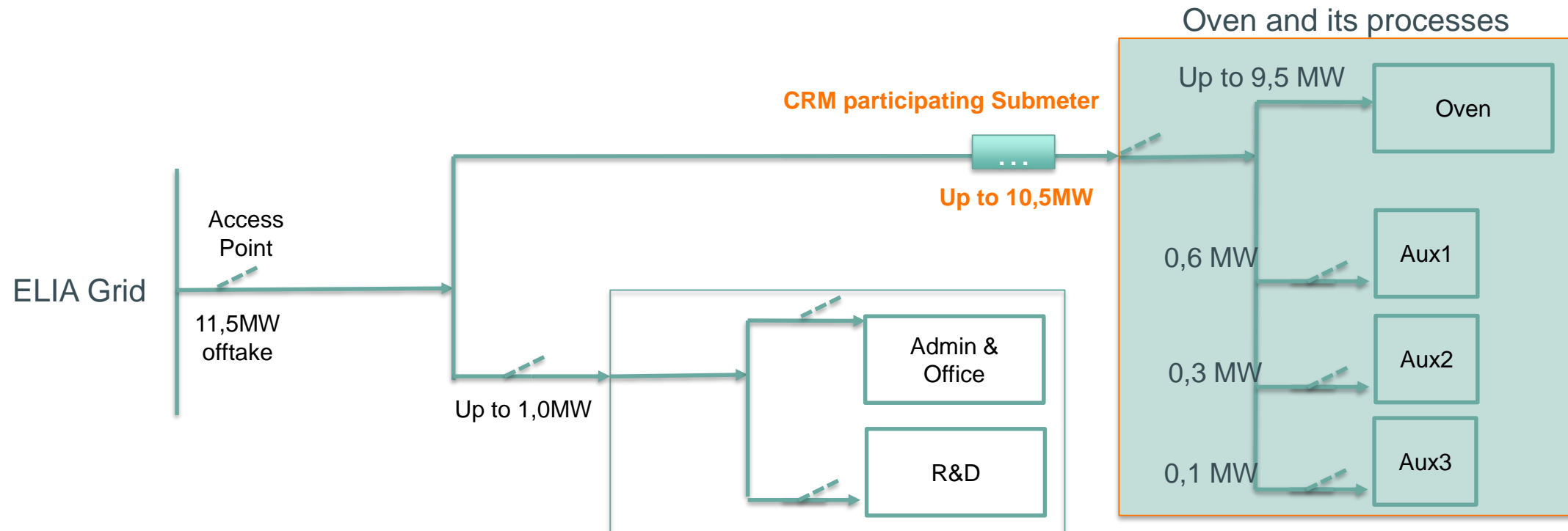
8. Evolution in time of the prequalification

1. The customer and his assets

- **IndustryOfTheFuture.SA/NA is owner of a site** on which a major oven & melting process are major consumers of electricity (located in Belgium and TSO connected)
- **The oven represents more than 80% of the consumption of the site** and other related processes are highly dependent of it, auxiliaries.
 - An estimate of 10MW on the 11MW usually consumed almost in baseload are expected to decrease in case of oven stop
 - The rest (11MW – 10MW) covers the R&D department, offices, site safety and other facilities.

1. The customer and his assets

Schematic and simplified Access Point Single Line Diagram



1. The customer and his assets

- A technical switch of the oven and its auxiliaries is already possible within the site control room.
- The oven and the factory are organized in 3X 8h shifts with a detailed planning of the site operation planning
- The oven process is **a slow reacting process**:
 - A stop of the oven activities is possible if foreseen by 17.00 the day before
 - A gradual stop of the oven requires 4 hours to preserve the ISO quality standard of the goods
 - A ramp-up of the oven in case of startup could need 4h to reach the process flow.
- IndustryOfTheFuture.SA/NA never participated in any flexibility product to deliver Ancillary Services for the Elia Grid.
- The CAPEX to be able to participate to such signal are limited so that the business plan is fully focused on the OPEX and the impacts on the company value chain organization

1. The customer and his assets

- Purely electricity consumption oriented & TSO connected – the site has no need of any **EOS/EDS study**
 - The Delivery Point is Existing and related to the process
 - The owner of the site is likely to be a legal entity handling the Prequalification File but the Capacity Holder is the mother company Visionnary International.SA/NV which signed the Access Contract with ELIA
 - ➔ **Visionary International.SA/NV shall sign a Grid User Declaration with the IndustryOfTheFuture.SA/NV**
 - The electricity offtake Access Point is expected to consume up to 12,5MW and has no capability to inject on ELIA Grid
 - A valid Submeter on all ovens and its related processes is already Existing
- **No electricity production license** for the site is necessary
- No third party documents except the Grid User Declaration are required

1. The customer and his assets

Customer high level comprehension: The oven and its auxiliaries processes behind the Submeter is clearly "Existing", but as it is a consumption, even above 1MW, there is no mandatory CRM Prequalification (neither in fast track).

Nevertheless there is a willingness to participate in the CRM for a 1 year Capacity Contract Duration as the investments for the CRM are considered as low (assumed below the investment threshold) and the impact of the OPEX will be integrated in the offers

→ 1 individual CMU (1 submeter) aims to be prequalified

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2. CRM terminology applicable to the customer's case

Capacity Holder: the owner of the Access Contract of the site, VisionaryInternational.SA/NV will mandate the company operating the activities IndustryOfTheFuture.SA/NV to prequalify for a participation to the CRM

→ Willingness to transfer a Grid User Declaration to his daughter company for the Delivery Point on the Access Point

→ All CRM Prequalification Process tasks shall be performed by IndustryOfTheFuture.SA/NV

CRM Candidate: IndustryOfTheFuture.SA/NV shall be able to participate to the CRM Prequalification after the acceptance of its application form by ELIA.

IndustryOfTheFuture.SA/NV is the participating CRM legal entity (having a Grid User Declaration with the Capacity Holder).

IndustryOfTheFuture.SA/NV shall be considered after a validation by ELIA/Contractual Counterparty of his application form **as a CRM Candidate** able to introduce **CRM Prequalification Files**

Prequalified CRM Candidate: If at least one CMU's Prequalification File of the CRM Candidate, IndustryOfTheFuture SA/NV, is considered as compliant (**duly prequalified**), the status of the candidate shall be **updated to Prequalified CRM Candidate**

2. CRM terminology applicable to the customer's case

Delivery Point: The oven and all its related auxiliaries processes is to be considered as a Delivery Point, as a validated sub-metering is identifying their consumption.

CMU: The Delivery Point (oven and related auxiliaries process) shall be considered as an 'individual CMU'.

Individual CMU : Because there is only one Delivery Point foreseen in the CMU, it shall be considered as individual.

If IndustryOfTheFuture.SA/NV got the Grid User Declaration of another customer's Delivery Point and had grouped it with the Oven DP under the same CMU, the CMU would not have been considered as an individual CMU anymore.

CMU without Daily Schedule: In regards to the Individual MW Schedule communication channel, the consumption threshold of the Delivery Point is not high enough and not considered as a production above 25MW so that it shall not be considered as a CMU with a Daily Schedule (participating and having in the ICAROS MW schedule obligation)

Existing CMU : The oven and its processes are connected on the grid via a submetering device, thus the CMU's sole Delivery Point is Existing, thus the status of the CMU shall be considered as Existing.

2. CRM terminology applicable to the customer's case

CRM standard Prequalification Process:

- The IndustryOfTheFuture.SA/NV has a willingness to participate in the CRM with its assets (via a Grid User Declaration)
- His potential participating individual CMU is considered as Existing
- There is a potential to participate in the Primary and Secondary Markets after a successful Prequalification Process

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3. Application form submission

To get the possibility to submit a prequalification file, the customer must first fill in the application form (as a legal entity; following the template provided in the Annexes of Functioning Rules) and by doing so; become **a CRM Candidate**.

The application form is submitted to Elia on May 5th 2021

The application form is approved by Elia on May 7th 2021

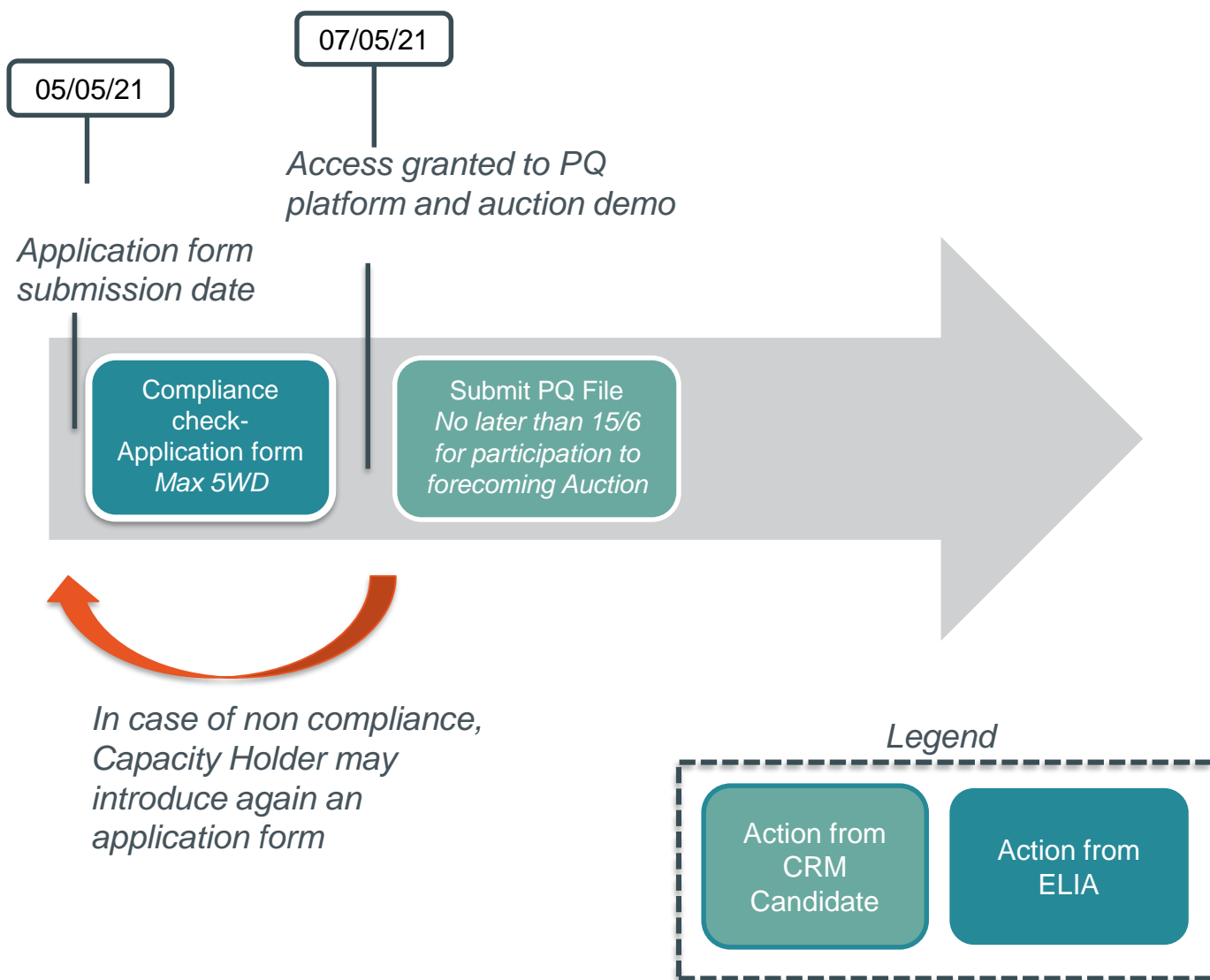


The **CRM Candidate** receives access to the PQ platform;



The CRM Candidate shall mark his commitment with the **eligibility conditions**;

3. Application form submission



3. Eligibility conditions

Prequalification platform access:

- The Capacity Holder receives a notification by email to create a password for a preliminary access to the CRM Platform
- At first connection, the IndustryOfTheFuture.SA/NV shall endorse:
 - (1) Functioning Rules and (2) Capacity Contract Conditions
 - The compliance of each Delivery Point with Electricity Act and related Royal Decrees regarding (3) Eligibility and (4) License requirement
 - (5) The compliance of each Delivery Point with EU Regulation 2019/943 on CO₂ emissions
 - (6) The compliance of each Delivery Point with relevant Legal and Regulatory Framework
- Therefore, IndustryOfTheFuture.SA/NV firstly shall verify all compliances to them prior of their endorsement, among others the following elements.

3. Eligibility conditions

Metering devices as a condition for the Delivery Points:

- As a reminder, one single Submeter is already monitoring the participating oven and its related processes
- *“A Submeter within the electrical facilities of a Grid User downstream of an Access Point connected to the ELIA Grid or to a CDS;”* is then fully present

The standard conditions applicable for the Existing Delivery Point are respected:

- In this context, within the projects and the CRM context, a CMU = A Delivery Point = the Submeter (with all oven processes)
- The Delivery Point will only be part of one CMU
- There is no dependency of the DP (oven and its process) with other elements of the Delivery Point on the Access Point site
- **All technical and metering requirements are respected**, see “metering requirement annex” and see “general technical requirements of the submetering”
- In conclusion: The Delivery Point (and CMU) is located below the Access Point connected to the TSO but shall have its own CRM valid metering devices

3. Eligibility conditions

The specific conditions for the Existing CMU are fulfilled

→ One Delivery Point at least per CMU

→ The sum of the Nominal Reference Power of all Delivery Points of the CMU, here 10MW capacity is higher than the minimal threshold defined by the Royal Decree (1MW)

No production license is foreseen

No agreement of third party is required

The CO₂ of the Delivery Point is below the 500g/kWh CO₂ threshold (attest of certification organization)

CONCLUSION on the Endorsement:

According to the Functioning Rules, all elements of the participation are estimated by the CRM Candidate as compliant for the introduction of a Prequalification File and therefore, he'll acknowledge the 6 bullet points on the Platform on May 12th 2021

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4. Prequalification File

No Project ID request to ELIA:

- Prior to the introduction of the Prequalification File(s), the CRM Candidate could obtain Project IDs for his investment projects
- As there is no project for a submission towards CREG as investment file, no Project ID is required, neither requested
- The absence of Project ID implies that solely a 1 year Contract Duration is possible

Prequalification File(s):

- Considering the Delivery Point as an individual CMU
 - Prequalification File 1 relates to CMU1 which has a Nominal Reference Power of 10MW

Forms of submission in the Platform:

- The CRM Candidate shall introduce in the Platform one Prequalification File, with the 2 data scales:
 - The Delivery Point scale (=Oven and its related processes)
 - The CMU scale (in the Use Case 1, the CMU is composed of one Delivery Point and is considered as an Individual CMU)

4. Prequalification File(s)-Data on DP level

- ➔ As the Delivery Point is Existing and then goes through the standard Prequalification Process, the following information shall be provided by the CRM Candidate according to the details of the *Functioning Rules Prequalification Process 4*.
Prequalification File(s):

<i>Requirements</i>	<i>Type of data</i>	DP
<i>Delivery Point's status</i>	<i>Name</i>	Existing
<i>Type of Delivery Point</i>	<i>Name</i>	TSO-connected
<i>Delivery Point's name</i>	<i>Name</i>	Willebrugge-Oven1
<i>Single line diagram</i>	<i>Diagram (pdf)</i>	Oven_location
<i>Technology</i>	<i>Name</i>	DSR
<i>List of Delivery Points located on the same geographical site</i>	<i>Number</i>	544545441256547

4. Prequalification File(s)-Data on DP level

- As the Delivery Point is Existing and then goes through the standard Prequalification Process, the following information shall be provided by the CRM Candidate according to the details of the *Functioning Rules Prequalification Process 4*.

Prequalification File(s):

<i>Requirements</i>	<i>Type of data</i>	<i>DP</i>
<i>Technical dependency with other Delivery Points</i>	<i>ID of related Delivery Points & CMU</i>	NA
<i>The Opt Out Volume repartition per Delivery Point</i>	%	100%
<i>CDSO Declaration</i>	<i>Signed letter</i>	NA
<i>EAN code of the Access Point</i>	<i>Number</i>	545555545416445
<i>EAN code(s) of the Delivery Point</i>	<i>Number</i>	544545441256547
<i>Expected Nominal Reference Power</i>	<i>Number (in MW)</i>	10 MW

- As there is solely one Delivery Point for the CMU, despite the fact that there is no plan to Opt-Out, in the dataset of the Delivery Point, 100% of the Opt-Out shall be allocated to the DP

4. Prequalification File(s)-Data on DP level

- As the Delivery Point is Existing and then goes through the standard Prequalification Process, the following information shall be provided by the CRM Candidate according to the details of the *Functioning Rules Prequalification Process 4*.

Prequalification File(s):

Requirements	Type of data	DP
<i>CO₂ emission attestation</i>	<i>Signed letter</i>	Pdf Attached
<i>CO₂ emission</i>	<i>Number (in g/kWh)</i>	317g/kWh
<i>Preferred Nominal Reference Power calculation methodology</i>	<i>Name (drop-down list)</i>	Method 1
<i>Prequalification test profile for method 3</i>	<i>Date (in D/MM/YY) and hours (in H:MM)</i>	NA
<i>Baseline adjustment</i>	<i>Name (drop-down list)</i>	Standard
<i>Unsheddable Margin</i>	<i>Number (in kW/MW)</i>	0 MW
<i>Net offtake/net injection</i>	<i>Data</i>	Net offtake

- IndustryOfTheFuture.SA/NV selects the historical data (method 1) to validate the Expected Nominal Reference Power (NRP) and determine the Provisional NRP

4. Prequalification File(s)-Data on DP level

- ➔ As the Delivery Point is Existing and then goes through the standard Prequalification Process, the following information shall be provided by the CRM Candidate according to the details of the *Functioning Rules Prequalification Process 4. Prequalification File(s)*:

<i>Requirements</i>	<i>Type of data</i>	<i>DP</i>
<i>Full technical injection Capacity</i>	<i>Number (in MW)</i>	0 MW
<i>Full technical offtake Capacity</i>	<i>Number (in MW)</i>	10,5MW
<i>Grid User Declaration</i>	<i>Signed letter</i>	PDF attached
<i>Renouncing the operating aid</i>	<i>Signed letter</i>	PDF attached
<i>Declared Nominal Reference Power</i>	<i>Number (MW)</i>	NA
<i>Existing connection volume</i>	<i>Number (MW)</i>	NA
<i>Information related to production license</i>	<i>list of information</i>	NA

4. Prequalification File(s)-Data on CMU level

→ As the CMU is Existing and then goes through the standard Prequalification Process, the following information shall be provided by the CRM Candidate according to the *Functioning Rules Prequalification Process 4. Prequalification File(s)*:

Requirements	Type of data	CMU
Information linked to Financial Security	NA	200.000€; BELFIOS
Opt-out Notification Volume	Number (MW)	0MW
Project ID	Number	NA
Choice of a Derating Factor	Number	1 (24h)
Project execution plan	Document	
Expected start date of the project	Date (in D/MM/YY)	
Expected end date of the project	Date (in D/MM/YY)	
Declared Eligible Volume	Number (in MW)	
Information for method 2 (for Nominal Reference Power determination)	Date (in D/MM/YY) & Number	
ID of the technical agreement	Number	

→ As the choice the CMU is non-Energy Constrained and without Daily Schedule, the decision on the SLA of the previous slide is implying a Derating Factor

4. Prequalification File

→ As the CMU is Existing and then goes through the standard Prequalification Process, the following information may be provided by the CRM Candidate according to the *Functioning Rules Prequalification Process 4. Prequalification File(s)*:

Requirements	Type of data	OV_CMU
<i>Declared Day Ahead Price (optional at this stage)</i>	<i>Number (in €/MWh)</i>	280 €/MWh
<i>NEMO (optional at this stage)</i>	<i>Name</i>	EPEX

→ At this stage, the CRM Candidate gathered all elements in the Prequalification File and is therefore ready to submit to ELIA via the Prequalification Platform

4. Prequalification File

Prequalification File is ready:

- IndustryOfTheFuture.SA/NV as a CRM Candidate completes and saves it on May 25th 2021 (but doesn't submit it):
 - Prequalification File as described in the previous slides:
 - Prequalification File relates to CMU1 = 10MW

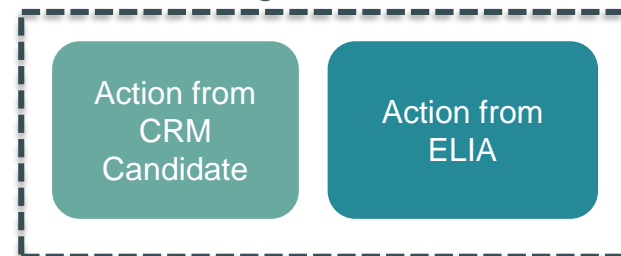
Submission of the Prequalification File(s):

- As all data are considered relevant, on May 26th 2021, the CRM candidate submits all his data ('submit') to ELIA
- The CRM Candidate is not allowed to adapt any information for the next 70WD
- ELIA will perform checks in the 20 next Working Days and will notify him if a modification is required

4. Prequalification file submission



Legend



Use case structure

1. The customer and his asset(s)



2. Terminology of the prequalification



3. Application form & Prequalification Platform access



4. Prequalification File(s)



5. Prequalification review process



6. Volume determination



7. Prequalification results notification



8. Evolution in time of the prequalification

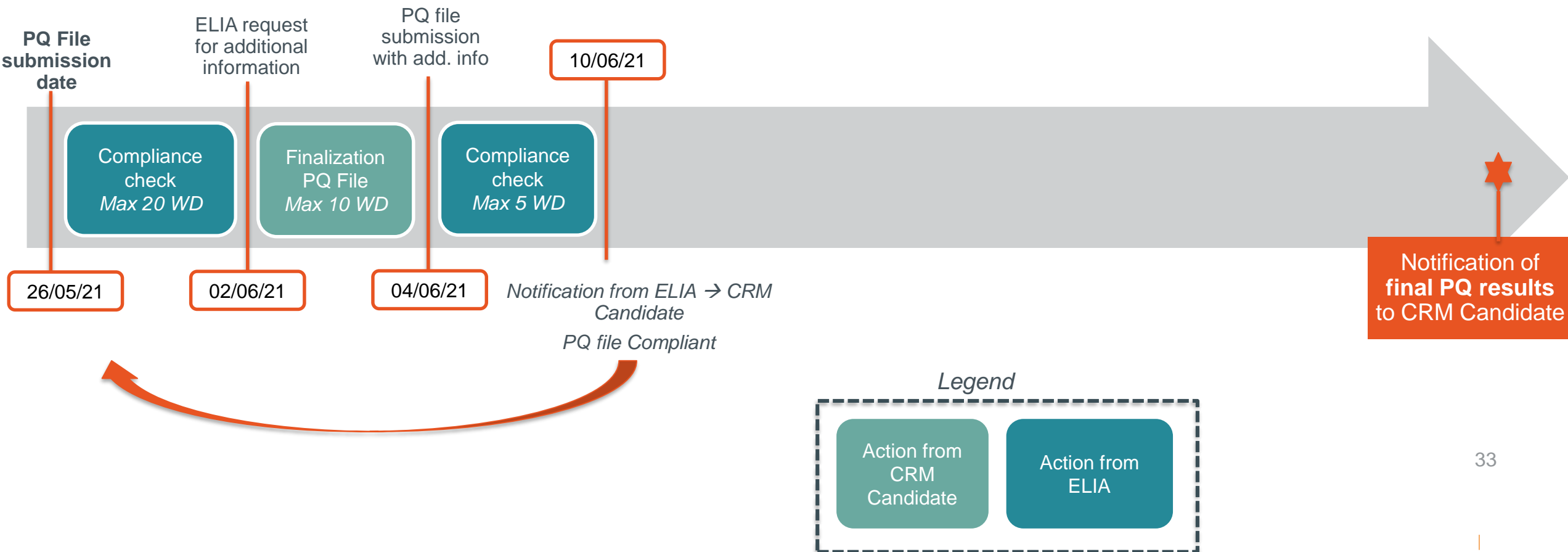
5. Prequalification review process(es)

ELIA review of the Prequalification File(s):

- On June 2nd 2021, ELIA notifies (within the maximum of the 20WD after submission) to IndustryOfTheFuture.SA/NV that its Grid User Declaration isn't valid because some mandatory fields are missing.
- IndustryOfTheFuture.SA/NV indeed could request easily an adaptation of the Grid User Declaration to its mother company.
- IndustryOfTheFuture.SA/NV has now 10 Working Days to re-submit a change (update) in the dataset of the Delivery Point/CMU → It is done two Working Days after on June 4th 2021
- As of the change in the Platform, ELIA has 5 Working Days as of the updated data submission date to provide a 'Compliant' or 'Non-Compliant' status update

→ The Prequalification File is considered by ELIA as “compliant” on June 10th 2021

5. Prequalification file submission



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6. Volume determination

After the Prequalification Files review by ELIA, the Prequalification Process determines the CMU Nominal Reference Power and the key parameters for a first participation in the Primary and Secondary Markets of the newly prequalified CMUs (having no previous CRM Transactions on the Delivery Period)

- Eligible Volume (For the participation in the Primary Market)
- Secondary Market Eligible Volume (for the participation in the Secondary Market) –
 - Considered as indicative. As reminder, there is no possibility to acquire volume in the Secondary Market for non-Existing CMUs.

Nominal Reference Power of the CMU:

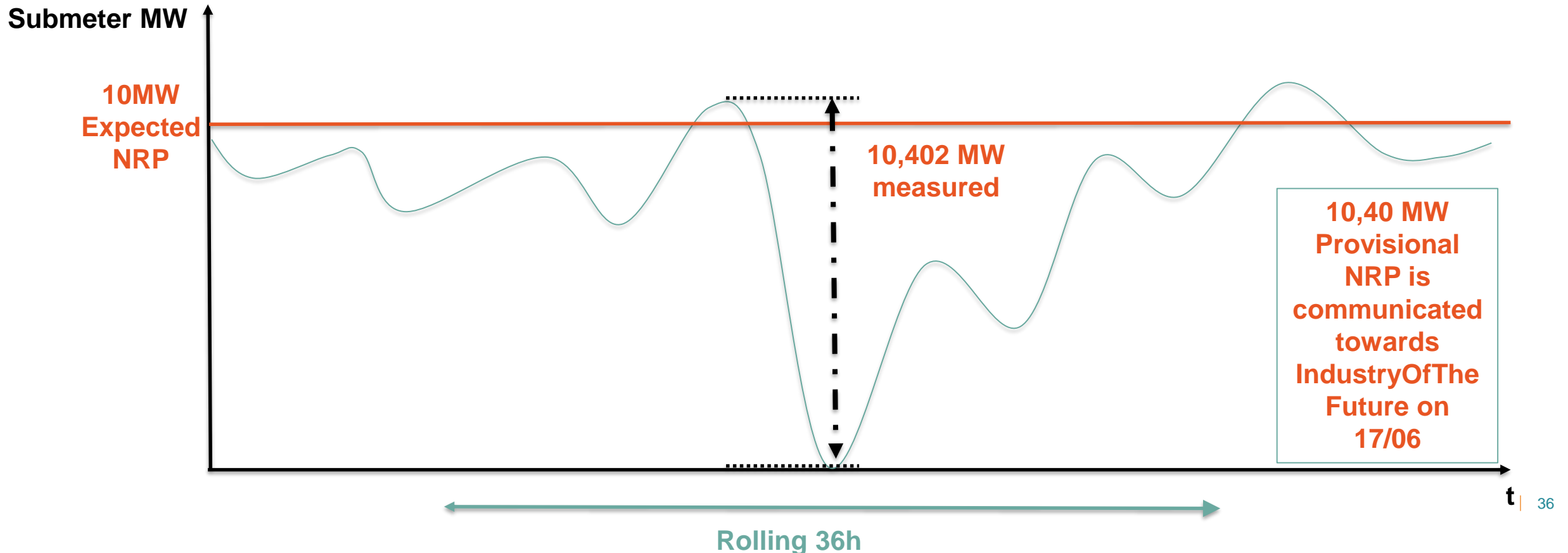
- According to *4. Prequalification File(s) in the Prequalification Functioning Rules*: the Nominal Reference Power is selected as Expected Nominal Reference Power
- The Nominal Reference Power shall be used in the Eligible Volume and the Secondary Market Eligible Volume calculations and shall be validated using the Method 1 (historical data)
- Expected NRP of CMU1 = 10,00 MW

6. Volume determination

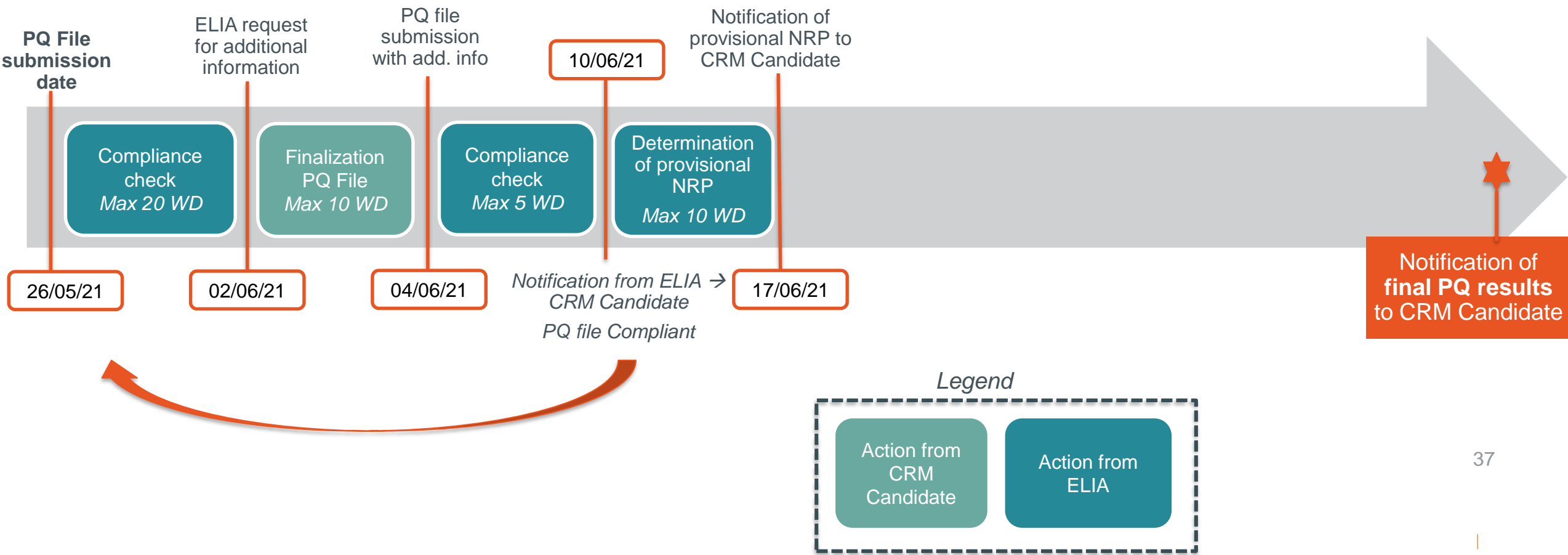
The NRP validation by ELIA after method 1 (historical data check):

→ ELIA will screen the maximum delta in QH (15' measurement) within 365/366 frames of 36h (from 12pm to 12am the day after) → Rolling period check based on the last 12 months prior to the submission of the Prequalification File

→ **ELIA measured 10,402 MW** as a maximum delta in QH (15' measurement) within one of the 365 frames



6. Volume determination



6. Volume determination

Opt-Out volume of the CMU:

- According to *4. Prequalification File(s) of the Prequalification Process Functioning Rules*, there was no declared Opt-Out implying that:
- Opt-Out volume of CMU1 was = 0,00 MW
- Following the communication on the Provisional NRP of 10,4MW, **IndustryOfTheFuture.SA/NV wants to remain with a Reference Power of 10MW.**
- As the Reference Power is resulting from the Provisional Nominal Reference Power minus Opt-Out, **this requires now an Opt-Out of 0,4MW.** This is communicated on June 18th 2021.

Reference Power of the CMU:

- According to *4. Prequalification File(s) of the Prequalification Process Functioning Rules* and its Provisional Nominal Reference Power and Opt-Out 'no Notification', implying a:
- Reference Power of CMU1 = Nominal Reference Power – Opt-Out Volume = 10,40MW - 0,40 MW = 10,00MW

6. Volume determination

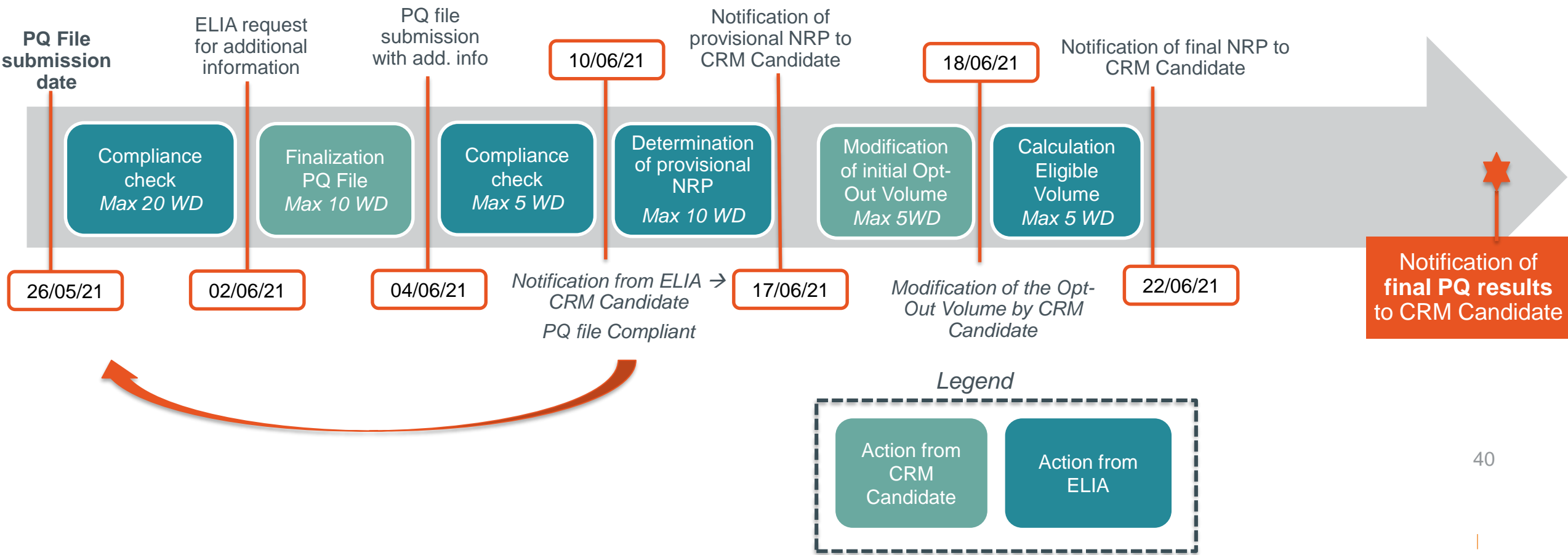
Eligible Volume of the CMU:

- According to 4. *Prequalification File(s) of the Prequalification Process Functioning Rules* and its Derating Factors associated to the CMUs, implying an:
- Eligible Volume of CMU1 = Reference Power CMU1 * Derating Factor CMU1 (unlimited) = 10,00MW * 1,0 = 10,00MW

Secondary Market Eligible Volume of the CMU:

- According to 4. *Prequalification File(s)* and its declared Nominal Reference Power and Opt-Out 'no Notification' and Derating Factors, so that:
- Secondary Market Eligible Volume of CMU1 = Nominal Reference Power – Opt-Out VolumeIN * Derating Factor CMU1
= 10,40MW – (0,40 MW * 1,0) = 10,00MW

6. Volume determination



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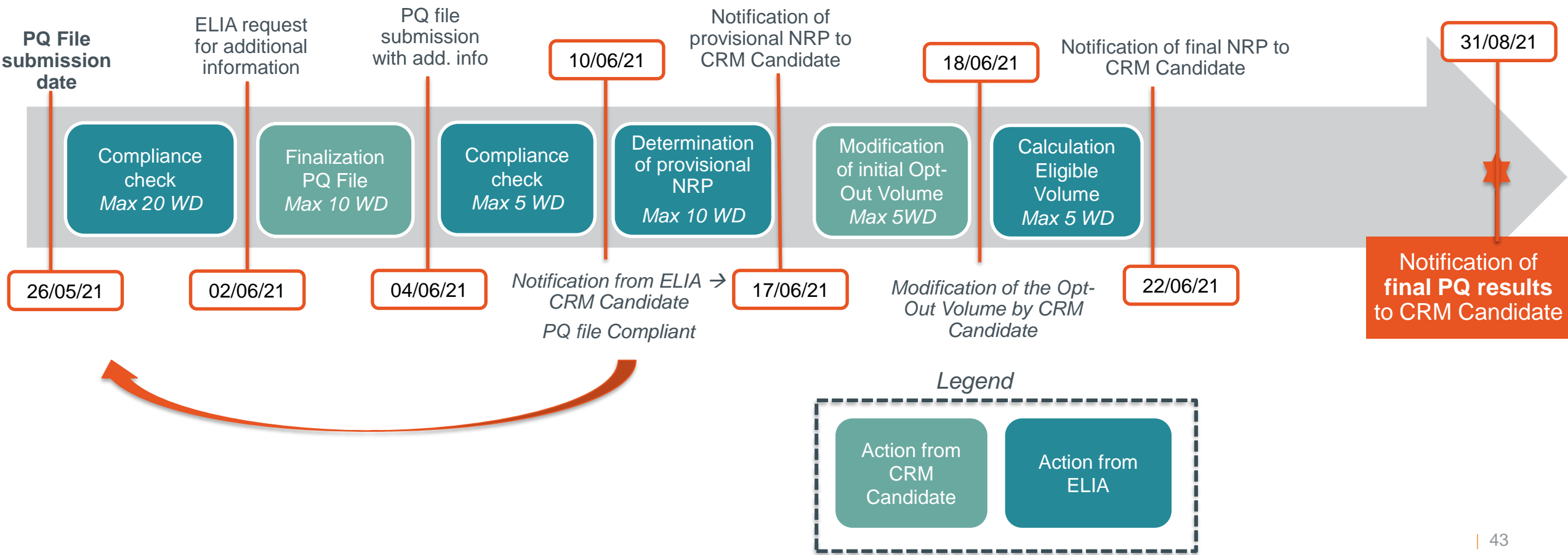
ELIA shall communicate the Prequalification results notification within the 70 Working Days as of the Prequalification Files submission towards IndustryOfTheFuture.SA/NV:

	Status of the CMU
<i>The Nominal Reference Power of the Delivery Point(s) part of the CMU</i>	10,4MW
<i>The Opt-Out Volume of the Delivery Points (in case of Aggregated CMU)</i>	
<i>The Opt-Out Volume of the CMU</i>	0,4MW
<i>The Eligible Volume of the CMU</i>	10MW
<i>The Secondary Market Eligible Volume of the CMU</i>	10MW
<i>The Capacity Category (in case of investment file and if known to ELIA at prequalification result notification time)</i>	1
<i>The date of the first quarterly report that shall be sent to ELIA (in case of awarded volume)</i>	01/04/2021

As the CMU is Existing, the Prequalified status is to be obtained by 15/09/2021

No other change on the Opt-Out Volume has been modified prior to 5 WD after September 15th 2021 for the Auction October 2021

6. Volume determination



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8. Evolution in time of the prequalification

8. Evolution in time

Evolution of the CMU in time:

Independently from the awarded Contracted Capacity of the Primary Market Auction of October 2021, the evolution in time of the CMU Delivery Point(s) could influence the:

- ➔ Remaining Eligible Volume for the Primary Market (“REV”)
- ➔ Secondary Market Remaining Eligible Volume for the Secondary Market (“SMREV”)

Indeed, VisionnaryInternational.SA/NV also mandated after the Auction of 2021 his daughter company IndustryOfTheFuture to add another Existing capacity located on another factory site.

The Prequalification Process related to the Addition of a Delivery Point to the CMU.

This implies that on demand of the CRM Candidate an extra Delivery Point and a modification of the CMU Prequalification File is requested.

The CMU Expected NRP will be updated after a validated update of the CMU in the Prequalification Platform, (after the Auction, and the proper modifications then) and solely on the demand of the CRM Candidate.

Standard Prequalification Process timeline

As illustrated in the Annex of the Functioning Rules (version sent on 24/04/2020 to market parties for indicative purposes), the following timing is foreseen when looking at a **capacity following the standard Prequalification Process**

