

Use case 2

Prequalification Process

Additional aggregated project

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 Processeses” 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 of 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

1. The customer and his asset(s)



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1. Customer and assets

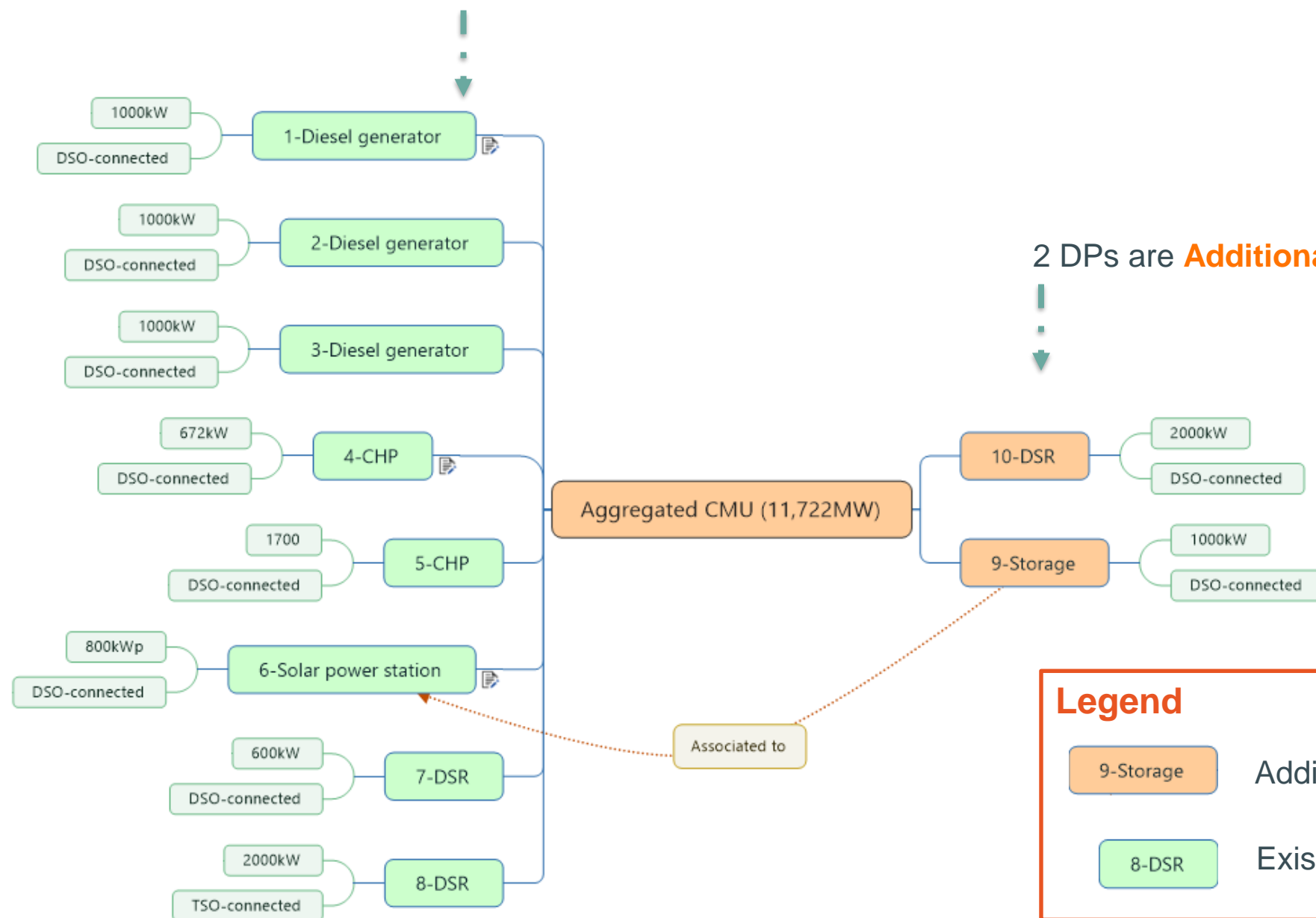
- 10 capacities and their associated Delivery Points (DP hereafter) on different geographical sites and different owners

(next slide gives an overview of those capacities)

- 8 delivery points are **Existing** assets already connected to the Grid
- 2 delivery points are new projects not developed yet and are therefore considered as **Additional**
- **Aggregation** via AggregaTHOR.SA/NV by signing Grid User Declaration for every DP
- 9 DPs are connected to different DSO's grids and 1DP (DP7) is connected to the TSO Elia's Grid

1. Customer and assets

8 DPs are **Existing**

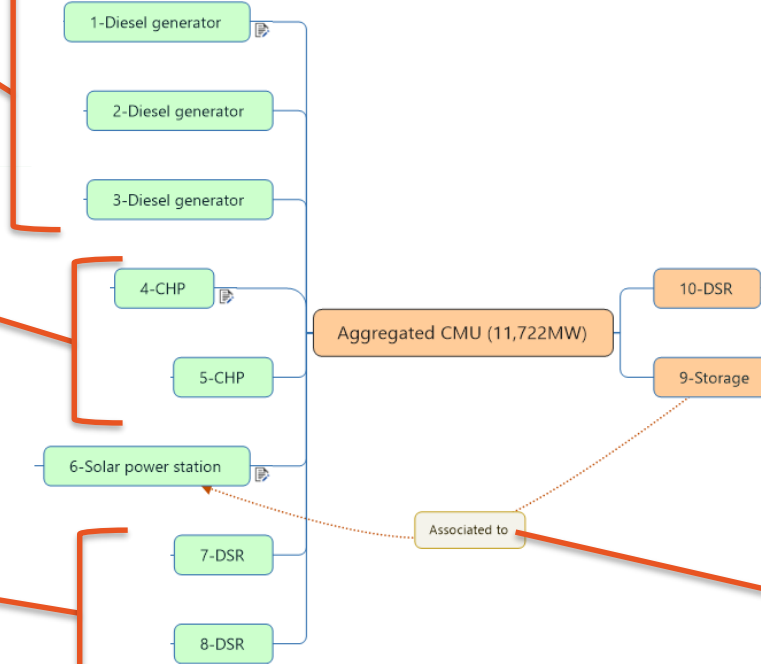


1. Customer and assets

Diesel generators are located on three different sites of the same hospitals group

CHPs were built in 2015 and have been allocated green certificates for ten years

DSR is already contracted on two different industrial sites with different processes for the balancing services



DSR10 is a potential reduction of industrial process; adaptations must still be done to become Existing

The Capacity Holder of the solar power station has the project to link it with batteries to improve its contribution to adequacy and ensure himself an higher auto consumption

1. Customer and assets

- Some assets are Energy Constrained, some others not but are with a limited installed Capacity, so that synergies could emerge by aggregating them in a portfolio to participate to the CRM
- AggregaTHOR.SA/NV will provide the most suitable and reliable product considering the portfolio
- Identification according to CRM nomenclature, those Delivery Points constitute a CMU :
 - ✓ Additional
 - ✓ Aggregated
 - ✓ Energy Constrained
 - ✓ TSO and DSO-connected

1. Customer and assets

- AggregaTHOR has the ambition to get a 3 years Capacity Contract Duration if selected in the Auction of October 2021
- As his Delivery Points present a CAPEX superior to the minimum thresholds fixed by the KB investment, he has the right to do so
- A 3 years contract would provide AggregaTHOR an income to address the costs linked to his Delivery Points
- That's why an investment file will be sent to CREG with a Project ID communicated by ELIA if the application form is approved

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2. CRM terminology applicable to the customer's case

Capacity Holder: Every capacity represented through the aggregation is considered as a Capacity Holder; AggregaTHOR is not considered as Capacity Holder regarding the CRM Law but will gather the mandates (Grid User Declaration(s)) for the CRM Prequalification of the Capacity Holder.

CRM Candidate: AggregaTHOR.SA/NV shall be able to participate to the CRM Prequalification after the acceptance of its Application Form by ELIA.

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

AggregaTHOR.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 the **Prequalification File** of the CRM Candidate AggregaTHOR.SA/NV is considered as accepted (**duly prequalified**) and the status of the candidate shall be **updated to Prequalified CRM Candidate**

2. CRM terminology applicable to the customer's case

CMU: The CMU is composed of 10 DPs of varying technologies and situated on different geographical sites. Those compose one single CMU.

Additional CMU : 2 DPs are not grid-connected yet and have no metering devices, so that the status of the entire CMU shall be considered as Additional instead of Existing. It's possible to calculate Provisional NRP of the 8 other DPs

→ **The entire CMU shall be considered as Additional**

Aggregated CMU : 6 DPs must be aggregated to be CRM eligible as they can't participate sole because of their low NRPs, below the participation threshold, it's up to the Candidate's choice to add DPs that could participate on their own

2. CRM terminology applicable to the customer's case

CMU without Daily Schedule: the CMU isn't considered as a CMU with Daily Schedule as the installed Capacity of every Delivery Point is not exceeding 25MW, the threshold for an obligation of individual MW schedule. Nevertheless, if a Delivery Point was considered as Daily Scheduled (and so exceeding 25MW), it couldn't be accepted in an Aggregated CMU

CMU with Energy Constraints: the CMU is considered as a mix of different technologies and is not Daily Scheduled, the CRM Candidate has to declare an SLA category that will be associated with a Derating Factor

CRM standard Prequalification Process:

- ➔ The CRM Candidate has a willingness to participate in the CRM with his assets/projects
- ➔ His potential participating CMU is considered as Additional
- ➔ 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 3th 2021

The application form is approved by Elia on May 4th 2021

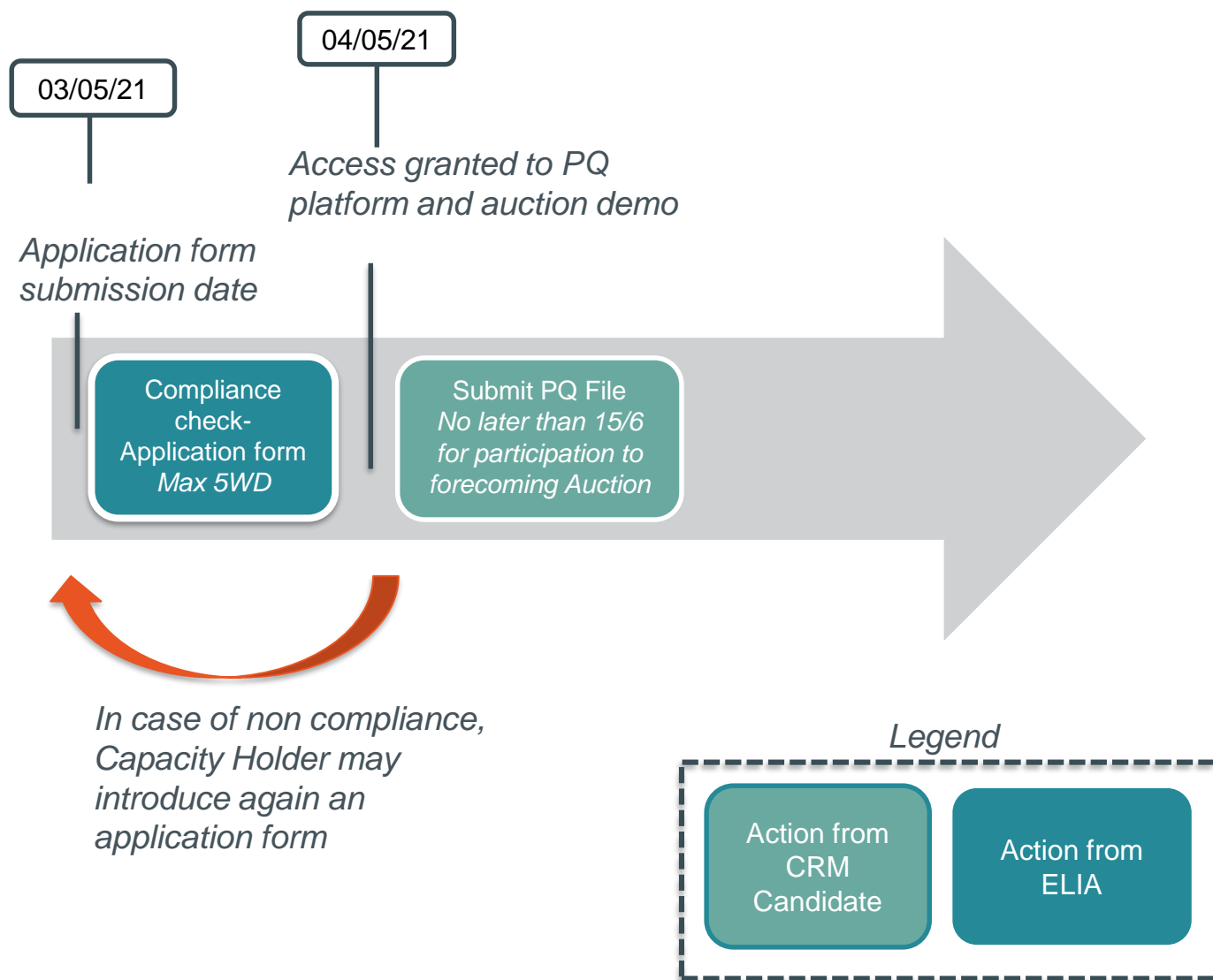


The **CRM Candidate** receives access to the PQ platform;



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

3. Application form submission



3. Eligibility conditions

Compliance checks to become a CRM Candidate

AggregaTHOR is asked to create a password to access the Prequalification Platform

AggregaTHOR also has to ensure and keep compliancy with the following items :

- ✓ Endorsement of the Functioning Rules
- ✓ Endorsement of the Capacity Contract conditions in case of Contracted Capacity for the forthcoming Auction
- ✓ Compliance of each Delivery Point with eligibility criteria, as defined in the Electricity Act and Royal Decree
- ✓ Compliance of each Delivery Point with an Existing status (8 first DPs) with the production license requirements as defined in the Electricity Act and dedicated Royal Decree
- ✓ Compliance of each Delivery Point with an Existing status with the maximal CO2 emission thresholds set by the Regulation (EU) 2019/943
- ✓ Compliance of each Delivery Point with any other the relevant legal and regulatory framework

3. Eligibility conditions

Conditions for the standard Prequalification Process

- Delivery Points are :
 - Part of a single CMU (CMU2)
 - Allocated to AggregaTHOR only
 - Compliant with combinability rules
 - Related to an Access Point
 - Respecting the metering requirements
 - Related to only one GUD

For DSO connected DPs, a CRM Candidate-DSO agreement shall be signed

- DP1 to DP6 are equipped with Submeters validated by the DSO
- DP8 is equipped with an Headmeter directly connected to the Access Point on DSO's grid

The CMU is:

- Consisting of at least one DP (here 10)
- Having a NRP higher than 1 MW

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4. Prequalification File

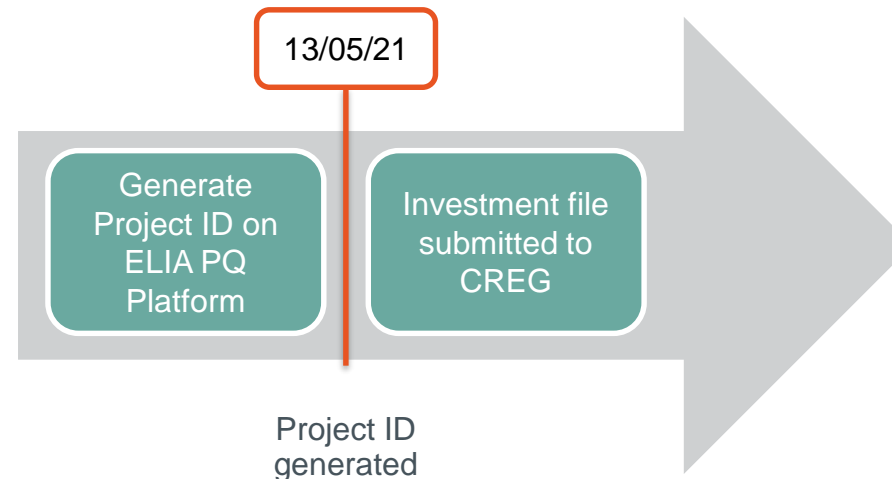
Investment file

As AggregaTHOR is offering an Additional CMU, and his application form has been approved by Elia, he decides to submit an investment file to CREG

To do so, he requires a ProjectID from ELIA.

AggregaTHOR enters a request to get one from Elia on May 12th 2021

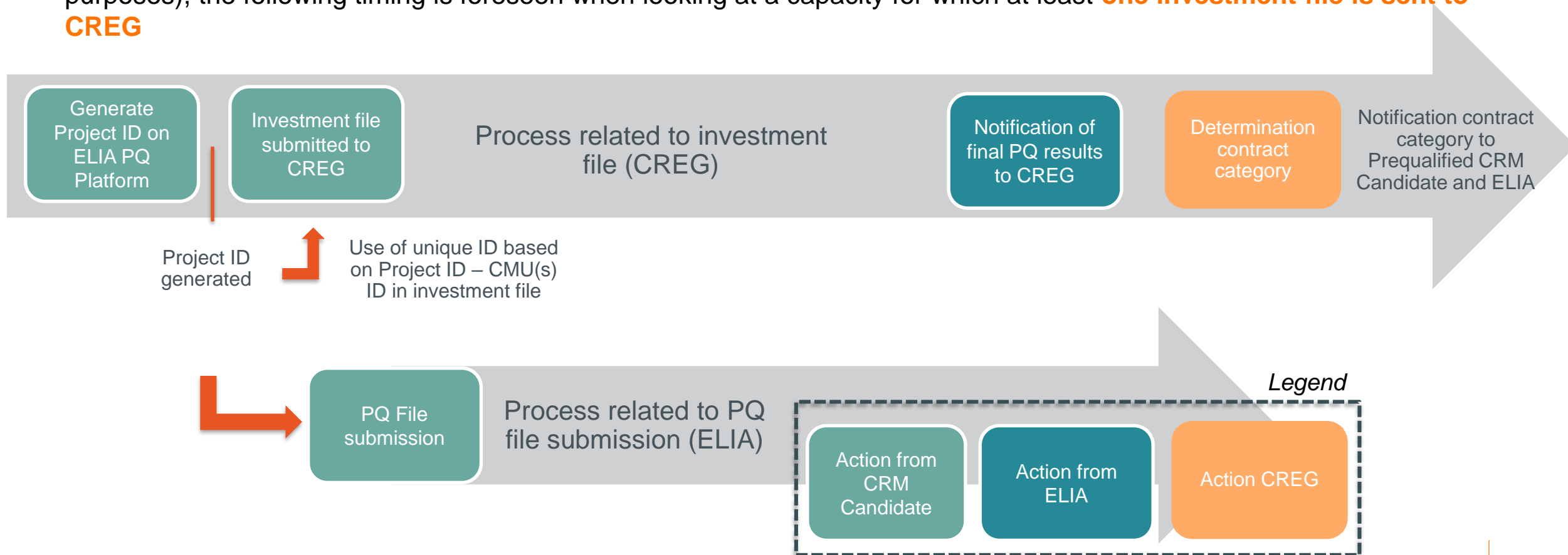
ELIA sends a ProjectID on May 13th 2021, so that an investment file is then sent by AggregaTHOR to CREG on May 13th 2021



4. Prequalification File submission

Investment file

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 for which at least **one investment file is sent to CREG**



4. Prequalification File

- AggregaTHOR, as a CRM Candidate, plans to introduce all possible elements to perform a successful participation of his project in the CRM
- 10 Delivery Points are considered into a single CMU
 - A single Prequalification File is submitted for the entire CMU
- 2 scales then need to be considered :
 - DP scale
 - CMU scale
- All data linked to both scales have to be provided through the Prequalification Platform
- Different information shall be given according to the considered dimension

4. Prequalification File- Data on DP level

Information that must be given differs according to DP's status; Grey areas in the following tables means the information isn't required for the concerned Delivery Points

<i>Requirements</i>	<i>Type of data</i>	DP1	DP2	DP3	DP4	DP5	DP6	DP7	DP8	DP9	DP10
<i>Delivery Point's status</i>	<i>Name</i>	Existing	Existing	Existing	Existing	Existing	Existing	Existing	Existing	Additional	Additional
<i>Type of Delivery Point</i>	<i>Name</i>	DSO-connected	DSO-connected	DSO-connected	DSO-connected	DSO-connected	DSO-connected	DSO-connected	TSO-connected	DSO-connected	DSO-connected
<i>Delivery Point's name</i>	<i>Name</i>	DP1	DP2	DP3	DP4	DP5	DP6	DP7	DP8	DP9	DP10
<i>Single line diagram</i>	<i>Diagram (pdf)</i>	DP1_location	DP2_location	DP3_location	DP4_location	DP5_location	DP6_location	DP7_location	DP8_location	DP9_location	DP10_location
<i>Technology</i>	<i>Name</i>	Diesel generator	Diesel generator	Diesel generator	CHP	CHP	Solar	DSR	DSR	Storage	DSR
<i>List of Delivery Points located on the same geographical site</i>	<i>Number or name</i>	/	/	/	/	/	DP9	/	/	DP6	/

4. Prequalification File- Data on DP level

Information that must be given differs according to DP's status; Grey areas in the following tables means the information isn't required for the concerned DP

<i>Requirements</i>	<i>Type of data</i>	DP1	DP2	DP3	DP4	DP5	DP6	DP7	DP8	DP9	DP10
<i>Technical dependency with other Delivery Points</i>	<i>Number</i>	/	/	/	/	/	DP9	/	/	DP6	/
<i>The Opt Out Volume repartition per Delivery Point</i>	<i>Number</i>	0%	0%	0%	11,76%	11,76%	41,18%	0%	0%	17,65%	17,65%
<i>CDSO Declaration</i>	<i>Signed Document</i>										
<i>EAN code of the Access Point</i>	<i>Number</i>	EAN_AC1	EAN_AC2	EAN_AC3	EAN_AC4	EAN_AC5	EAN_AC6	EAN_AC7	EAN_AC8		
<i>EAN code(s) of the Delivery Point</i>	<i>Number(s)</i>	EAN_DP1	EAN_DP2	EAN_DP3	EAN_DP4	EAN_DP5	EAN_DP6	EAN_DP7	EAN_DP8		
<i>Expected Nominal Reference Power</i>	<i>Number (MW)</i>	1	1	1	0.672	1.7	0.8	0.6	2		

As the Opt Out Volume is CMU based, the total of the Opt-Out Volume repartition on the DPs has to be 100%

4. Prequalification File- Data on DP level

Requirements	Type of data	DP1	DP2	DP3	DP4	DP5	DP6	DP7	DP8	DP9	DP10
CO2 emission attestation	Signed letter	Letter 1	Letter 2	Letter 3	Letter 4	Letter 5	Letter 6				
CO2 emission	Number (in g/kWh)										
Preferred Nominal Reference Power calculation methodology	Name	Method 1 (DSO)	Method 1 (DSO)	Method 1 (DSO)	Method 1 (DSO)	Method 1 (DSO)	Method 1 (DSO)	Method 1	Method 1 (DSO)		
Prequalification test profile for method 3	Date and hours										
Baseline adjustment	Name	Methodology 1	Methodology 1	Methodology 1	Methodology 1	Methodology 1	Methodology 1	Methodology 1	Methodology 1		
Unsheddable Margin	Number (kW/MW)	0	0	0	0	0	0	0	0		
Net offtake/net injection	Data	Net injection	Net injection	Net injection	Net injection	Net injection	Net injection	Net offtake	Net offtake		
Full technical injection Capacity	Number(MW)	1	1	1	0,672	1,7	0,8				

4. Prequalification File- Data on DP level

Requirements	Type of data	DP1	DP2	DP3	DP4	DP5	DP6	DP7	DP8	DP9	DP10
Full technical offtake Capacity	Number(MW)							0.6	2		
Grid User Declaration	Signed letter	GUD1	GUD2	GUD3	GUD4	GUD5	GUD6	GUD7	GUD8		
Renouncing the operating aid	Signed letter				CHP1	CHP2	Solar				
Declared Nominal Reference Power	Number (MW)									1	2
Existing connection volume	Number (MW)									/	/
Information related to production license	list of information									PL1	PL2

4. Prequalification File- Data on CMU level

Further
information on
next slide

<i>Requirements</i>	<i>Type of data</i>	<i>CMU2</i>
<i>Information linked to Financial Security</i>	<i>NA</i>	Conditional bank guarantee
<i>Opt-out Notification Volume</i>	<i>Number (MW)</i>	1,7
<i>Project ID</i>	<i>Number</i>	Project 111
<i>Choice of a Derating Factor</i>	<i>Number</i>	0,3 (4h)
<i>Project execution plan</i>	<i>Document</i>	Plan_ag_project
<i>Expected start date of the project</i>	<i>Date (in D/MM/YY)</i>	12/01/2021
<i>Expected end date of the project</i>	<i>Date (in D/MM/YY)</i>	12/01/2023
<i>Declared Eligible Volume</i>	<i>Number (in MW)</i>	
<i>Information for method 2 (for Nominal Reference Power determination)</i>	<i>Date (in D/MM/YY) & Number</i>	
<i>ID of the technical agreement</i>	<i>Number</i>	Agreement20210125-142

4. Prequalification File

Opt-Out volume

AggregaTHOR decides to partially **Opt-Out** for his CMU

This is linked to the different technologies represented in his pool of capacities

For example, there is a high probability that his solar power plant doesn't deliver the 800 kWp and impacts the aggregate potential future capability to deliver in Adequacy issue moments.

→ It's safer for AggregaTHOR to Opt-Out a part of his Capacity he's not sure to deliver

Nevertheless, as method 1 has been chosen for the Nominal Reference Power ELIA review, the Opt-Out could be adapted at a later stage of the Prequalification Process accordingly (see 6. Volume Definition in the Functioning Rules).

4. Prequalification File

AggregaTHOR may already provide values for:

- A Declared Day-Ahead Price → x €/MWh
- A NEMO → EPEX, NordPool, ...

As those are not mandatory elements of the Prequalification Process but are requirements in a later phase of the pre-delivery (after a successful Auction result), AggregaTHOR decides to postpone their notification

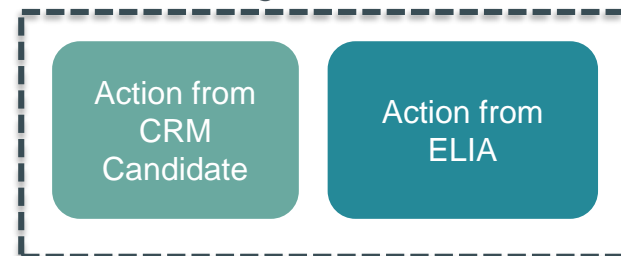
The ProjectID generated by Elia on AggregaTHOR demand is being used in the Prequalification File

**At this stage, the CRM Candidate considers all elements of the Prequalification File ready for submission on the Prequalification Platform to ELIA.
→ It is submitted on May 20th 2021**

4. Prequalification file submission

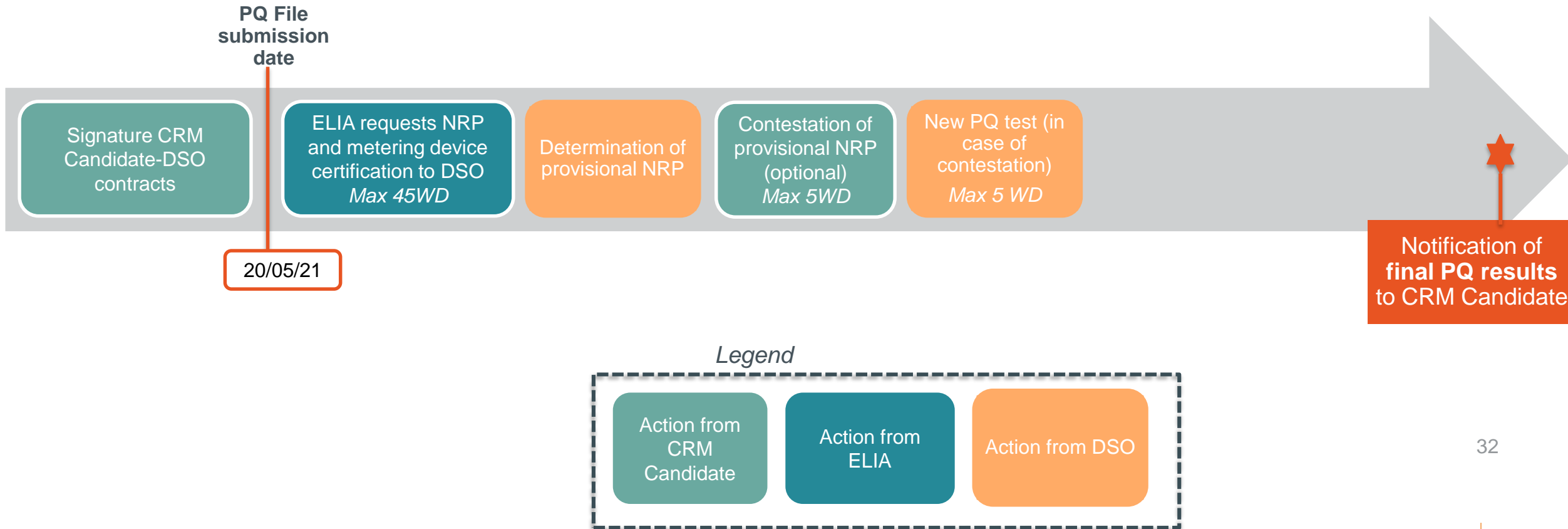


Legend



4. Prequalification file submission

DSO Actions



Use case structure

1. The customer and his asset(s)



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6. Volume determination



7. Prequalification results notification



8. Evolution in time of the prequalification

5. Prequalification review process

Prequalification File

AggregaTHOR won't have any possibility to make changes to his file for the 70 WD following the submission on May 20th 2021

Elia notifies on June 6th 2021 that the file is incomplete (CO2 emissions of the DPs are missing)

AggregaTHOR completes his file on June 10th 2021

Elia gives a final notification on June 14th 2021 that the file is now compliant

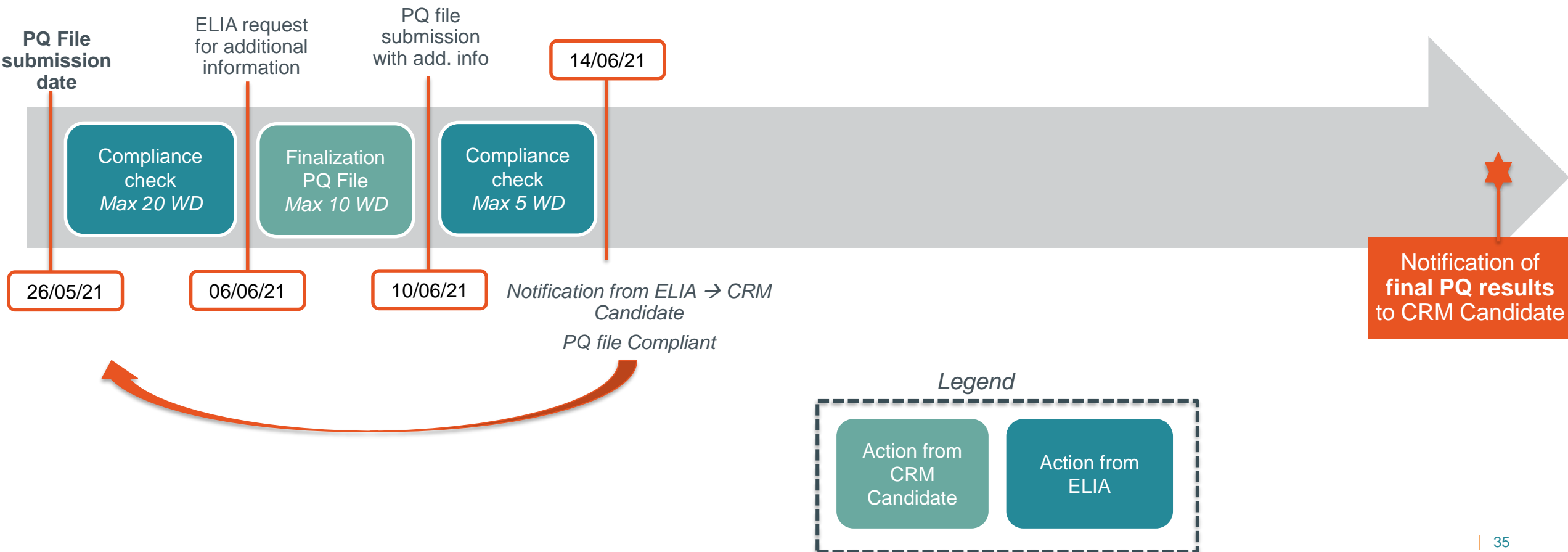
The volumes shall now be determined (see section 6)

Communication with the DSOs

AggregaTHOR is expected to have signed DSO-CRM Candidate Agreements.

As the Provisional NRP (used for the Prequalification volume(s) determination) calculation is performed by the DSOs, the absence of the agreement will lead to the impossibility for ELIA to validate the Prequalification File. In its absence, the results notification of the Prequalification Process couldn't be communicated by ELIA.

5. Prequalification review process



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6. Volume determination

As specified in the Prequalification File, the entire CMU Nominal Reference Power (NRP) (comprising **Declared and Expected NRP**) is 11,722MW, which must be rounded to **11,72MW**

The volume of DP7 must be determined in collaboration with Elia as it's connected to its Grid; Other DP's NRPs are calculated by the concerned DSOs excepted DP9 and DP10 as they are not Existing

The process of validation of the NRPs of the Existing DPs connected to the DSOs shall be described in the CRM Candidate-DSO Agreements

The observed NRP (by Elia and DSOs thanks to Method 1) are identical to the Declared ones; Those are then confirmed

6. Volume determination

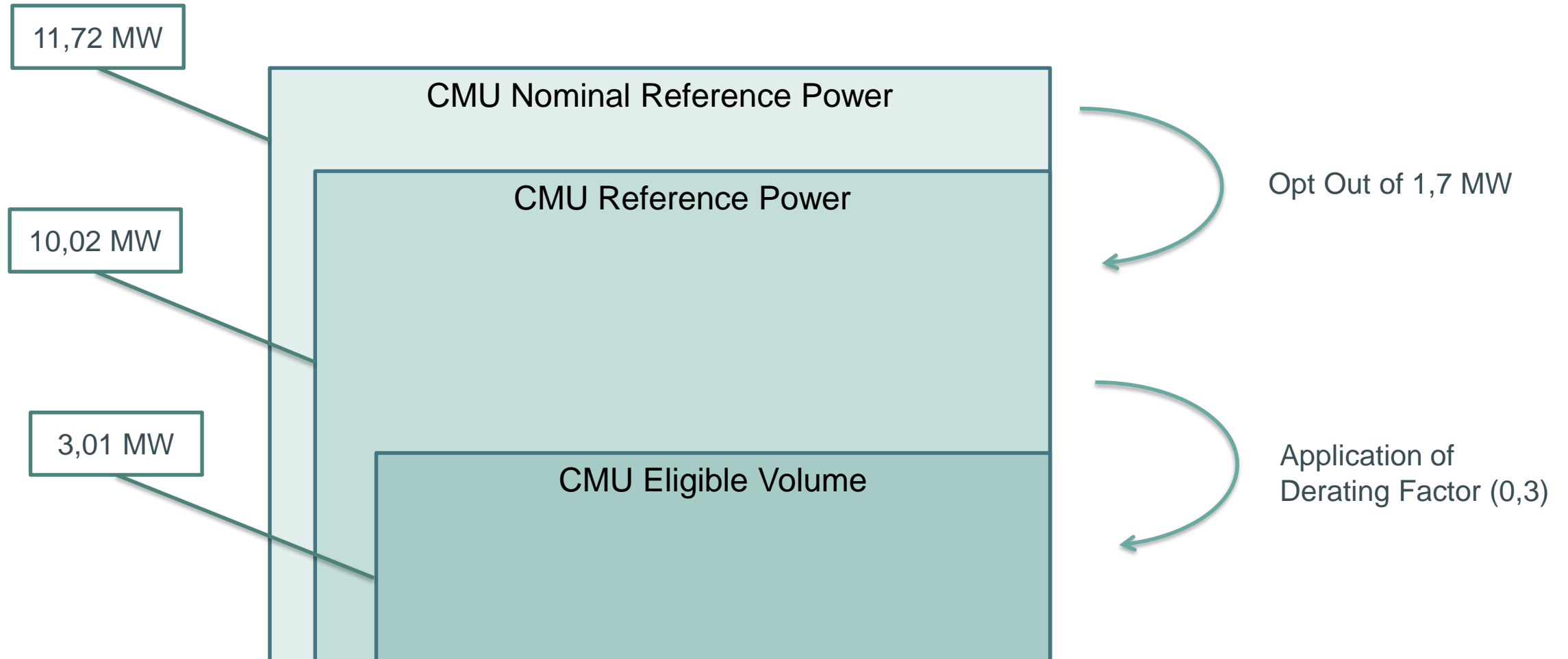
This NRP Volume must be reduced by its **Opt-Out Volume (1,7MW)**, to get the Reference Power of the CMU

This **Reference Power** is then : $11,72 - 1,7 = 10,02 \text{ MW}$

The **Eligible Volume** is determined by applying the chosen **Derating Factor (0,3)**; CMU's Eligible Volume is then **3,01MW**

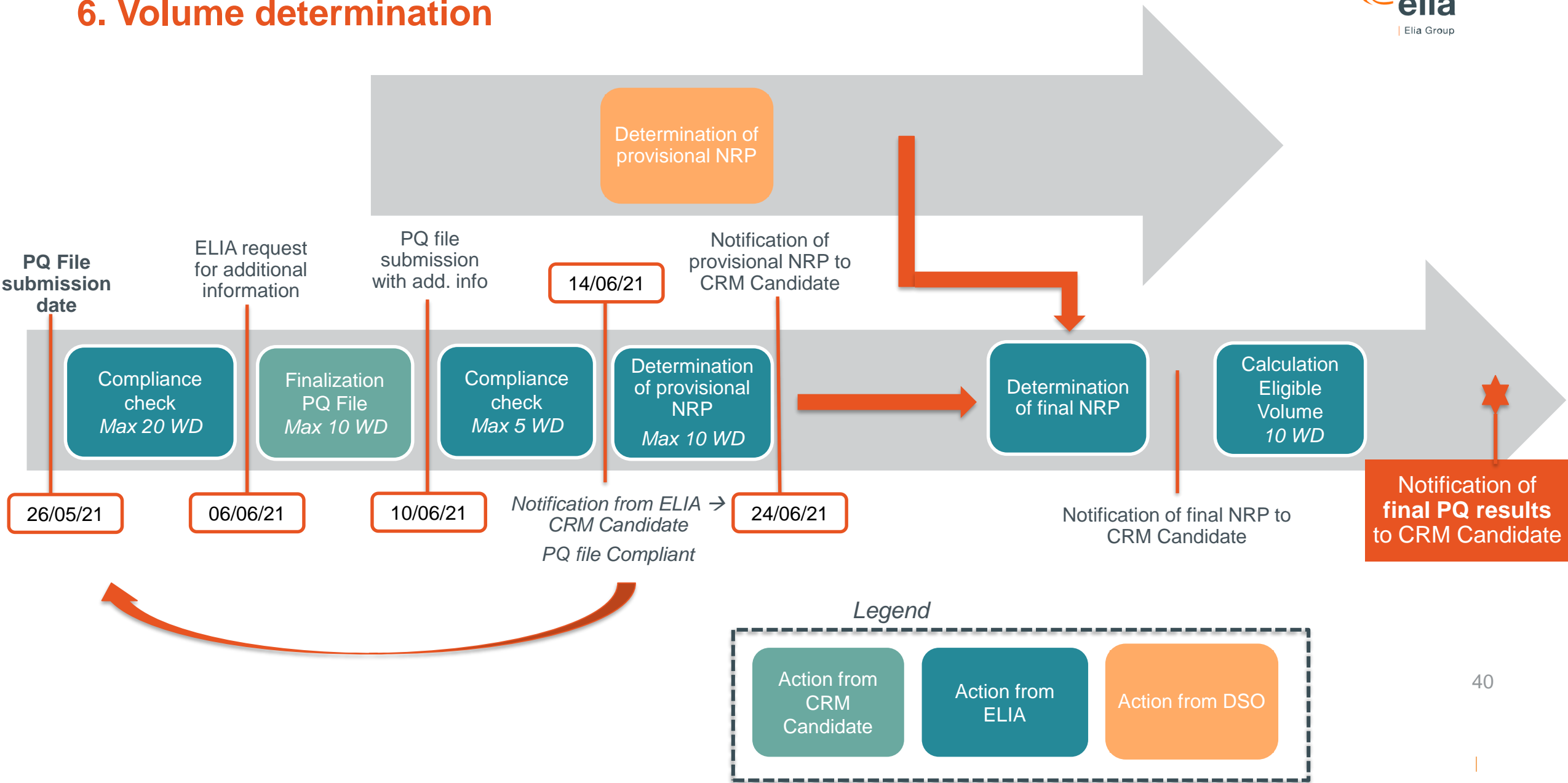
No **Secondary Market Eligible Volume** is determined at this stage as the CMU is considered as Additional and couldn't take over Contracted Capacities in the Secondary Market prior to a status of Existing

6. Volume determination



The mathematical rounding and the granularity of 0,01MW are applied at each step.

6. Volume determination



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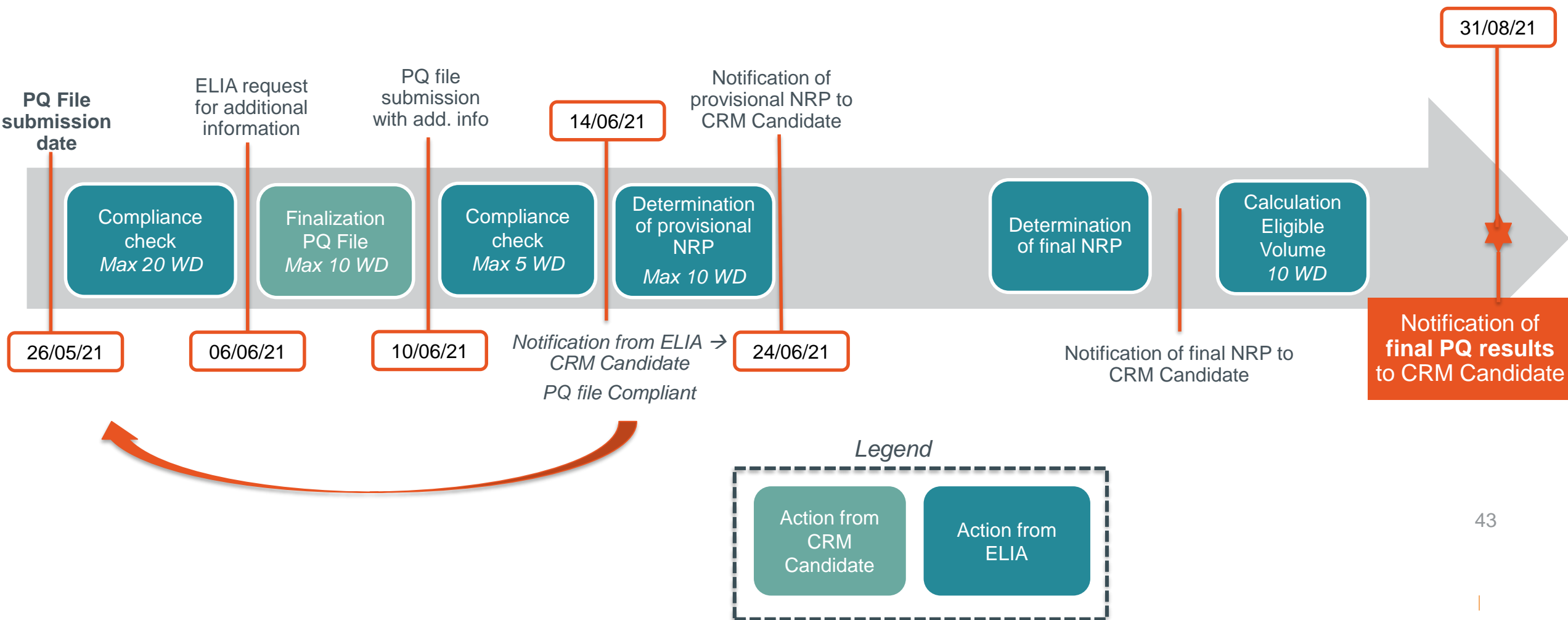
7. Prequalification results notification

Elia shall communicate within the 70 working days from Prequalification File submission towards AggregaTHOR. Elia communicates on August 14th 2021 by giving :

	DP1	DP2	DP3	DP4	DP5	DP6	DP7	DP8	DP9	DP10	CMU
<i>The Nominal Reference Power of the Delivery Point(s) part of the CMU</i>	1	1	1	0.672	1.7	0.8	0.6	2	1	2	
<i>The Opt-Out Volume of the Delivery Points (in case of Aggregated CMU)</i>	0	0	0	0.2	0.2	0.7	0	0	0.3	0.3	
<i>The Opt-Out Volume of the CMU</i>											1.7
<i>The Eligible Volume of the CMU</i>											3,01
<i>The Secondary Market Eligible Volume of the CMU</i>											
<i>The Capacity Category (in case of investment file and if known to ELIA at prequalification result notification time)</i>											Not known yet
<i>The date of the first quarterly report that shall be sent to ELIA (in case of awarded volume)</i>									4/5/2022	4/5/2022	

- In order to participate to the Auction of October 2021, as an investment file has been submitted for both projects, the Prequalified status is to be obtained by September 1st 2021
- No Opt-Out volume has been modified prior to 5 WD after September 15th 2021 for the Auction October 2021

7. Prequalification results notification



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8. Evolution in time

Any changes must be introduced in the Prequalification Platform

If the Prequalification File remains valid (which means no changes must be made to the Prequalification File content, according to the Functioning Rules of Prequalification), the Prequalification of the CMU is automatically reconducted through years (around 15/06)

The update of the Derating Factor shall be automatically processed