

# Prequalification Use Case 1

Offtake: Industrial process on a site – Oven & Melting

Task Force Implementation CRM – 05/05/2020I

# 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 layers of information and details are relevant, it is to be understood that this document focuses on most pertinent prequalification aspects.

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 *Prequalification Processes* 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

1. The customer and his asset(s)



2. Terminology applicable to the customer's case



3. Application form & CRM IT Interface access



4. Prequalification File(s)



5. Prequalification review process



6. Volumes determination



7. Prequalification results notification

1. The customer and his asset(s)



2. Terminology applicable to the customer's case



3. Application form & CRM IT Interface access



4. Prequalification File(s)



5. Prequalification review process



6. Volumes determination



7. Prequalification results notification

# 1. The customer and his asset(s)

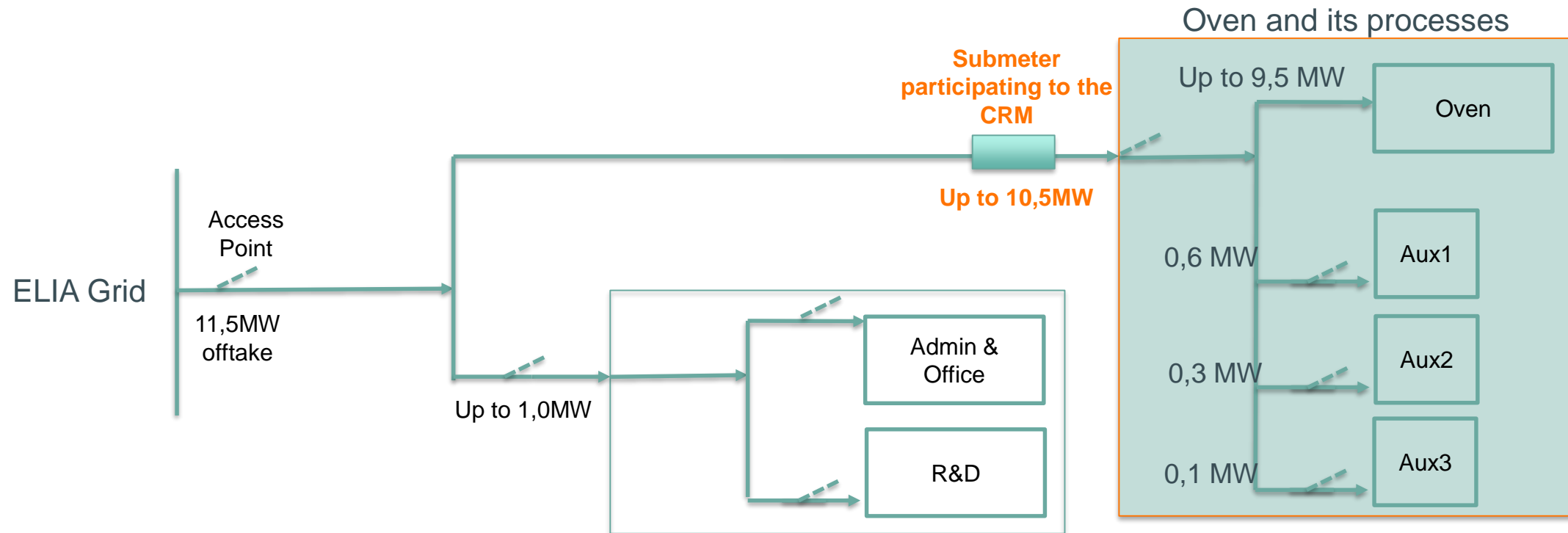
**IndustryOfTheFuture.SA/NA** is owner of a site on which a major oven & a melting process are major consumers of electricity (located in Belgium and TSO connected)

**The oven represents more than 80% of the consumption of the site** and other related processes are highly dependent of its auxiliaries:

- An estimate of 10MW on the 11MW usually consumed almost in baseload are expected to decrease in case of oven stop
- The rest ( $11\text{MW} - 10\text{MW} = 1\text{MW}$ ) covers the R&D department, offices, site safety and other facilities

# 1. The customer and his asset(s)

## Schematic and simplified Access Point single line diagram



# 1. The customer and his asset(s)

- 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 3 shifts of 8h 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 it is foreseen by 17h00 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 ELIA.
- 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 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 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 (the Delivery Point is therefore an Existing Delivery Point)
- **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 clearly constitutes an Existing Delivery Point, but as it is a consumption – even above 1MW – there is no obligation to prequalify this Delivery Point (even via a fast track Prequalification Process).

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

➔ The CRM Candidate aims to prequalify one individual CMU (1 Submeter)

1. The customer and his asset(s)



2. Terminology applicable to the customer's case



3. Application form & CRM IT Interface access



4. Prequalification File(s)



5. Prequalification review process



6. Volumes determination



7. Prequalification results notification

## 2. Terminology applicable to the customer's case

### Definitions from the Functioning Rules:

- **Capacity Holder:** Any natural or legal person likely to offer capacity, individually or in an aggregated manner
- **Capacity Market Unit (CMU):** A Capacity (« individual CMU ») or several associated Capacities (« aggregated CMU») with the objective to pass through the consecutive phases of the Capacity Remuneration Mechanism ("CRM"), being the Prequalification Process, followed by a Transaction and to deliver the Service.
- **Capacity Provider:** any capacity holder, selected at the end of an auction, making capacity available during the capacity provision period, in exchange for the capacity remuneration
- **CRM Candidate:** The Capacity Holder whose application form has been accepted by ELIA.
- **Delivery Point:** A (future) point on an electricity grid or within electrical installations of a Grid User where the Service is or will be delivered. This point is or will be associated with one or several metering device(s) in conformity with standards set by ELIA.
- **Existing Capacity:** The Capacity for which, at the time of Prequalification File submission, the Nominal Reference Power can be calculated based on 15 minutes measurements.
- **Existing CMU:** A Capacity Market Unit that only includes Existing Delivery Points.
- **Existing Delivery Point:** A Delivery Point associated to an Existing Capacity.
- **Prequalification File:** All documents and data that the CRM Candidate has prepared, updated (when required) and provided to ELIA and which are necessary for the proper and complete execution of the Prequalification Process.
- **Prequalification Process:** The procedure for determining the ability of Capacity Holders to participate in an Auction (or in the Secondary Market)
- **Prequalified CRM Candidate:** A Capacity Market Unit which has succeeded the standard Prequalification Process or a Virtual Capacity Market Unit which has succeeded the specific Prequalification Process.

## 2. Terminology applicable to the customer's case

### Candidate's information

- The **Capacity Holder** is IndustryOfTheFuture.SA/NV
- IndustryOfTheFuture.SA/NV becomes a **CRM Candidate** from the moment his application form is approved by ELIA
- IndustryOfTheFuture.SA/NV is the legal entity willing to participate to the CRM (IndustryOfTheFuture.SA/NV signed a Grid User Declaration with VisionaryInternational.SA/NV to allow him to participate to the Service)
- If at least one of his CMUs is prequalified, the CRM Candidate becomes a **Prequalified CRM Candidate**

### CMU's information

- The oven and its related auxiliaries are to be considered as a **Delivery Point** (a validated sub-metering is identifying the consumption)
- The **CMU** only includes this Delivery Point and is therefore an individual CMU
- The oven and its related auxiliaries are connected on the grid via a submetering device, thus the Delivery Point is an **Existing Delivery Point**
- The CMU being composed of only one Existing Delivery Point, the CMU is an **Existing CMU**
- As the Delivery Point is only consuming electricity, the CMU is not subject to a Daily Schedule (= The program of production of a CMU, given on a quarter hourly basis, provided to ELIA in day-ahead and updated in accordance with the rules of the CIPU Contract)



**In order to be able to participate to the Primary Market or the Secondary Market, IndustryOfTheFuture.SA/NV will go through the standard Prequalification Process with his CMU**

1. The customer and his asset(s)



2. Terminology applicable to the customer's case



3. Application form & CRM IT Interface access



4. Prequalification File(s)



5. Prequalification review process



6. Volumes determination



7. Prequalification results notification

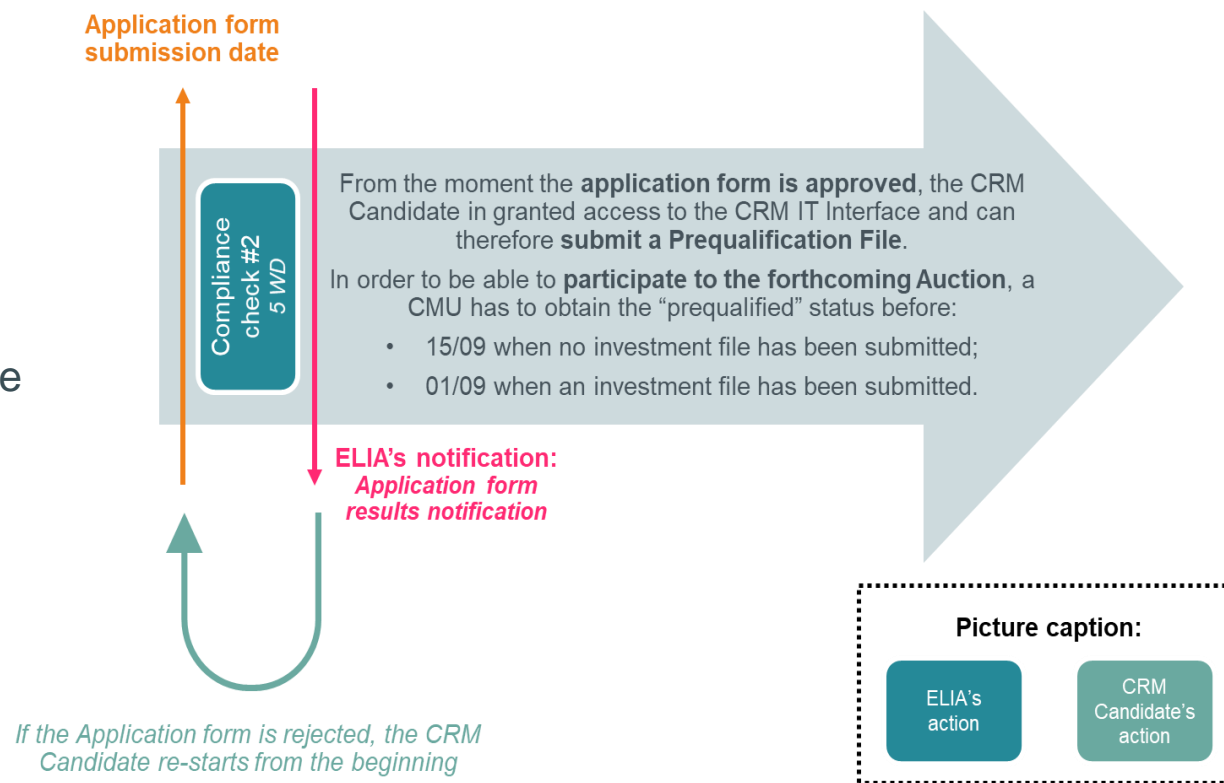
### 3. Application form & CRM IT Interface access

To get the possibility to submit a Prequalification File and therefore become a **CRM Candidate**, IndustryOfTheFuture.SA/NV must first fill in the application form (following 17.1.4.ANNEX A.4 in the Functioning Rules)

The application form is submitted to ELIA on May 5, 2021

The application form is approved by ELIA on May 7, 2021

→ The **CRM Candidate** receives access to the CRM IT Interface



### 3. Application form & CRM IT Interface access

- Once the application form is approved by ELIA, each user (provided by IndustryOfTheFuture.SA/NV in his application form) of the CRM IT Interface receives an ID and is asked by e-mail to create a password
  - At first connection in the CRM IT Interface, IndustryOfTheFuture.SA/NV ensures compliancy by marking dedicated boxes, namely:
    1. His acknowledgment of the Functioning Rules for the Capacity Remuneration Mechanism; and
    2. His acknowledgment of the Capacity Contract conditions in case of Contracted Capacity for the forthcoming Auction; and
    3. The compliance of each Delivery Point with eligibility criteria, as defined in the Electricity Act (cf. Art. 7undecies. §4, 1°, 2° and 3°) and dedicated Royal Decree referred to in Article 7undecies §4 of the Electricity Act; and
    4. The compliance of each Existing Delivery Point with the production license requirements as defined in article 4 of the Electricity Act; and
    5. The compliance of each Existing Delivery Point with the maximal CO2 emission thresholds set by the Regulation (EU) 2019/943; and
    6. The compliance of each Delivery Point with any other relevant legal and regulatory framework.
- ➔ IndustryOfTheFuture.SA/NV verifies his compliance with the above information before marking the boxes

1. The customer and his asset(s)



2. Terminology applicable to the customer's case



3. Application form & CRM IT Interface access



4. Prequalification File(s)



5. Prequalification review process



6. Volumes determination



7. Prequalification results notification

## 4. Prequalification File(s)

### 4.1. Requirements at the Delivery Point level

As the Delivery Point is an **Existing Delivery Point**, the following information shall be provided by the CRM Candidate in his Prequalification File:

<i>Requirements</i>	<i>Data provided by the CRM Candidate</i>
<i>Type of Delivery Point</i>	TSO-connected
<i>Delivery Point's name</i>	Willebrugge-Oven1
<i>Single line diagram</i>	Oven_location.pdf
<i>Technology</i>	DSR
<i>Linked Capacities</i>	544545441256547
<i>CDSO Declaration</i>	NA
<i>EAN code of the Access Point</i>	545555545416445
<i>Agreement between Belgian member State and Adjacent Member State</i>	NA
<i>Declaration by the Eligible Direct Foreign Capacity Holder</i>	NA
<i>Declaration by the Adjacent Member State</i>	NA
<i>EAN code(s) of the Delivery Point</i>	544545441256547
<i>Expected Nominal Reference Power</i>	10 MW

## 4. Prequalification File(s)

### 4.1. Requirements at the Delivery Point level

As the Delivery Point is an **Existing Delivery Point**, the following information shall be provided by the CRM Candidate in his Prequalification File:

<i>Requirements</i>	<i>Data provided by the CRM Candidate</i>
<i>CO<sub>2</sub> emission attestation</i>	CO2_emission.pdf
<i>CO<sub>2</sub> emission</i>	317g/kWh
<i>Preferred Nominal Reference Power methodology</i>	Method 1
<i>Prequalification test profile for method 3</i>	NA
<i>Baseline adjustment</i>	Standard method
<i>Unsheddable Margin</i>	0 MW
<i>Nameplate capacity of generation</i>	NA
<i>Net offtake/net injection</i>	Net offtake
<i>Full technical injection Capacity</i>	0 MW
<i>Full technical offtake Capacity</i>	10,5MW
<i>Grid User Declaration</i>	PDF attached
<i>Renouncing the operating aid</i>	PDF attached

## 4. Prequalification File(s)

### 4.2. Requirements at the CMU level

As the CMU is an **Existing CMU**, the following information shall be provided by the CRM Candidate in his Prequalification File:

<i>Requirements</i>	<i>Data provided by the CRM Candidate</i>
<i>Information linked to Financial Security</i>	Bank guarantee of 200.000€ with BELFIOS
<i>Opt-Out Volume</i>	0MW
<i>Project ID</i>	NA
<i>Choice of a Derating Factor</i>	1 (24h) <sup>1</sup>
<i>Link(s) (an)other CMU(s) in case of multiple use of a same Delivery Point</i>	NA
<i>Information for method 2 (for Nominal Reference Power determination)</i>	NA
<i>Link with a VCMU</i>	NA
<i>Participation to the Primary Market or the Secondary Market</i>	Primary Market and Secondary Market

1: As the CMU is a Non-energy Constrained CMU and is not subject to a Daily Schedule, it is eligible to a SLA category AND to a derating category, The CRM Candidate decided to select a SLA category.

## 4. Prequalification File(s)

### 4.3. Requirements prior to any Transaction Period

As the CMU is an **Existing CMU**, the following information shall be provided by the CRM Candidate in his Prequalification File:

Requirements	Data provided by the CRM Candidate
<i>Declared Day Ahead Price (optional at this stage)</i>	280 €/MWh
<i>NEMO (optional at this stage)</i>	EPEX

**At this stage, the CRM Candidate completed entirely and correctly his Prequalification File  
→ He is therefore ready to submit it to ELIA**

## 4. Prequalification File(s)

### 4.4. Prequalification File submission

- All data provided in his Prequalification File are considered as relevant by the CRM Candidate
  - ➔ On May 26, 2021, the CRM candidate submits his Prequalification File to ELIA (= Prequalification File submission date #1)
- The CRM Candidate is not allowed to adapt his Prequalification File during maximum 20 Working Days starting from the Prequalification File submission date
- ELIA will check the information included in the Prequalification File within these 20 Working Days

Prequalification File  
submission date #1



1. The customer and his asset(s)



2. Terminology applicable to the customer's case



3. Application form & CRM IT Interface access



4. Prequalification File(s)



5. Prequalification review process



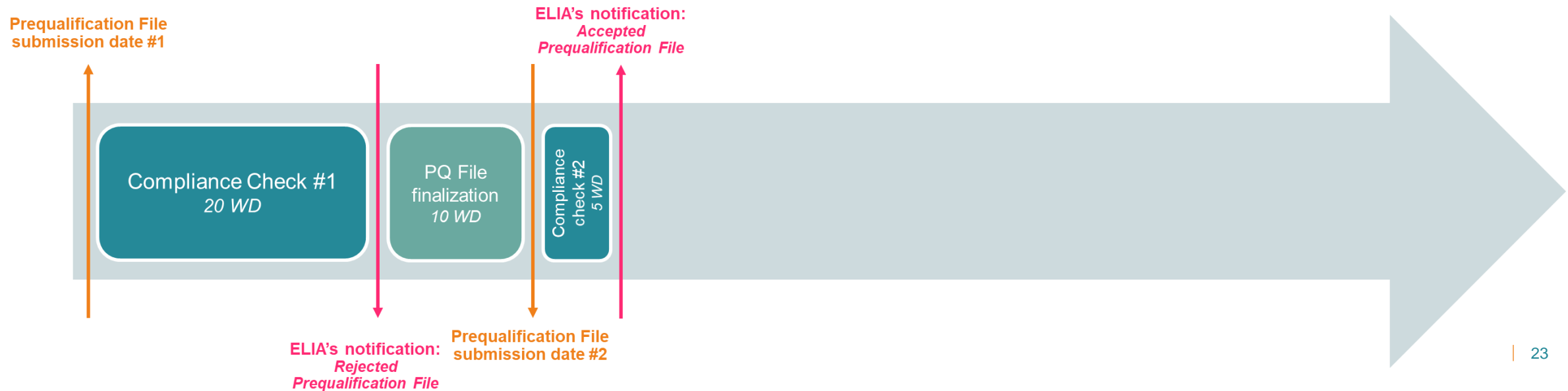
6. Volumes determination



7. Prequalification results notification

## 5. Prequalification review process

- On June 2, 2021 ELIA notifies to IndustryOfTheFuture.SA/NV that its Grid User Declaration isn't valid because some mandatory fields are missing.
  - IndustryOfTheFuture.SA/NV has 10 Working Days to upload a new Grid User Declaration
  - IndustryOfTheFuture.SA/NV adapts his Prequalification File on June 4<sup>th</sup> 2021 (= Prequalification File submission date #2)
- As of the change in the Prequalification File, ELIA has 5 Working Days to review the Prequalification File for the second time
  - The Prequalification File is considered by ELIA as “approved” on June 10<sup>th</sup> 2021



1. The customer and his asset(s)



2. Terminology applicable to the customer's case



3. Application form & CRM IT Interface access



4. Prequalification File(s)



5. Prequalification review process



6. Volumes determination



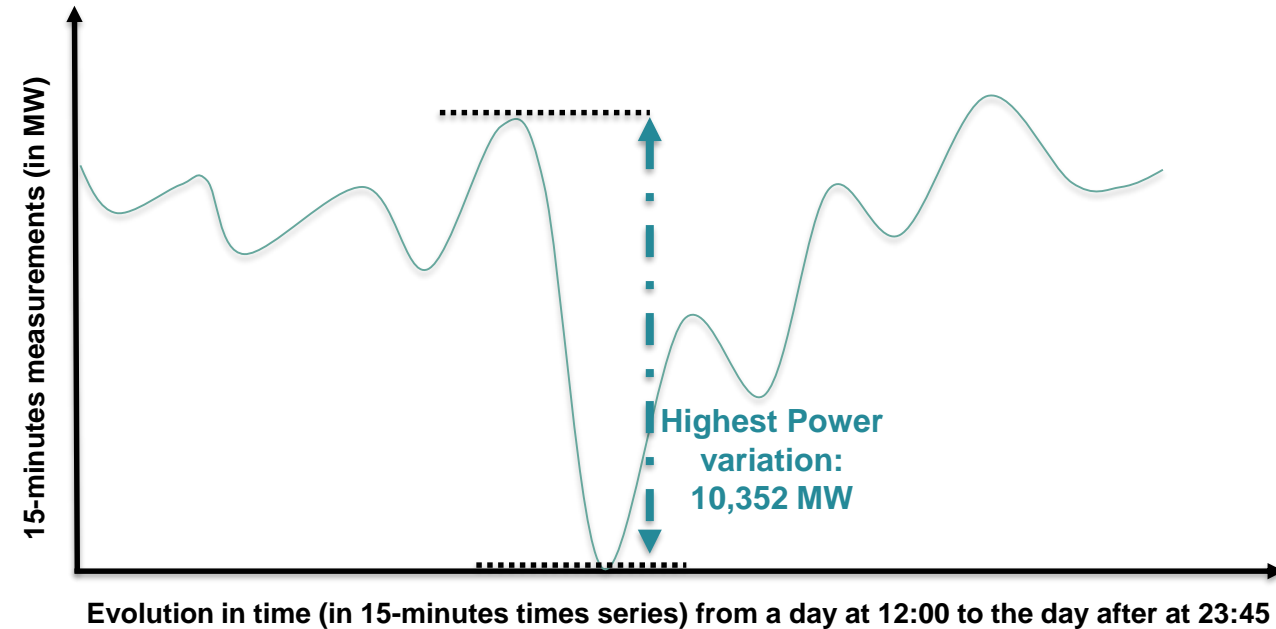
7. Prequalification results notification

## 6. Volumes determination

### 6.1. Nominal Reference Powers

After the Prequalification File review, ELIA starts to determine the Nominal Reference Power (NRP) of each Delivery Point part of the CMU (in this use case, there is only one Delivery Point in the CMU):

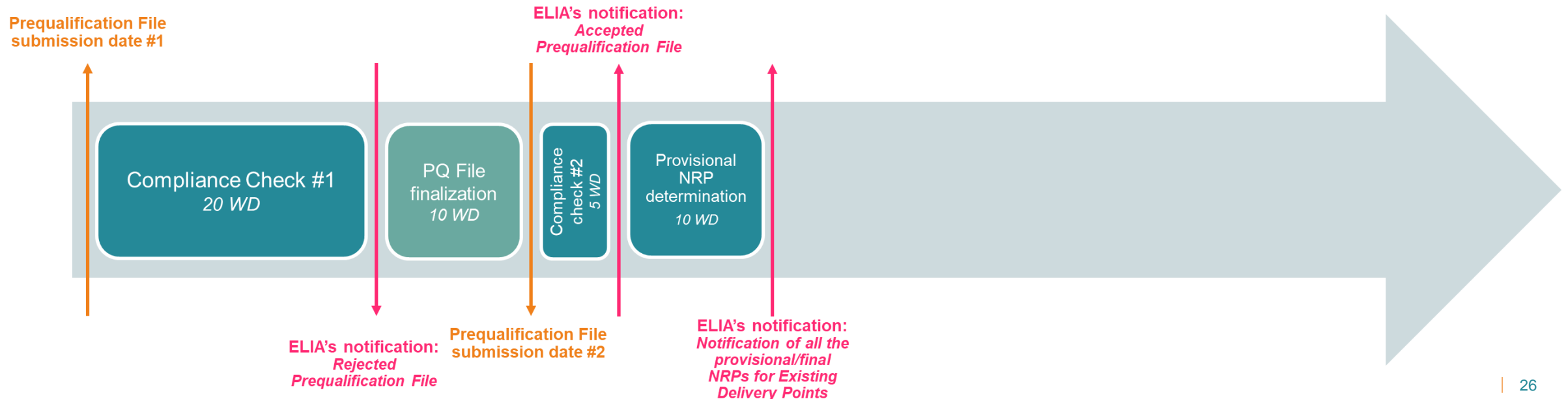
- ELIA uses method 1 (historical data) as chosen by the CRM Candidate in his Prequalification File
- ELIA identifies the highest power variation (within the 15 minutes measurements) within each of the 365/366 frames (starting 12 months prior to the Prequalification File submission date) of 36h starting from 12:00 to 23:45 the day after
- The figure on the right illustrates an example of frame of 36h
- ELIA determines the **provisional Nominal Reference Power** of the Delivery Point: **10,40 MW**



## 6. Volumes determination

### 6.1. Nominal Reference Powers

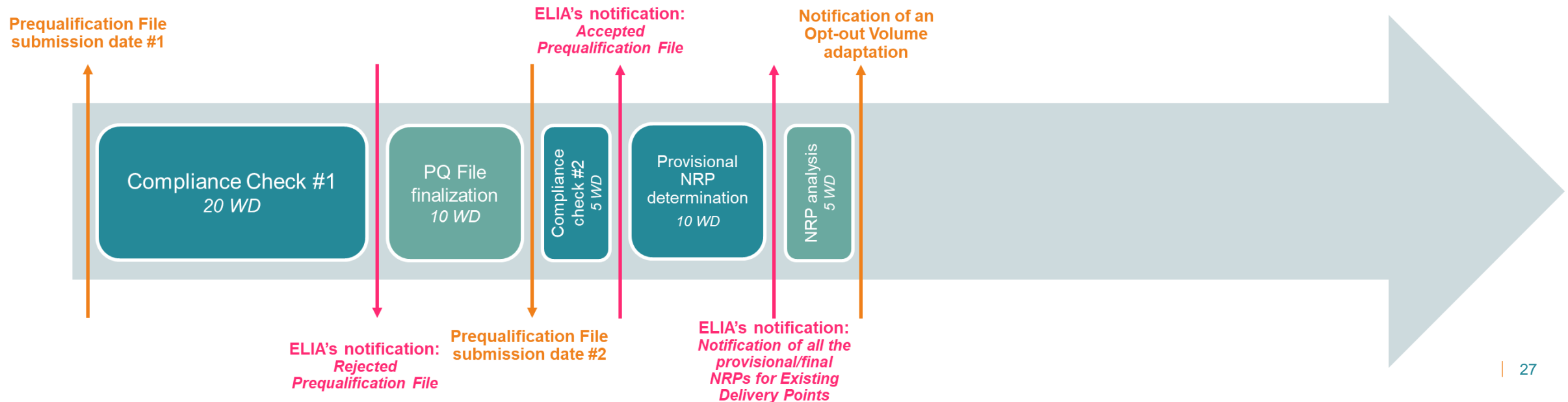
- The provisional Nominal Reference Power is communicated by ELIA to IndustryOfTheFuture on June 17, 2021
- IndustryOfTheFuture does not contest the Nominal Reference Power
- The provisional Nominal Reference Power is deemed final
- The **final Nominal Reference Power** is equal to **10,40 MW**
- As there is only one Delivery Point part of the CMU, the Nominal Reference Power of the CMU is equal to 10,40 MW



## 6. Volume determination

### 6.2. Adaptation of the Opt-Out Volume

- When submitting his Prequalification File, IndustryOfTheFuture did not declare any Opt-Out Volume for his CMU
- Following the communication on the provisional Nominal Reference Power (10,4MW) IndustryOfTheFuture wants to remain with a Reference Power of 10MW
  - IndustryOfTheFuture does an Opt-Out Notification with an **Opt-Out Volume** of **0,4MW**
  - This Opt-Out Notification is made on June 18, 2021 via the CRM IT Interface



## 6. Volume determination

### 6.3. (Secondary Market) Eligible Volume determination

#### *Reference Power*

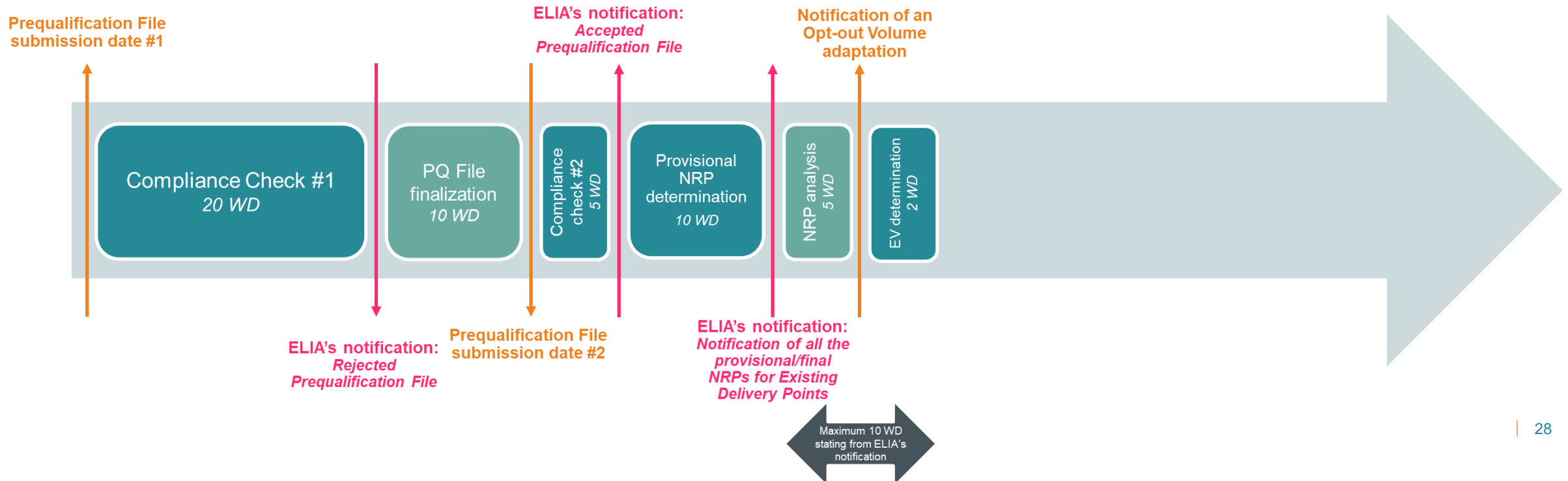
$$\begin{aligned}
 &= \text{Nominal Reference Power} - \text{OptOut Volume} \\
 &= 10,4 - 0,4 = 10 \text{ MW}
 \end{aligned}$$

#### *Eligible Volume*

$$\begin{aligned}
 &= \text{Reference Power} \times \text{Derating Factor} \\
 &= 10 \times 1,0 = 10 \text{ MW}
 \end{aligned}$$

#### *Secondary Market Eligible Volume*

$$\begin{aligned}
 &= \text{Reference Power} - \text{OptOut Volume(IN)} \times \text{Derating Factor} \\
 &= 10,40 - 0,4 \times 1,0 = 10 \text{ MW}
 \end{aligned}$$



1. The customer and his asset(s)



2. Terminology applicable to the customer's case



3. Application form & CRM IT Interface access



4. Prequalification File(s)



5. Prequalification review process



6. Volumes determination



7. Prequalification results notification

## 7. Prequalification results notification

- From the moment the volumes have been determined, ELIA communicates the prequalification results to IndustryOfTheFuture
- The results are communicated on June 24, 2021 to IndustryOfTheFuture
- As the CMU is not subject to an investment file, the prequalification results shall be notified by September 15, 2021 at the latest
- IndustryOfTheFuture has not adapted his Opt-Out Volume after the notification of the Eligible Volume

Prequalification results	
<i>The Nominal Reference Power of the CMU</i>	10,4 MW
<i>The Reference Power of the CMU</i>	10 MW
<i>The Opt-Out Volume of the CMU</i>	0,4 MW
<i>The Eligible Volume of the CMU</i>	10 MW
<i>The Secondary Market Eligible Volume of the CMU</i>	10 MW

## 7. Prequalification results notification

