## The derating factors

## — Introduction

All technologies are allowed to participate in the CRM (the mechanism is 'market-wide').

However, they are subject to the application of a derating factor representing the degree to which the technology enhances Belgian security of supply. The derating factor is a percentage multiplying the capacities in MW determining the eligible volume to participate in the auction.

The derating factors are organised into categories with which each delivery point can be associated.

The adequate derating factor for a given delivery point/CMU may be found based on whether:

- the delivery point is under an "Elia individual MW schedule obligation", known as the 'Daily Schedule' (TSO and above 25MW installed capacity) or not.
- the delivery point is energy constrained or not (limited numbers of Service Level Agreement (SLA) hours in a day)

## Derating categories

Combined Cycle Gas Turbine

Open Cycle Gas Turbine

Turbojets

Gas-engines

Diesels-engines

Combined Heat and Power

**Biomass** 

Waste

Nuclear installations

Coal

Pump-Storage Plant

Large-scale batteries

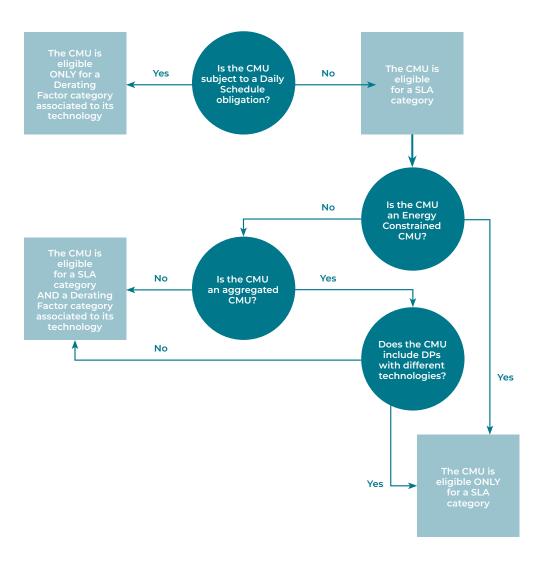
Offshore wind

Onshore wind

Solar

Hydro run-of-river

| SLA categories |  |
|----------------|--|
| 1h             |  |
| 2h             |  |
| 3h             |  |
| 4h             |  |
| 5h             |  |
| 6h             |  |
| 7h             |  |
| 8h             |  |
| 9h             |  |
| 10h            |  |
| 11h            |  |
| 12h            |  |
| SLA unlimited  |  |



As part of the auction's organisation, the minister defines the derating factors for each technology and SLA, along with other auction parameters. For each new auction, an update will be published.

The derating factors is of application

- 1. In the Eligibility and mandatory participation assessment of the capacity holder's Delivery Point for the prequalification process
  Since the participation threshold is defined as 1 MW after applying the derating factor, the factor is to be multiplied by the delivery point capacity.
  As reminder, if an asset/delivery point cannot reach the 1MW threshold (after applying the derating factor) on its own, it is still possible to aggregate assets/delivery points in order to reach 1MW derated capacity.
- 2. In the standard prequalification process, the derating factor is selected by the CRM candidate for each participating delivery point. The derating factor is a major element of the volume calculation that may be offered in the auction, i.e. the (Remaining) CMU Eligible Volume. Example: An existing OCGT asset with successfully prequalified 300MW as nominal reference power may, in its first auction, bid no more than 300MW \* 91% = 273 MW. The derating factor is also declared in the fast track. In the specific prequalification process the derating factor is not entered by the CRM candidate, this will intervene in the Pre-delivery Period after Auction results.
- 3. In the correction volume of the CRM Auction, for which a market dummy bid of is introduced for all Opt-Out IN of the successful pregualification files
- **4.In the capacity contract** indicating the level of the CRM service: it defines the expected level of service for the energy-constrained CMU during the delivery period (as of November 2027) and therefore **will be fixed in each transaction** based on the prequalification file in case of successful selection in the auction.

| Categor   |                     |
|---|---------------------|
| Sub-Category  | Derating Factor [%] |
| SLA-1h  | 20                  |
| SLA-2h  | 35                  |
| SLA-3h  | 47                  |
| SLA-4h  | 57                  |
| SLA-5h  | 65                  |
| SLA-6h  | 72                  |
| SLA-7h  | 78                  |
| SLA-8h  | 83                  |
| SLA-9h  | 87                  |
| SLA-10h   | 90                  |
| SLA-11h   | 93                  |
| SLA-12h   | 95                  |
| SLA unlimited   | 100                 |
| Category II: Thermal technologies with daily schedule |                     |
| Sub-Category  | Derating Factor [%] |
| Combined Cycle Gas Turbine                            | 93                  |
| Open Cycle Gas Turbine                                | 93                  |
| Turbojets   | 96                  |
| Gas-engines   | 95                  |
| Diesel-engines  | 95                  |
| Combined Heat and Power,<br>Biomass, Waste            | 93                  |
| Nuclear installations                                 | 80                  |
| Coal  | 90                  |

| Category III: Energy-limited technologies with daily schedule |                     |  |
|---|---------------------|--|
| Sub-Category  | Derating Factor [%] |  |
| Storage 1h  | 23                  |  |
| Storage 2h  | 39                  |  |
| Storage 3h  | 51                  |  |
| Storage 4h  | 60                  |  |
| Storage 5h  | 66                  |  |
| Storage 6h  | 71                  |  |
| PSP   | 48                  |  |
| Category IV: Weather-dependent technologies                   |                     |  |
| Sub-Category  | Derating Factor [%] |  |
| Offshore Wind   | 11                  |  |
| Onshore Wind  | 10                  |  |
| Solar   | 1                   |  |
| Hydro Run-of-River  | 46                  |  |
| Category V: Thermal technologies without daily schedule       |                     |  |
| Sub-Category  | Derating Factor [%] |  |
| Aggregated thermal technologies                               | 63                  |  |

 $Derating Factor for the Y-4 Auction 2023: https://www.ejustice.just.fgov.be/cgi_2018/article.pl?language=nl&sum_date=2023-03-31&lg_txt=n&pd_search=2023-03-31&numac_search=2023041521&caller=&2023041521=-2&view_numac=2023041521f$ 

This Quick Reference card is a facilitation tool for the Belgian Capacity Remuneration Mechanism. It is a tool to facilitate understanding of the CRM and associated documents. Any parties wishing to obtain a complete understanding of the law and its implementing decrees, the functioning rules, as as proposed by Elia to CREG on 01 March 2023 and the proposed capacity contract should refer to these documents, which are the only references to be relied upon for the application of the Belgian CRM.