[#3]

Demand curve Y-axis - Methodology for defining net-CONE

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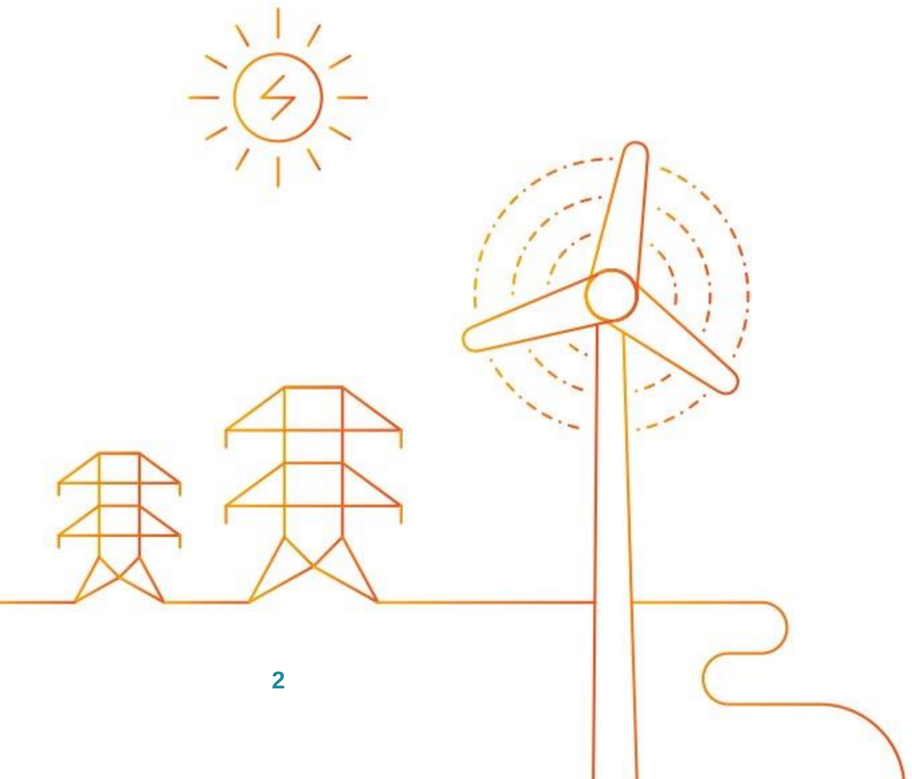


Overview of economic parameters and concepts

The economic parameters represent the Y-values of the demand curves

X-axis (capacity):

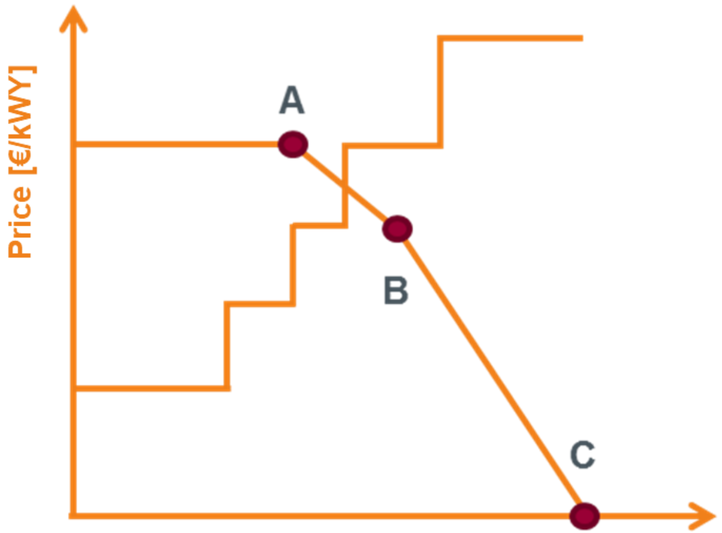
To be discussed later

- **A:** Lower limit
  Lesser volumes are cleared at price cap
- **B:** Target procured capacity
  Typically: meet legal SoS requirement (e.g.: LOLE = 3h/Y)
- **C:** Upper limit
  Maximally procured capacity

Y-axis (price):

Economics-based
=> subject of this topic

- **A:** Global Auction Price Cap
  Multiple price caps/bid caps focus on limiting windfall profits and market power abuse and are treated as a separate subject
- **B:** Price offered by Best New Entrant capacity (see next slide)
- **C:** X-axis intersect (0 €/kWY)



The methodology should allow to determine the price values (y-axis) for parameters A and B, and fix C at 0 €/kW/y
The economic parameters will affect the cost of the CRM

Price values for A and B should reflect reasonable values for expected bids of new-built capacity

➔ The expected bid (**Point B**) of the new entrant with the lowest missing money per MW at that volume of capacity:

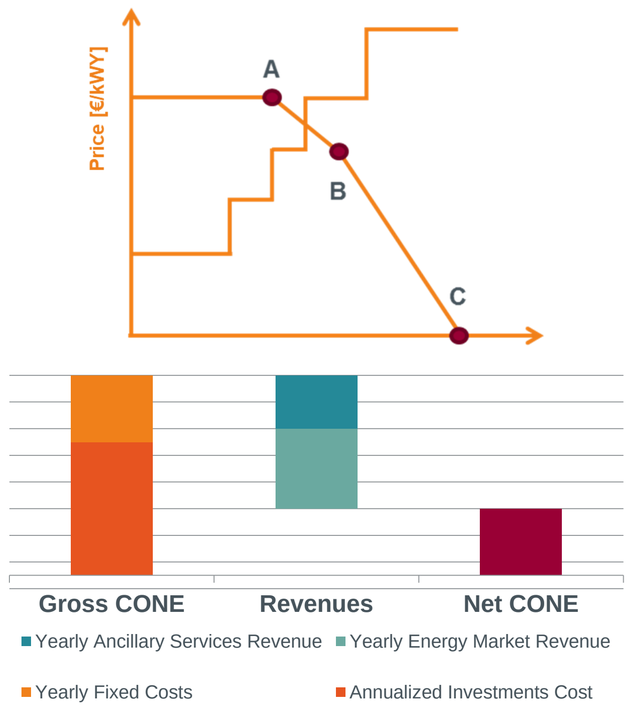
Gross Cost Of New Entry (Gross CONE) – Revenues
= Net Cost Of New Entry (Net CONE)

Uncertainties persist in estimating the net CONE:

- Technology choice
- Assumptions on costs
- Assumptions on revenues

➔ The maximum price (**Point A**) should allow variations that account for these uncertainties: **Sensitivities on Net CONE calculation**

Price Cap = 1,X * Net CONE



In other words, the methodology should determine how to estimate Net CONE and fix a margin for uncertainty
If conditions of the Energy Market improve, the Net CONE will be lower and thus also the CRM cost

The same parameters are used in other centralized CRM's to establish the demand curve

As approved by the European Commission under the EEAG State Aid rules:

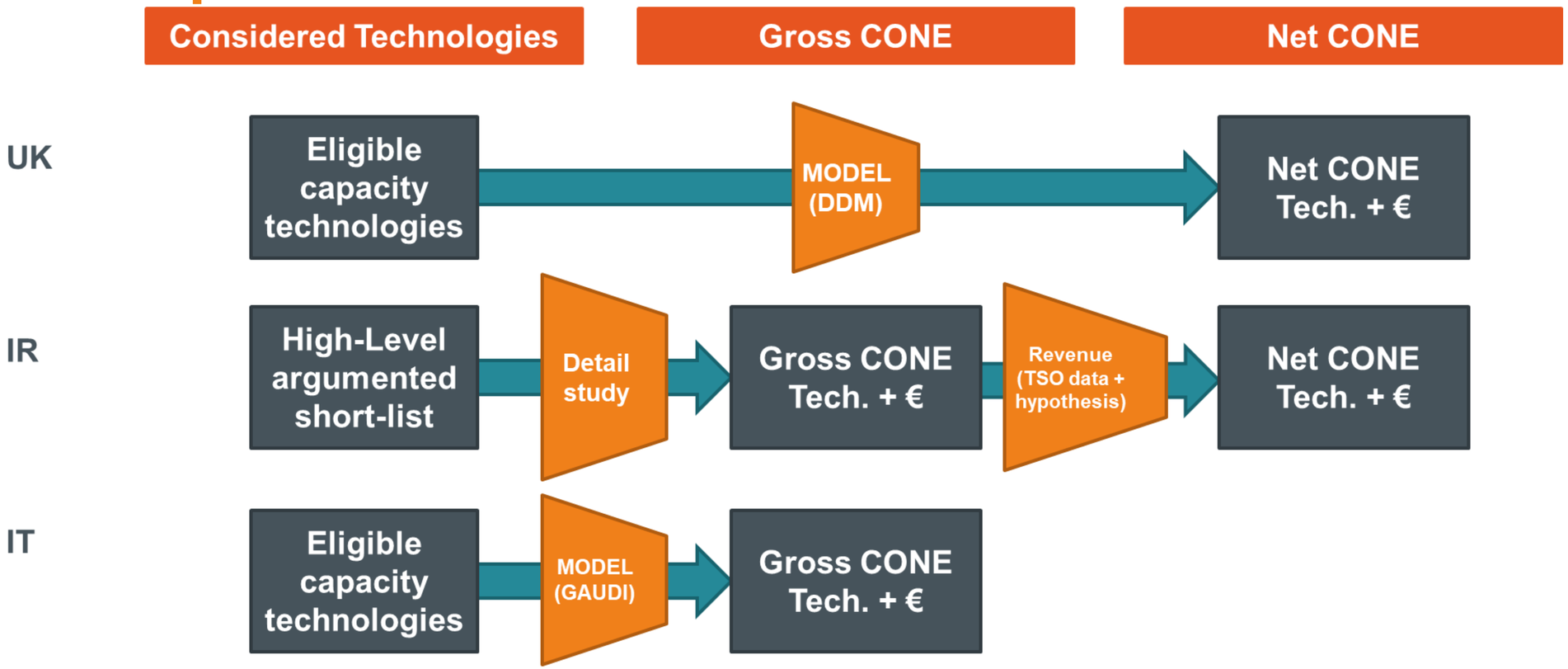
- United Kingdom paragraphs 37-41 (elaborated in Impact Assessment by DECC)
- Ireland paragraph 27, 28 and 50 (elaborated in decision SEM-17-022)
- Poland paragraph 35

Practiced in non-EU CRM's as well (e.g.: PJM, Alberta,…)

Country	Net CONE value	Price Cap	Most recent Reference Tech
UK	70 €/kWy	1,25* net CONE	CCGT
IR	78,82 €/kWy	1,5* net CONE	CCGT
PL	70 €/kWy	1,5* net CONE	OCGT

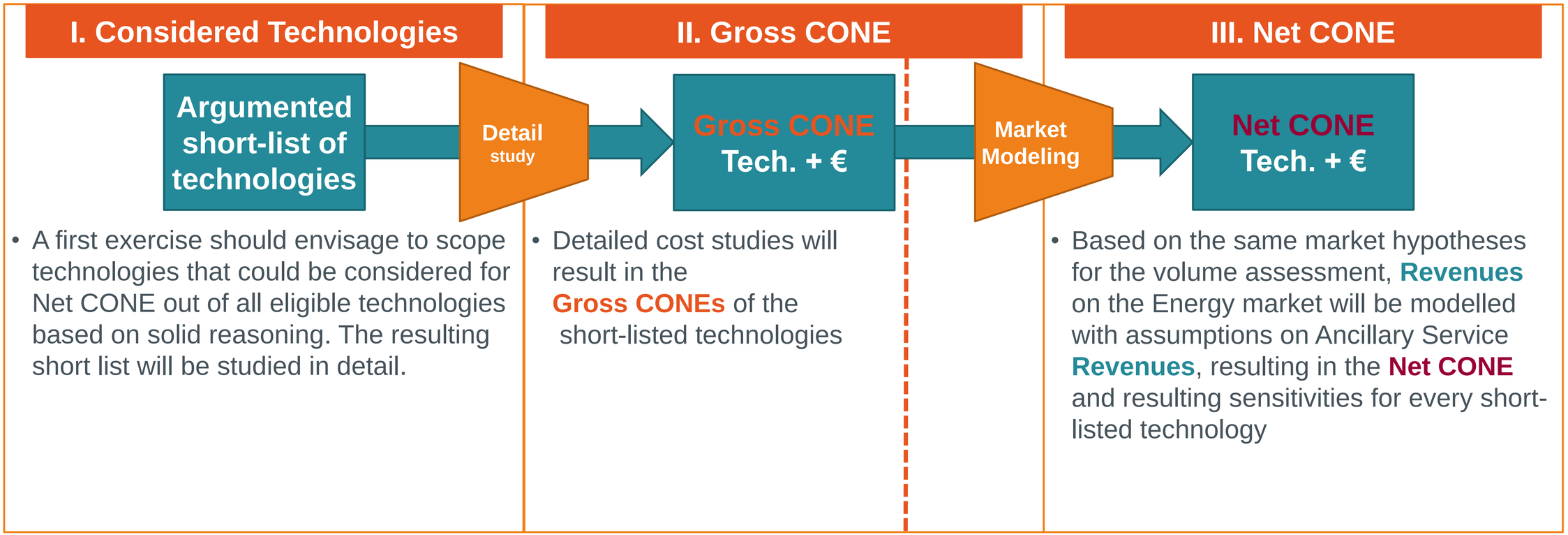
Methodology for calibrating the parameters

Typically for other CRM's, a detail study was performed for CONE



A similar study will also be required for Belgium to support the design of the mechanism

Proposed methodology to identify Net CONE

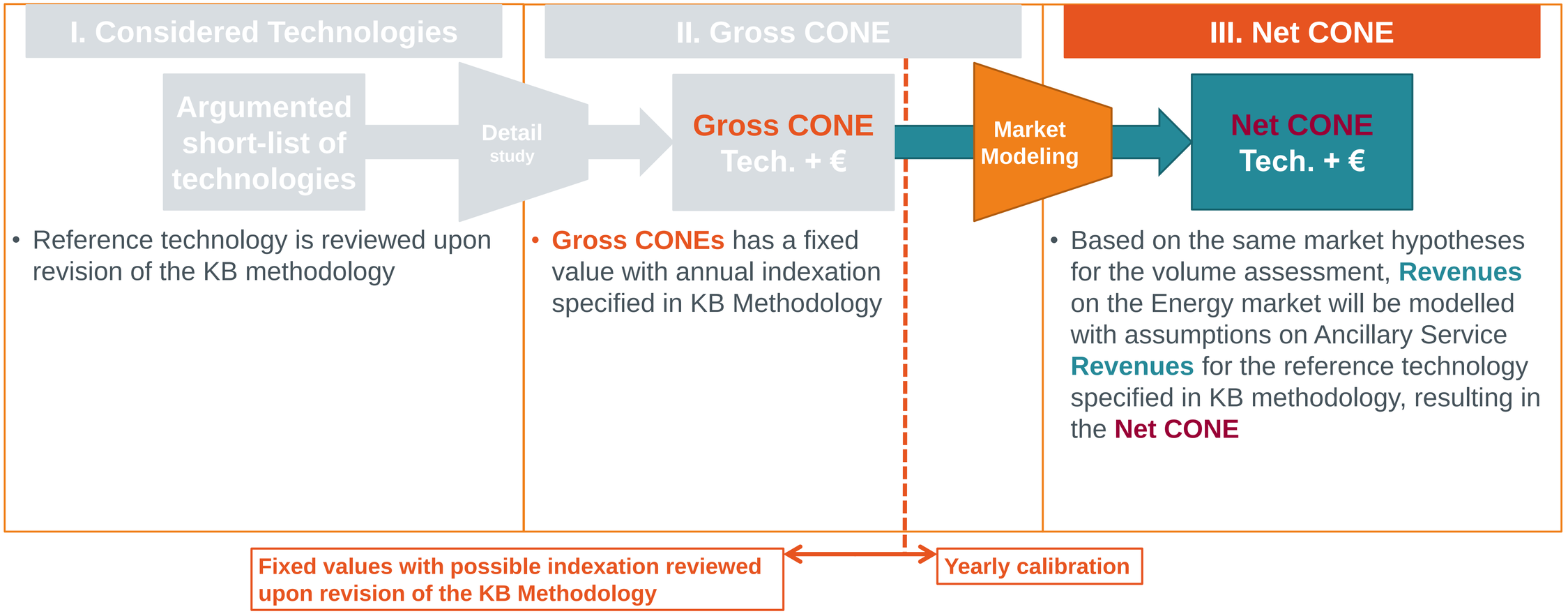


Elia intends to seek an external party with expertise in this area for the stages I and II of the process

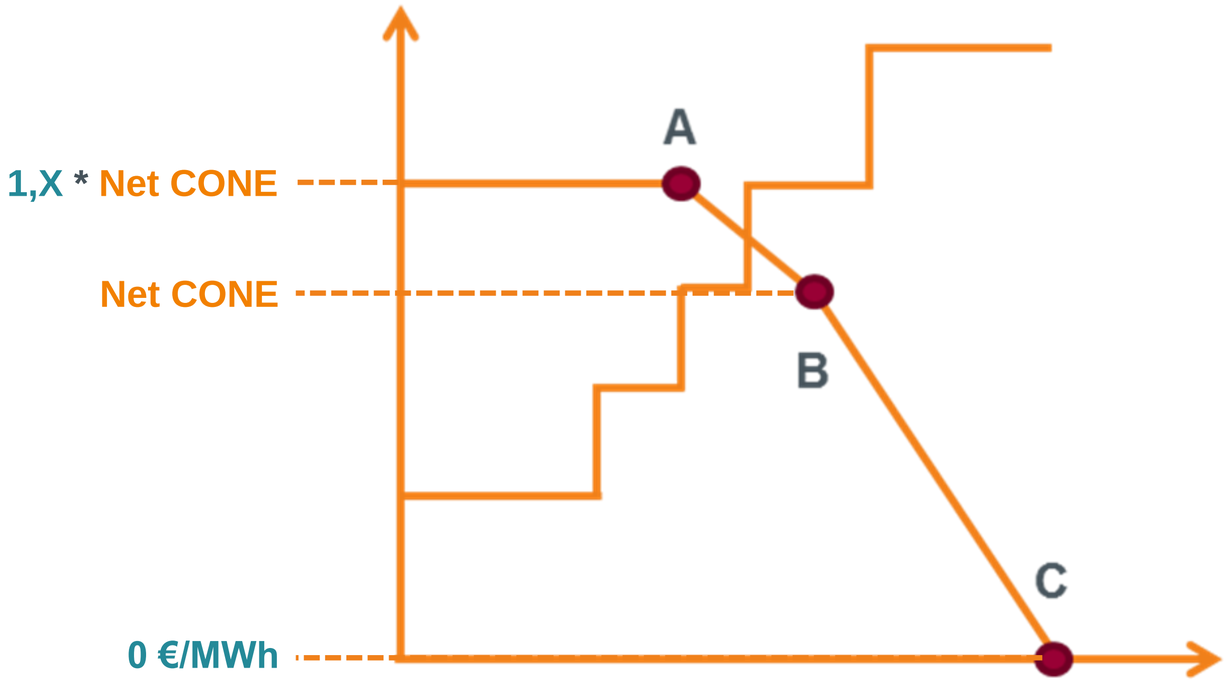
Elia proposes to use ANTARES modeling for stage III to ensure consistency with other methodologies and use inputs from stages I and II

Regular updates and exchanges during the taskforce CRM are envisaged for this study

The methodology in the royal decree will be used for yearly calibration



Conceptual illustration of the economic parameters in the demand curve



Net CONE = Gross CONE – Revenues

Fixed parameters in Royal Decree Methodology

Yearly calibrated parameters according to Royal Decree Methodology

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Public information on studies in other CRM's is available

Similar studies were performed in the context of other CRM's:

- **United Kingdom:**
  1. Department of Energy and Climate Change generation costs study
  2. Department of Energy and Climate Change Dynamic Dispatch Model to calculate CONE
- **Ireland:**
  1. Study conducted by Pöyry
- **Italy:**
  1. Methodology for CRM proposed by Terna (paragraph 2.2)