

TF CRM #24

1 April 2021

Agenda

- Draft Minutes of Meeting TF CRM #21 – 08.01.2021
- Guidelines for CO₂ emissions quantification for the prequalification to the CRM [FPS Economy]
- CRM Functioning Rules [Elia]



TF CRM: Guidelines for CO₂ emissions
quantification for the prequalification to the
CRM in Belgium
01/04/2021
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Agenda

- Legal framework
- Quantification methodology
 - ✓ Specific emissions
 - Emission factors
 - Design efficiency
 - ✓ Annual emissions
- Practical procedure
- Control ex-ante and ex-post
- Q&A

<https://economie.fgov.be/fr/themes/energie/securite-dapprovisionnement/mecanisme-de-remuneration-de>

Legal Framework

- *Generation capacity that started commercial production on or after 4th of July 2019*

$$\text{Specific emissions} \leq 550 \frac{g}{kWh}$$

Equation 1: Limit of CO₂ emissions of fossil fuels origin to prequalify to the CRM

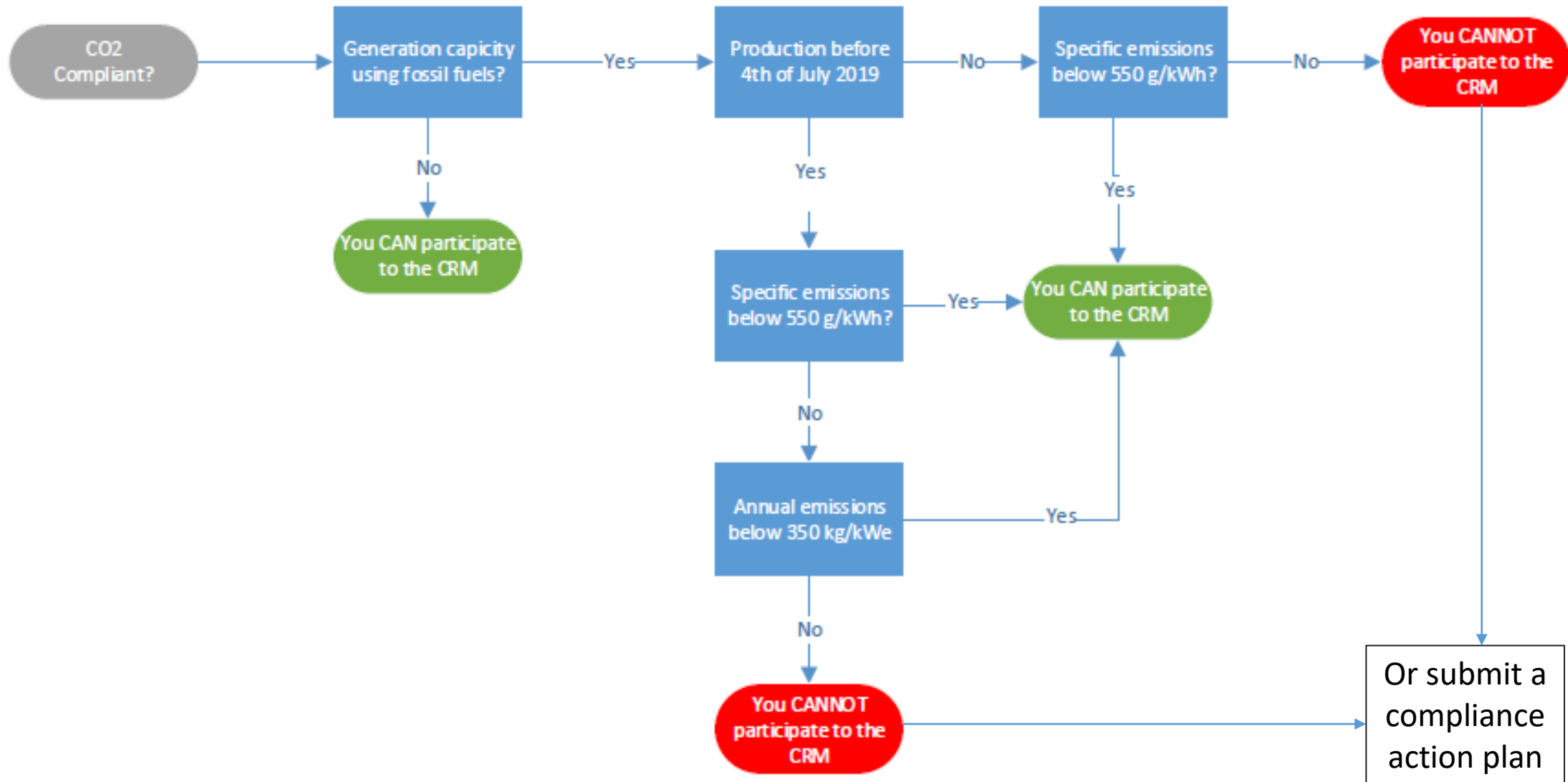
- *Generation capacity that started commercial production before 4th of July 2019*

$$\text{Specific emissions} \leq 550 \frac{g}{kWh}$$

$$\text{or annual emissions} \leq 350 \frac{kg}{kWe}$$

*Equation 2: Limits **from 1st July 2025** of CO₂ emissions of fossil fuels origin to prequalify to the CRM*

Legal Framework



Quantification: Specific emissions

$$\text{Specific emissions} = \frac{0,0036 (1 - t_{CO_2}) \sum_f s_f \cdot EF_{f,CO_2}}{\eta_{des}} = \frac{[g CO_2]}{[kWh_e]}$$

Equation 3

Value	Units	Specifications
f	-	Index of fuel
t_{CO_2}	%	Fraction of transferred CO ₂ over the total CO ₂ emitted
s_f	%	Share of fuel f over the total fuel input
EF_{f,CO_2}	$\frac{kg}{TJ}$	Emission factor for CO ₂
η_{des}	-	Design efficiency

Emission factor

- Generation units under EU ETS:
 - Most recent annual emission report
- Generation units outside EU ETS:
 - Using parameters provided by TSO's or DSO's
 - ❖ New capacity:
 - Use emission factor listed in Annex I of ACER's opinion
 - ❖ Mixed fuels:
 - biomass fraction considered as carbon neutral
 - ❖ Waste to energy:
 - case-by-case basis
 - ❖ Synthetic gas:
 - case-by-case basis

Design efficiency

- design efficiency
 - ✓ the net efficiency at nominal capacity under the relevant standards
 - refer to the latest performance test of the generation unit certified or attested
 - Calculated from calibrated meters of TSO's or DSO's
 - ✓ Providing heat and mass balance
 - ✓ Providing justification of **net** efficiency
 - ✓ At conditions close to site conditions
 - For new capacity
 - ✓ Offers indicating the expected performance

CHP

The FPS Economy considers efficiency of cogeneration units should refer to **both electricity and heat** at full load:

- Regulation (EU)2019/331
 - ✓ Annex VII (8) provides rules for assigning fuels and emissions of CHP
 - ✓ Attribution factors for heat and electricity from CHP

Quantification: Annual emissions

$$\text{Annual emissions} = \frac{1}{N} \sum_{y=Y-N}^{Y-1} \frac{\text{specific emissions}_y \cdot \text{electricity production}_y}{\text{installed capacity}_y} = \frac{[kg CO_2]}{[kW_e]}$$

Equation 4

Value	Units	Specifications
Y	-	Prequalification year
y	-	Delivery year
N	-	Numbers of years considered (if possible latest 3 years)
$\text{specific emissions}_y$	$\frac{g}{kWh}$	Specific emissions of generation capacity calculated for year y
$\text{electricity production}_y$	GWh	Annual electricity production in year y
$\text{installed capacity}_y$	MW _e	Nominal capacity of the generation unit in year y

Exception

- **IF NOT CO₂ COMPLIANT**



submit a compliance action plan



measures taken

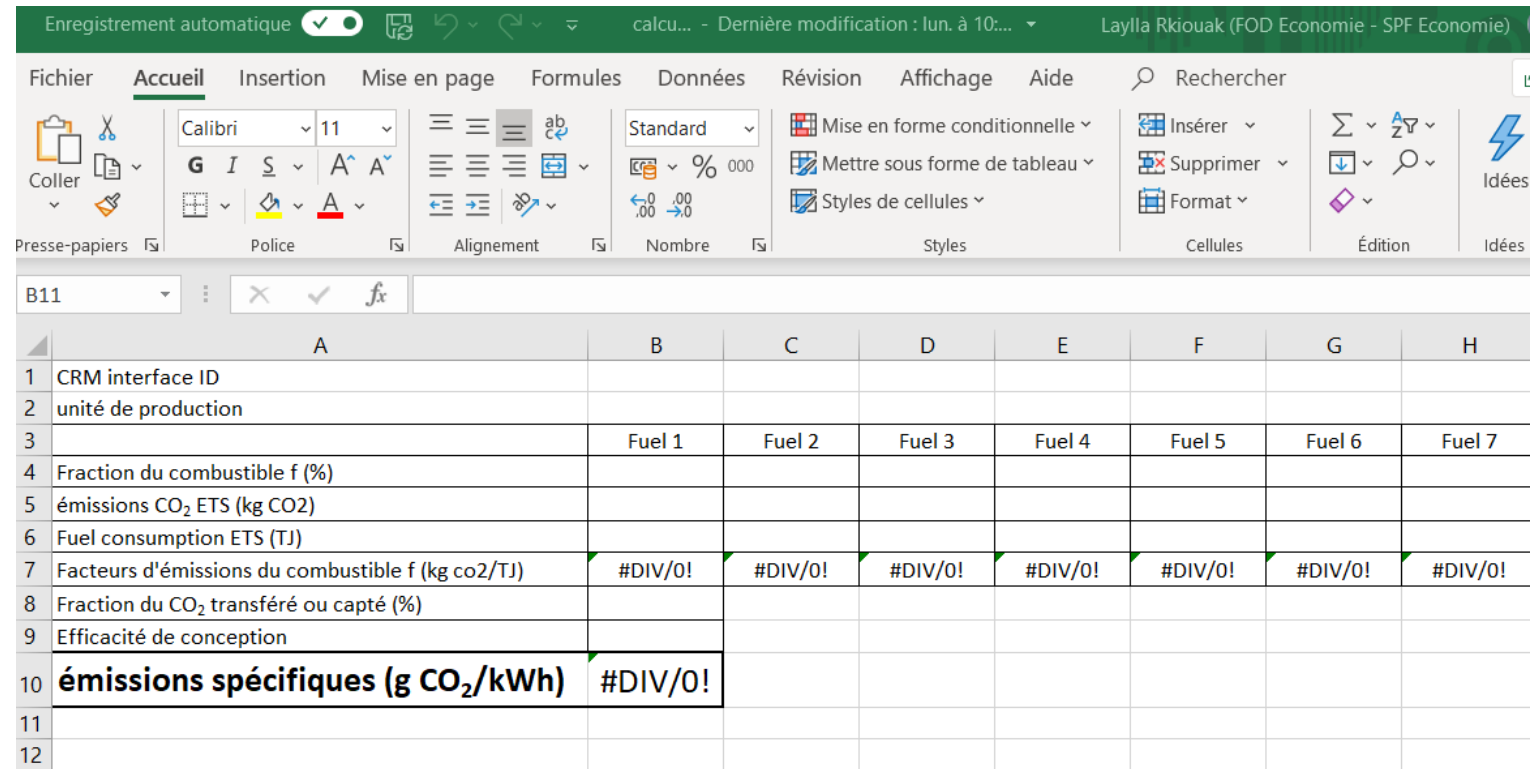


Compliant at the start of the delivery period

Practical procedures

Excel Table on CRM Interface

- Insert all the parameters
- Attach all the documents justifying the values inserted
 - ✓ Calculations done in the Excel



Enregistrement automatique ☒ calcul... - Dernière modification : lun. à 10:00 Laylla Rkiouak (FOD Economie - SPF Economie)

Fichier Accueil Insertion Mise en page Formules Données Révision Affichage Aide Rechercher

Coller Calibri 11 Standard Mise en forme conditionnelle Insérer Σ Z

Police Alignement Nombre Styles Cellules Édition Idées

	A	B	C	D	E	F	G	H
1	CRM interface ID							
2	unité de production							
3		Fuel 1	Fuel 2	Fuel 3	Fuel 4	Fuel 5	Fuel 6	Fuel 7
4	Fraction du combustible f (%)							
5	émissions CO ₂ ETS (kg CO ₂)							
6	Fuel consumption ETS (TJ)							
7	Facteurs d'émissions du combustible f (kg co ₂ /TJ)	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
8	Fraction du CO ₂ transféré ou capté (%)							
9	Efficacité de conception							
10	émissions spécifiques (g CO₂/kWh)	#DIV/0!						
11								
12								

Controls

- Ex-ante calculations:
 - Conformity control
 - Accuracy control
- Ex-post validation:
 - At the end of the delivery period
 - For specific generation units
 - Verified by accredited third party and/or certified
 - Submitted by the capacity provider
 - Sanctionned if not compliant

Q&A

Thank you

Status Functioning Rules

Elia

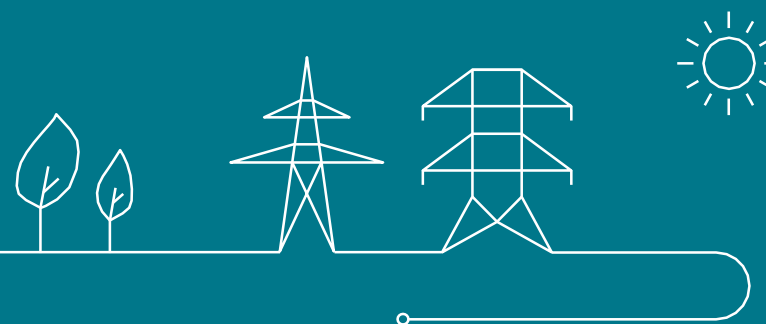


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Chapter 2: Legal & Governance

- EIF: + impact assessment for future amendments
- Interpretation: + Q&A
- Coming from chapter 12: communication-notifications, use of language, CRM IT interface
- Coming from contract: confidentiality
- Data accuracy
- GDPR: simplification, reference to Elia privacy policy



Chapter 3: Definitions

- No major changes to the definitions have been included.
- Definitions are aligned with the amended CRM Law.
- Some definitions have been updated in accordance with changes in other chapters. Alignment, consistency check (including with regional legislation), some new definitions



Chapter 5: Prequalification Processes

- ✓ Most of the **changes** are **related to form**, not content. However, the following design evolutions are now included:
- ✓ Validation procedure wrt **CO₂** included;
- ✓ Additional details on **communication ELIA – DSO** included to ensure effective NRP calculation within foreseen timings;
- ✓ Creation of specific prequalification requirements covering changes **introduced in KB Investment thresholds** (e.g: on aggregated CMUs);
- ✓ Inclusion of some Annexes in the PQ chapters ; shift of others (to Predelivery)
- ✓ Clarification of contestations procedures.

Chapter 5: Prequalification Processes (Opt-out) - Updates

Opt-out

- Generally, the design of the opt-out process has not changed in spite of a general restructuring of the content.
- The Prequalification Processes chapter now only contains opt-out related rules regarding the opt-out notification and the classification of opt-out volumes (IN/OUT). **The related consequences, i.e. volume corrections in the auction and secondary market implications, are treated in the respective chapters.**
- Final deadline for opt-out notification as stipulated in the Electricity Act: **September 30 9:00am.**
- As a refinement of the Opt-out classification, a “full opt-out” of additional capacity is now only considered OUT if:
 - Generation capacity; and
 - No signed Connection Contract (with Elia or the DSO) OR signed Connection Contract but timings herein indicate that the capacity will not be available by the start of the Delivery Period.



Chapter 6: Auction Process - Updates

- Generally, the design of the auction process has not changed in spite of various reformulations.

Bid submission

- New condition on Bid volume: greater than or equal to **minimum participation threshold** as defined in the RD on Eligibility Criteria.
- Bid statuses brought in line with the ongoing IT implementation: “**Saved**”, “**Submitted**”, “**Canceled**”¹ and “**Selected**”.
- Bid submission deadline as stipulated in the Electricity Act: **September 30 5:00pm** (unless fallback procedure applies).

Auction clearing

- A new section titled “**Dummy Bids**” is inserted, concerning rules on volume corrections towards the auction that arise from the opt-out notifications.
 - This information was previously included in the Prequalification Processes chapter.

¹If a submitted bid is related to a CMU that has been suppressed from the Prequalification Process.



Chapter 8: Pre-delivery control

- Pre-delivery chapter completely rewritten to clarify, simplify and avoid redundancies.
- Whenever possible, ELIA harmonized design principles applicable to Existing, Additional or Virtual CMUs.
 - 2 moments of control ($t_{\text{control 1}}$ and $t_{\text{control 2}}$) applicable to each type of CMU.
- Improved definitions of Total Contracted Capacity ; Pre-delivery Period and moments of control
- Inclusion of processes to become existing (initially part of PQ Annexes) ;
- Inclusion of process applicable in case of delays on Infrastructure Works (initially in chapter 14 – fallback);
- Inclusion of process applicable prior to start of delivery period (initially part of PQ: e.g: NEMO)
- Clarification of penalty formulas;
- Clarification of penalty mechanism fixed on additional CMUs at first moment of control
- Annexes adapted to illustrate the updated definitions and principles.



Chapter 9: Availability Obligations - Updates

- Generally, the design has not changed in spite of various clarifications throughout the chapter
- Final term for notifying Unavailable Capacity (§355):
 - Though not specified before, a final term for submitting Unavailable Capacity seems appropriate for settlement reasons
 - It has been aligned with the closure time for Secondary Market, i.e. up to ten days after the start date
 - This does not impact the deadline for submission of Announced Unavailable Capacity before 11:00 CET in D-1
- Commitment to submit the selection procedure for AMT Moments (§380) and Availability Tests (§439) to CREG along with the functioning rules for the Y-1 auction in 2024 for Delivery Period 2025-2026 at the latest



Chapter 10: Secondary Market - Updates

- Generally, the design has not changed in spite of various clarifications and a restructuring of the chapter
- Unilateral revocation of the Exchange mandate by the Capacity Provider/Prequalified CRM Candidate (§372):
 - In the previous version, both the Exchange and Capacity Provider/Prequalified CRM Candidate had to revoke the Exchange's mandate
 - The update allows the Capacity Provider/Prequalified CRM Candidate to do so unilaterally in case of 20 days ahead notice
- Elia no longer blocks Secondary Market transactions in case of “reasonable doubts” regarding the Capacity Provider/Prequalified CRM Candidate's behaviour (§584)
- Minor modification of the definition of ‘ex-ante’ vs ‘ex-post’ transactions (section 9.5.3):
 - In the previous version, it applied to the Transaction Date relative to the identification of AMT Hours
 - Upon review, it seems more correct to apply it to the Transaction Date relative to the start date of the Transaction Period
- Erratum in §544:
 - ‘Remaining Maximum Capacity’ in the determination of Secondary Market Eligible Volume for Non-Energy Constrained CMUs and ex-post trades should be replaced with ‘Proven Availability’ in the formula and text



Chapter 11: Financial Securities - updates

Financial Security obligation

- The **Validity Period for a Transaction related to an Existing CMU** is aligned with the modalities in the most recent version of the capacity contract → End date of the validity period corresponds to 50 Working Days after the due date of the last credit note.
- A **parent company guarantee** can also be provided by any **Affiliate**, subject to the condition that all requirements (including the minimum rating) are respected → Parent company guarantee is changed into an Affiliate guarantee.
- **Legal opinion** can be provided in English, Dutch or French.
- Requirements in case of a **transfer of a CMU** have been added.

Processes

- The procedures to provide additional Financial Security or to release a Financial Security are streamlined over the different cases.
- If Elia does not reduce the Total Contracted Capacity if Financial Security obligation is breached, a **written motivation is to be sent to CREG**.
- The **process to call upon the Financial Security** is further detailed:
 - The process in case of non-signature of the capacity contract is included.
 - It has been added that Elia will first send a reminder (within 10 Working Days) before a claim is made.
 - In case of multiple financial securities, the Capacity Provider can inform Elia on which Financial Security should be claimed first.
 - In case of a claim under a bank guarantee or PCG, Elia will send a copy of the written statement to the Capacity Provider.



Chapter 12: Payback Obligation – updates

- Generally, the design of the chapter Payback Obligation has not changed in spite of various reformulations.
 - The Payback Obligation formula and the Stop-Loss limit turned into **apart sections** from the parameters of the Payback Obligation formula.
 - The aspects related to the settlement of the Payback Obligation, its calculation, its reporting **fall all** under the Payback Obligation **process** section.
- Some additional elements were added to the content of the chapter to provide more clarity in the text or to cover additional cases :
 - Reference Price : the choice of the NEMO was completed to cover XB participation and the deadline of modification of a NEMO triggered by a notification made by the Capacity Provider was reduced from 10 WD to a **straightforward change** following a **confirmation of notification reception from the Capacity Provider by Elia**.
 - Indexation of the Strike Price : the time component of the formula has been adapted to link the factor of indexation of the Strike Price to the Delivery Period during which it will occur and a fallback solution is provided in case DAM prices data would not be available for its calculation (as for the Reference Price). No content changes.
 - Availability Ratio : some text has been added to improve the wording and bring additional clarification on the concept of 'P equivalent' used to calculate a Payback Obligation at every moment (even during a non-AMT Hour). No content changes.



Chapter 13: Communication → Liabilities & force majeure

- Communication has been integrated in chapter 2.
- This chapter will focus on liability (tbc):
 - Based on contractual regime (caps, making also link with regulated contracts)
 - Applicable also on prequalification process and auction
 - Relationship with third parties



Chapter 14: Disputes

See proposal November 2020.



Chapter 15: Fallback Procedures

- Reformulation of the fallback procedures applicable to each process;
- Clarification of applicable timings (when initially not mentioned)
- Shift of section 14.9 to Pre-delivery chapter (delays on infrastructure works)



Chapter 16: Transparency

- No major changes on the transparency chapter are included.
- On the reporting of the Opt-out Volumes
 - Reporting is aligned with the updated chapter on the Prequalification Processes.
 - Main focus on the distinction between opt-out volumes contribution to adequacy (category “IN”) and not contributing to adequacy (category “OUT”).
- In line with the Auction chapter, reference to the pay-as-cleared pricing rule is removed.



Chapter 17: Cross-Border participation - Updates

- ACER decision 36-2020 is now public and references have been integrated in the Functioning Rules
- Consistency check with the latest version of the law



Next meetings



Next meetings

TF CRM #25 : Tuesday 20 April 2021

TF CRM #26 : Friday 21 May 2021

TF CRM #27 : Friday 11 June 2021

TF CRM #28 : Tuesday 29 June 2021

TF CRM #29 : Friday 3 September 2021

TF CRM #30 : Thursday 23 September 2021

TF CRM #31 : Thursday 28 October 2021

TF CRM #32 : Friday 19 November 2021

TF CRM #33 : Tuesday 14 December 2021