



WG Balancing of 14th November 2023

Hybrid meeting

14/11/2023



For a smooth teleconference with 30+ people ... Some rules apply

- Please put yourself on mute at any time that you are not speaking to avoid background noise.
- If you receive a call, please ensure that you do not put this meeting **on hold**.
 - You can quit and reconnect later on.
 - You will be muted or kicked out of the session, if necessary.
- You will be requested to hold your questions for the end of each presentation.
 - Should you have a question, please notify via Teams or speak out if you are only via phone.
 - Share your question (with slide number) in advance so all participants may follow
 - Before you share your question, please announce yourself.
- If you have a poor internet connection, please dial-in.
- Finally, please be courteous and let people finish their sentences.
 - It is practically impossible to follow when 2 people are speaking at the same time in a teleconference.

Agenda

14:00 – 14:10: Winter Plan Balancing – Status Update

14:10 – 14:30: aFRR evolutions and connection to PICASSO

14:30 – 15:00: EU & BE Balancing Program Update

15:00 – 15:20: DFD – Feedback following Public Consultation

15:20 – 15:35: AOB – Incompressibility



Minutes of Meeting for approval

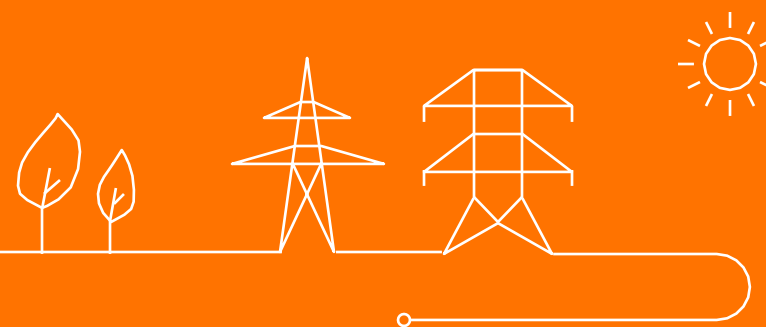
Minutes of Meeting of WG Balancing of 27/09/2023

- **Suggestion to approve:**
- The MoM of 27/09/2023

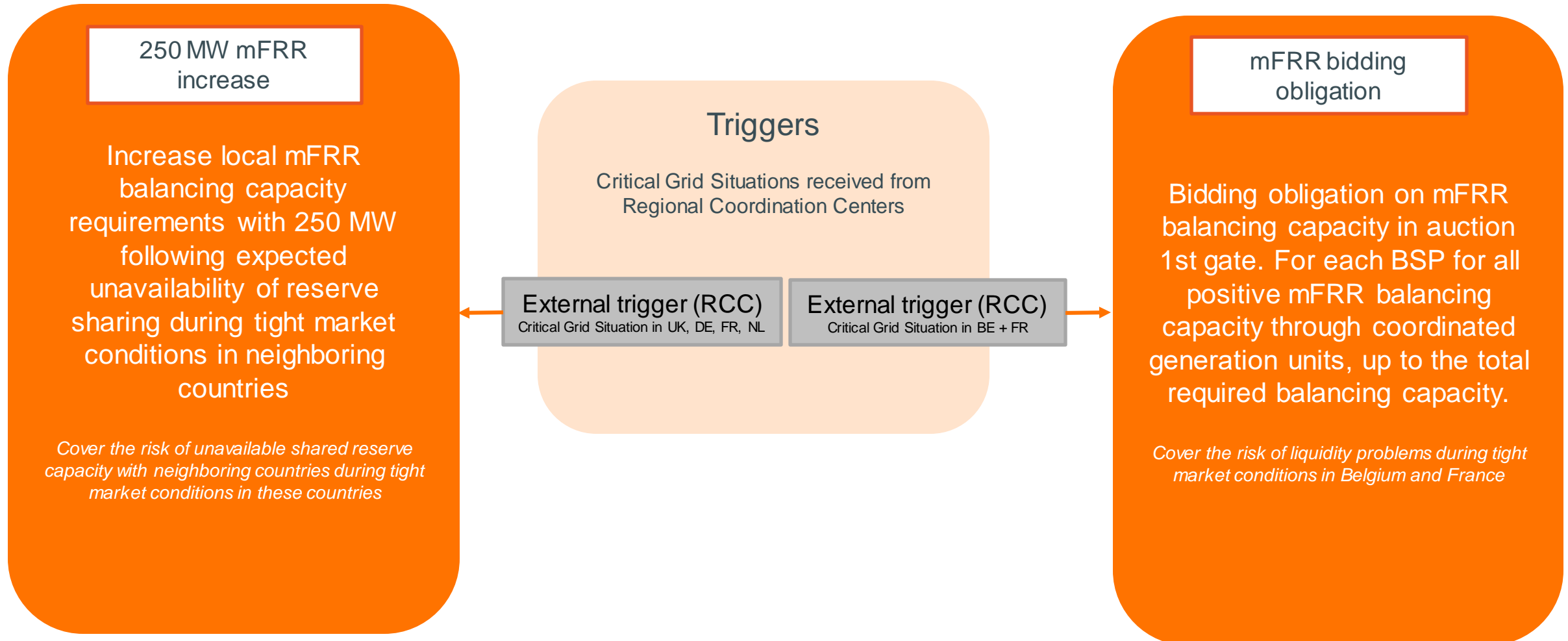


Winter Plan Balancing – Status Update

Kristof De Vos

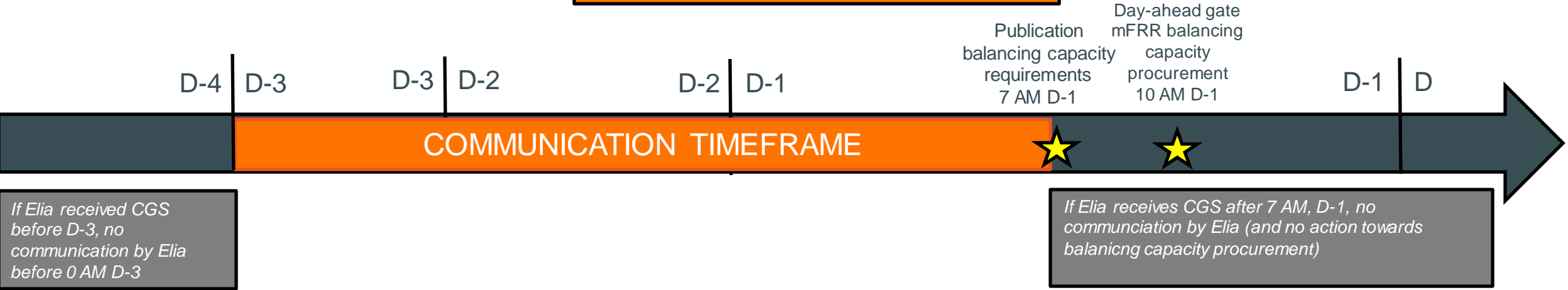
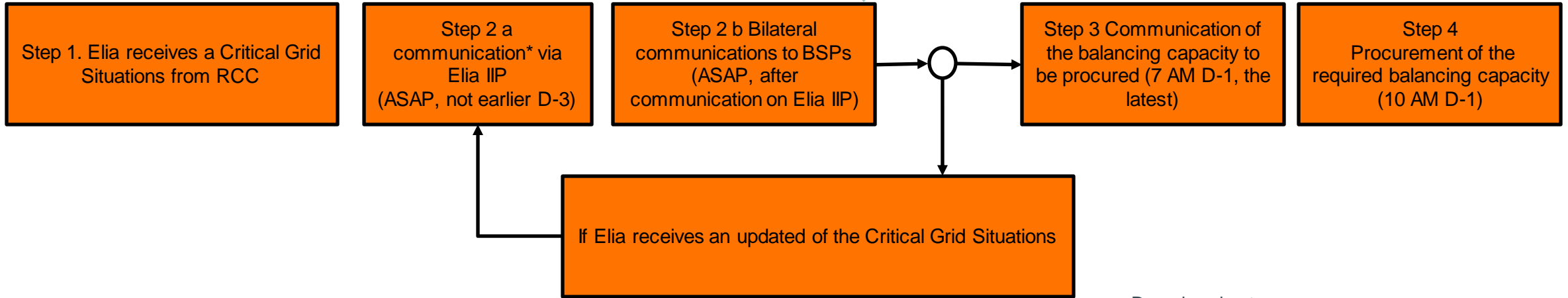


Winter plan Balancing : re-cap proposals under approval



Proposed communication plan

As of the moment a (update of) critical grid situation is published on IIP, Elia will foresee the usual bilateral contact between BSP contract manager and Elia KAM Energy



*250 MW mFRR increase and /or mFRR bidding obligation

Status and next steps

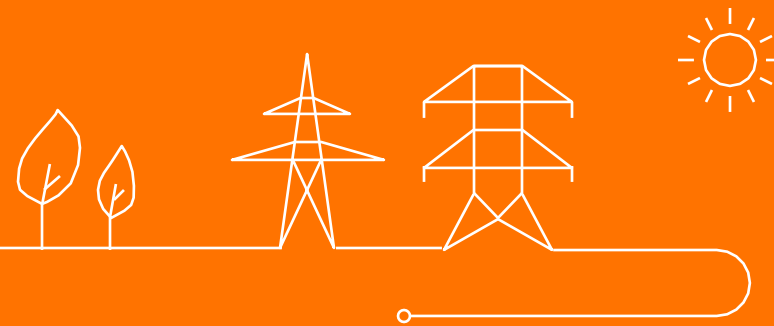
- Elia re-initiated the discussions of Winter 2022/23 in the WG BAL as from May 16, 2023
- Elia refers to the full design and justifications presented in the WG BAL of June 29, 2023
- Elia launched consultations on Friday August 18, until September 15, 2023 (4 weeks)
- Elia presented the results of the consultation in the WG BAL on September 27, 2023
- Elia submitted the proposals to CREG on September 29, 2023

The foreseen entry into force was initially on November 1, 2023 but

- Elia awaits formal approval from CREG
- Elia can implement the measures a few days after receiving formal approval
- Elia will communicate the implementation date as soon as possible (after receiving approval from CREG)

aFRR Evolutions and Connection to PICASSO

Philippe Magnant



Proposed approach to connect to the aFRR-Platform

- As presented during the stakeholder workshop of 19/9, Elia and the CREG are aligned on the implementation of a **price cap on Contracted aFRR Energy Bids**, in combination with the introduction of elastic demand.
- **A price cap on all aFRR Energy Bids**, as proposed by Elia in previous workshop, **to bridge the gap** between Elia's connection to the aFRR Platform and the implementation of elastic demand however appears **not** to be **legally acceptable for the CREG**.
- **Elia has been looking for alternatives**, with the objective not to delay the connection to the aFRR Platform but no solution has been identified yet. Elia and CREG will continue looking for legally acceptable alternatives allowing a connection to PICASSO in June 2024.
- **If no such alternative can be found**, ELIA and CREG will discuss a **possible delay of the connection until the introduction of aFRR elastic demand** on PICASSO.

Exchanges with CREG and resulting connection approach

- Elia and the CREG have been looking for several options of temporary mitigation measure allowing to cover the gap between the planned connection and the implementation of the elastic demand
- Unfortunately, no option covering the market risk identified appeared to be judged compliant with Article 10 of the EU Regulation on internal market for electricity
- As a result, Elia and CREG intend to condition the connection to the aFRR Platform to the implementation of elastic demand

Implementation planning of elastic demand

- The implementation timing of elastic demand has been analyzed at EU and at local level
- Critical path is the regulatory track
 - ACER decision planned end of 07/'24 (a few days before the legal deadline)
 - Once the ACER decision is published, CREG needs to approve the balancing rules, in which the local implementation of the elastic demand will be described. This can be expected the earliest by the end of 08/'24, at the condition that the public consultation and submission to CREG occurs before ACER's decision
- The implementation, at European and at local level, can be done in parallel, at 2 conditions:
 - Approval by TSOs to commit a (possible) budget to the implementation in the algorithm of the aFRR-Platform
 - ACER's decision on the elastic demand doesn't cause any change request at the EU and/or local level
- ➔ The earliest possible **local implementation of aFRR elastic demand** is estimated in **10/2024**
- ➔ Assuming the best case but realistic scenario, the **connection to the aFRR Platform** could be planned **beginning of 10/24, together with (or very close to)** the implementation of **aFRR dynamic dimensioning**

Resulting planning

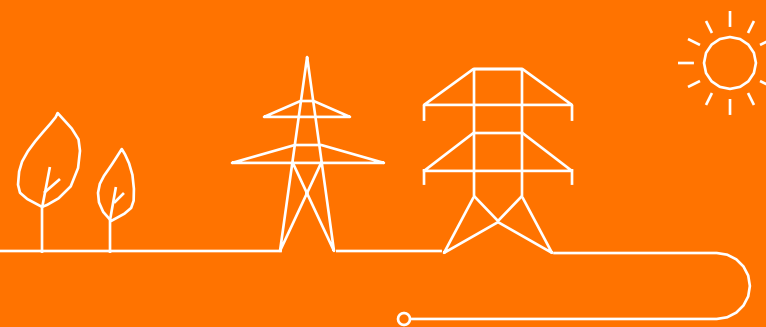
Design evolution	Implementation impact for the BSPs	Planning
Connection to aFRR-Platform	Mandatory – impact on prices and activation frequencies	beginning of 10/2024
5' FAT (Full Activation Time)	Mandatory – possible impact on offered volumes	04/12/2024
Move aFRR capacity auction to D-1	Mandatory – operational impact	01/10/2024
Incentive 2021: RT baseline	Optional implementation	01/10/2024
Incentive 2022: activation method	Optional implementation	01/10/2024
CCMD: ind. correction model, opening LV	Optional implementation	01/10/2024

As the connection to the aFRR-Platform is postponed after the summer, it is proposed to align the go-lives of the other evolutions (except for the 5' FAT)

The change towards the 5' FAT will be a separate go-live, as market parties did not express support on the proposal to delay the go-live of aFRR dynamic dimensioning to December in order to combine the go-lives.

EU & BE Balancing Program Update

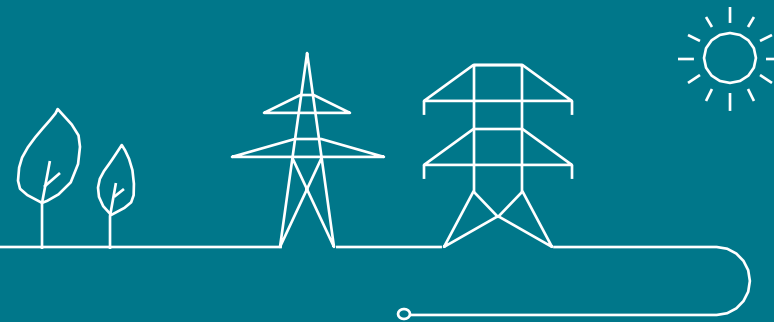
Cécile Pellegrin



Agenda of today's presentation

- MARI & iCAROS : short status
- Key focuses 2024
- Coming stakeholder management interactions

MARI & iCAROS : short status



Public consultation in the framework of the MARI and iCAROS projects

MARI

- Public consultation occurred between 05/07/23 and 30/08/23
- ELIA received feedbacks from Centrica, FEBEG & FEBELIEC

iCAROS

- Public consultation occurred between 06/06/23 and 25/08/23
- ELIA received feedbacks from BOP, Centrica, Eneco, FEBEG, FEBELIEC and Zandvliet Power for the iCAROS Project

Common info session for MARI & ICAROS took place on 12/10/2023

- **Submission of consultation report and final versions** of T&C BSP and balancing rules for regulatory approval towards CREG **20/10/2023**
- **Publication on Elia website** of consultation report and submitted versions of regulated documents **23/10/2023**
- **Submission of consultation report and final versions** of T&C OPA, T&C SA and coordination rules for regulatory approval towards CREG **30/10/2023**
- **Publication on Elia website** of consultation report and submitted versions of regulated documents **7/11/2023**



BUSINESS TESTING PROTOCOLS WITH MARKET PARTIES

Tests	Type	What	Who	When			
				Day I	Day II		
iCAROS	Reproduction of real situation	Update of an Availability Plan	OPA	Day I	23/05/2023		
				Day II	25/05/2023		
				Backup	01/06/2023		
		iCAROS_2	Initializati o n of Schedules & RD Energy Bids	SA OPA	Day I	10/10/2023	
					Day II	11/10/2023	
					Backup	16/10/2023	
		iCAROS_3	Updates of Schedules & RD Energy Bids	SA OPA	Day I	17/10/2023	
					Day II	18/10/2023	
					Backup	23/10/2023	
		iCAROS_4	Simulation of scenario's	Activations of RD, Return to Schedules Requests	SA	Day I	24/10/2023
						Day II	25/10/2023
						Day II	26/10/2023
Backup	06/11/2023						
Back-up week 30/11 - 03/11/2023							

Tests	Type	What	Who	When		
				Day I	Day II	
MARI	MARI_1	Reproduction of real situation	Initializati o n & updates of mFRR Energy Bids	BSP	Day I	07/11/2023
					Day II	08/11/2023
					Backup	13/11/2023
	MARI_2	Simulation of scenario's	Activations of mFRR	BSP	Day I	14/11/2023
					Day II	15/11/2023
					Backup	20/11/2023
Back-up week 20/11 - 24/11/2023						
iCAROS/MARI	iCAROS/MARI_1	Reproduction of real situation	Initializati o n of Schedules & RD/mFRR Energy Bids	BSP SA OPA	Day I	28/11/2023
					Day II	29/11/2023
					Backup	04/12/2023
	iCAROS/MARI_2	Updates of Schedules & RD/mFRR Energy Bids	BSP SA OPA	Day I	05/12/2023	
				Day II	06/12/2023	
				Backup	11/12/2023	
iCAROS/MARI_3	Simulation of scenario's	Combination of activations of mFRR, RD & Return-to-Schedules Requests	BSP SA	Day I	12/12/2023	
				Day II	13/12/2023	
				Backup	18/12/2023	

Business testing protocols with market parties

Testing organized for both market and ELIA needs:

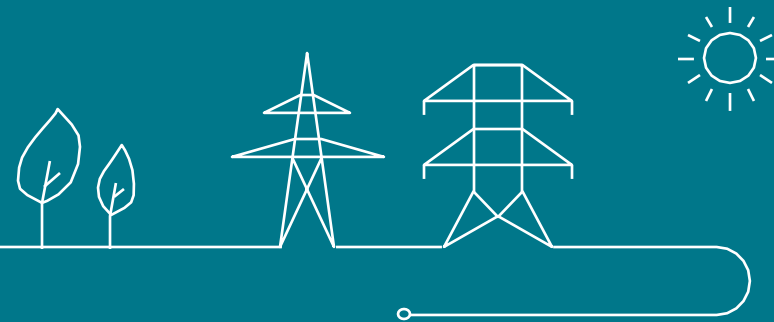
- Coherency checked between as-is and to-be tooling
- End to end testing on BSP/SA and ELIA side

Lack of successful testing at this stage will lead to less efficient go-live!

!!! Testing period ongoing !!!



Key focuses 2024



Key focuses 2024 - Process

- Workplan 2024 is being prepared and will depend on the consolidated detailed roadmap taking into account:
 - Effective implementation plan of the ongoing incentives
 - Possible constraints
- In the meantime, ELIA wants to already share today the list of key focuses for 2024 covering
 - EU & BE Balancing program
 - Balancing Incentives 2024
- Any feedback on this list of key focuses for 2024 is welcome and would be considered when preparing the consolidated roadmap

Consolidated High level Roadmap

Update of the Roadmap

- Local go live of the new mFRR bidding and iCAROS phase 1 **Mid February 2024**
- Connection to EU mFRR balancing energy platform **Mid April 2024**
- Connection to EU aFRR balancing energy platform **Mid June 2024**

NB : The two months period is needed between the different go-lives



Careful follow-up of the progress of the implementation, testing and dry run in order to ensure the readiness for local mFRR / iCAROS phase 1 go live



Other initiatives – Incentives 2023

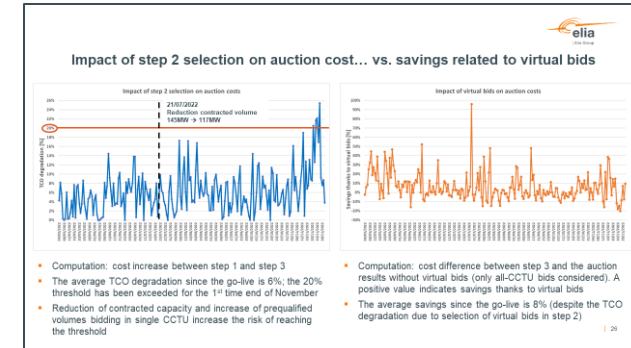
Incentives		
Evaluation des modalités de préqualification, contrôle et pénalités des services mFRR et aFRR	Will be followed in WG BAL	Presented today
Étude sur les possibilités et éventuelles évolutions de correction du périmètre du BRP en cas d'activation d'offres d'énergie pour la mFRR ou le redispatching	Will be followed in WG BAL	Presented today
MVAr service – review and recommendations for design optimisations	Will be followed in WG Belgian grid	Presented today and in next WG Belgian grid
Cartes de capacités d'accueil de raccordement de production, consommation et stockage	Will be followed in WG Belgian grid	Presented in next WG Belgian grid
Cost benefit analysis on requirements for generators applicable on existing and new generating units between 1 and 25 MW	Will be followed in WG Belgian grid	Presented in next WG Belgian grid
Prédiction des “deterministic frequency deviation” (DFD) et de la contribution d'Elia	Will be followed in WG BAL	Presented today





Other initiatives – Product evolutions

- aFRR Design evolutions
 - TCO Degradation price Cap
 - Other evolutions as aFRR RT Baseline, aFRR activation method, ..
- FCR Design evolutions
 - Additional properties
 - Other evolutions as Amendment of Baseline and Activation Control Methodology, Combo FCR/aFRR, Migration from BMAP to BIPLE, ..
- aFRR Dimensioning
- Bidding instructions and T&C RSP
- Other modifications will impact the T&C BRP in particular in the context of CCMD (see WG CCMD for more information). Modifications to other regulatory documents for CCMD will follow a similar planning



NB : Taking into account the feedback received on the winterplan (250MW mFRR / bidding obligation), Elia is investigating how to implement such scheme in a more enduring way (not included yet in roadmap).

iCAROS – MARI - PICASSO

Update of the Roadmap

- Local go live of the new mFRR bidding and iCAROS phase 1 **Mid February 2024**
- Connection to EU mFRR balancing energy platform **Mid April 2024**
- Connection to EU aFRR balancing energy platform **beginning of October 2024**

NB : The two months period is needed between the different go-lives



Careful follow-up of the progress of the implementation, testing and dry run in order to ensure the readiness for local mFRR / iCAROS phase 1 go live



Other initiatives – Incentives 2024

Incentives	
Amélioration de la mise à disposition de données par Elia	Will be followed in WG BAL
Vision et roadmap sur la flexibilité pour la gestion des congestions et communication transparente sur l'activation de la flexibilité dans le cadre des contrats avec accès flexible	Will be followed in Belgian Grid
Etablissement des exigences en termes de stratégie de gestion de la charge pour les points de fourniture disposant d'un réservoir d'énergie limité et offrant plusieurs services d'équilibrage simultanément	Will be followed in WG BAL
Processus de facturation des BRP	TBC
Implémentation de tests intelligents de la disponibilité des réserves	Will be followed in WG BAL



Other initiatives – Product evolutions



- aFRR Design evolutions

Design evolution	Planning
Possible local mitigation measures for PICASSO	beginning of 10/2024
5' FAT (Full Activation Time)	04/12/2024
Move aFRR capacity auction to D-1	01/10/2024
Incentive 2021: RT baseline	01/10/2024
Incentive 2022: activation method	01/10/2024
CCMD: ind. correction model, opening LV	01/10/2024

- FCR Design evolutions – Target go live date end 2024
 - Additional properties
 - Other evolutions as Amendment of Baseline and Activation Control Methodology, Combo FCR/aFRR, Migration from BMAP to BIPLE, ..
- aFRR Dimensioning - parallel run from 01/07/24 on, go live 01/10/24
- Planning and/or scope to be confirmed based on the final implementation plan of the incentive 2023
 - Bidding instructions and T&C VSP (including the needed implementation plan of the 2023 incentive)
 - Incentive « Prequalification, control & penalties »

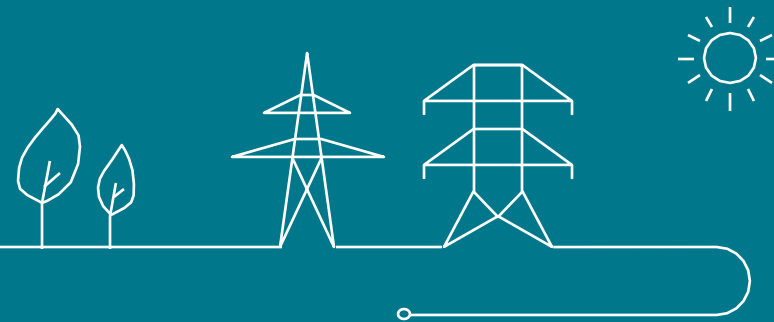
Other initiatives



Elia will also work on

- The rewrite of its auction tool
- Short term procurement of losses
- Improvement of the invoicing / Settlement of Ancillary services

Coming stakeholder management interactions



Coming stakeholder management interactions



- Next interactions
 - Regular follow-up of implementation plans
 - More information regarding the content and organization of the business testing protocol with service providers, where still applicable, is communicated in due time directly to service providers
- Workshop / information session:
 - 30/11/23 – Balancing Stakeholders Workshop ([Balancing platforms stakeholders' workshop \(entsoe.eu\)](https://entsoe.eu))
 - 12/12/23 – Deadline of the EU consultation
 - 16/01/24 – Info sessions on MARI/PICASSO/iCAROS
 - Imbalance price
 - Impact on publications
- Go live period in the second half of February to be anticipated in terms of organization



Contact persons



KAM Energy

Amandine Leroux / Arno Motté / Nicolas Koelman

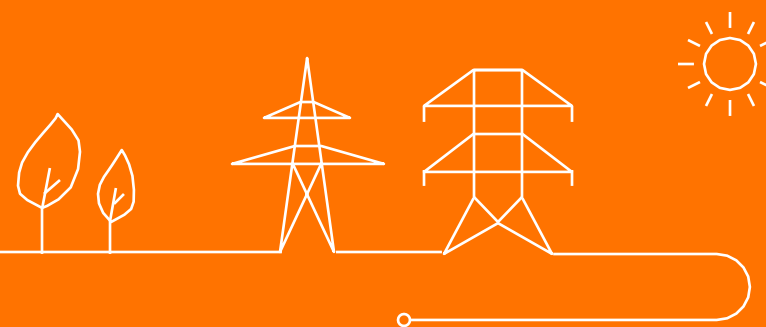
Implementation ad hoc sessions (on request)

- Q&A sessions dedicated to design and implementation questions
- IT questions & Live debugging sessions with ELIA IT-team



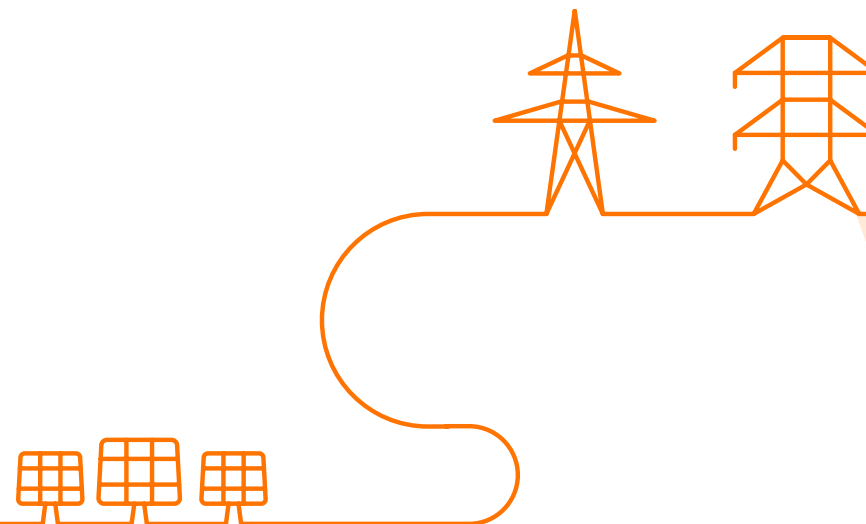
Deterministic Frequency Deviation – Feedback following Public Consultation

Aline Mathy



Agenda

1. Consultation report – feedback received and Elia’s position
2. Next steps and implementation plan



General Comment - FEBEG

- FEBEG considers the topic as interesting and is concerned about the DFD trends
- ⇒ Elia shares the view
- FEBEG stresses that it is up to Elia to safeguard grid security and grid equilibrium
- FEBEG supports DFD forecasting in the broader effort to accurately forecast SI and take appropriate decisions on activation.
- ⇒ Forecast aims at properly mitigating the issue and study aims at proposing the most appropriate measure

Subject	Stakeholder	Comment	Elia's View
General comment	FEBEG	<p>FEBEG is generally speaking often overwhelmed with the many incentives of Elia, however, we do consider that this specific incentive is interesting and relevant.</p> <p>As shown in the report of Elia, the number of DFDs has increased since 2020, which is a sign that the issue is an important one. FEBEG is indeed also concerned to see such worrying trends and we agree that measures are needed and that it is important to study the topic and work on possible solutions.</p> <p>As a general observation, we firmly believe that DFD should not create significant grid security challenges. Should such issues arise, they should be addressed through appropriate mitigation measures. FEBEG contends that it is the primary responsibility of Elia to safeguard grid security and maintain grid equilibrium at all times. It is incumbent upon Elia to assess whether the emergence of DFD poses a substantial threat to the grid.</p> <p>FEBEG fully supports the forecasting of DFD as part of a broader effort to accurately predict system imbalances, not limited to DFD alone. Such forecasting can significantly aid Elia in executing cost-efficient activations, ultimately benefiting end consumers.</p>	<p>Elia and FEBEG share a common view on the fact that the increase of DFDs is a concern. Therefore, in order to assure the grid security, Elia is pro-actively launching some initiatives to define efficient mitigation measures regarding DFDs.</p> <p>Elia uses the forecast based approach to be able to mitigate some issues with the most efficient means. However, the link with Simplify in terms of content cannot be extended.</p>

Specific comment - FEBEG

- FEBEG supports the pro-active activation of mFRR to reduce system costs
 - ⇒ aFRR or mFRR are used as a mitigation measure according to their efficiency in the resolution of the DFD issue particularly.
- FEBEG supports continual forecast enhancement. FEBEG makes a link with the optimization of the aFRR VS mFRR activation strategy.
 - ⇒ Activation strategy enhancement are supported by initiatives such as Simplify, MARI, Smart Balancing controller, ...
- FEBEG does not oppose to the proposed approach nor to the use of aFRR as mitigation measure and is in favor of a rapid application of the measures.
 - ⇒ Elia will continue improving the forecast and so the mitigation measure selection in the context of the DFD incentive and the activation strategy in the context of MARI.

Specific Comment	FEBEG	Specific comments
		<p>Cost-Efficient Balancing: proactive mFRR activation is cost-effective and can help preventing expensive aFRR activations. This approach promotes efficient utilization of balancing resources. FEBEG strongly supports this proposed approach, since we have always asked Elia to consider more pro-active mFRR activation to reduce system costs.</p> <p>In light of these considerations, it is essential to continually enhance the forecasting of system imbalances, with DFD being a subset thereof. FEBEG believes that employing the models outlined in the analysis will lead to a continuous improvement in forecasts. This approach will likely refine over time, benefiting from experience-sharing with other TSOs that have already implemented similar strategies. We firmly believe that optimizing the common activation strategy for aFRR and mFRR is an important and realistic objective that we should strive for in the coming months and years.</p> <p>Conclusion</p> <p>In summary, FEBEG recommends that Elia continues its investigations into DFD occurrences and, more crucially, focuses on improving the forecast of system imbalances. If deemed necessary, Elia should consider the initial mitigation measure, which involves tuning the controller. Overall, as one of the key measures, we stress the importance of developing an implementation plan for proactive mFRR activation, as its utility extends far beyond resolving DFD issues. Ultimately, such proactive measures will translate into advantages for end consumers.</p> <p>To conclude, FEBEG does not oppose the proposed approach of Elia as set out in the recommendation plan. Generally speaking, the main request of FEBEG is to come with effective solutions and to not postpone too long any measures to tackle the issue of increasing DFDs.</p>
		<p>In the specific context of DFD, the complementarity of aFRR product by mFRR is considered as part of mitigation measure but it is depending on the circumstances from a physical and economical point of view:</p> <ul style="list-style-type: none"> - mFRR activation should be triggered much in advance for having a similar physical impact as a specific aFRR activation moment, with the drawback that it will physically last much longer. - mFRR and aFRR activation cost should be compared for their whole respective activation period. <p>Elia supports the approach in the context of Simplify, MARI and Smart Balancing Controllers. But regarding the optimization of the common activation strategy for aFRR and mFRR, Elia would refer to the public consultation related to the incentives 2024.</p> <p>Conclusion</p> <p>Elia is going to continue to work on the forecasting aspects, on the activation strategy (as proposed in the context of MARI) and on DFD (additional study, monitoring and impact on the grid).</p>

General comment - Febeliec

- FEBELIEC supports preventing the need to contract more reserves
⇒ Elia has the same understanding.
- FEBELIEC is in favor of measures based on a cost benefit analysis
- FEBELIEC stresses that as few unnecessary actions as possible should be taken
⇒ Elia supports the idea of avoiding unnecessary costs. Improving the forecast and monitoring the mitigation measure costs are initiatives Elia proposes to confirm this position.
- FEBELIEC supports the stepwise approach for the implementation plan
⇒ Elia continues the discussion on the implementation plan with all parties (including CREG).

General comment	FEBELIEC		
		<p>Febeliec understand the importance of the analysis, and wants to avoid that Elia could be forced to contract additional balancing reserves as a penalty for going beyond its allowed threshold, as this would incur additional costs for grid users in their grid tariffs. Moreover, as these additional reserves would put even more strain on an already challengingly limited merit order, the cost implications could be quite important.</p> <p>However, Febeliec also would like to warn against taking too many costly actions to avoid or limit DFDs, as these also come with a cost and could even lead to overshoots. It is important to strike a (fine) balance, based on a cost-benefit analysis of the chosen path, ex ante but also ex post, to ensure that the chosen option is still the optimal solution.</p> <p>The above is even more so valid because Febeliec understands from the analysis from Elia that Elia could also take action even if the risk is high that it was not contribution to the DFD, due to the lack of accuracy of the ACE contribution forecast. This implies incurring costs, at the detriment of grid users, in situations where this might not have been warranted. While Febeliec understands that perfect forecast only exist in theory and not in practice, it is important that the occurrence of such situations is limited as much as possible.</p> <p>Concerning the proposed options, Febeliec can only take note of the analysis from Elia, as well as the conclusions drawn by Elia regarding the chosen differentiated approaches for upward and downward DFD (with aFRR and mFRR for upward and only aFRR for downward). Concerning the conclusions on possible mitigation measures, Febeliec follows the reasoning of a stepwise approach and looks forward to the results of the first step in order to define possible next steps.</p>	<p>Elia has the same understanding as Febeliec on the importance to manage the DFD concern.</p> <p>Elia fully agrees with the necessity to improve performance of the algorithm to increase the accuracy in order to be more efficient (and avoid unnecessary costs).</p> <p>The Elia approach intends to monitor the mitigation measures costs as one of the element to differentiate them.</p> <p>Implementation plan is part of the discussion between parties (CREG, Elia and Market Parties).</p> <p>The proposal from Elia is to have a stepwise approach with a period of improvement, a period of development and then, a delivery in production with each time a Go/No-Go decision.</p>

Next steps

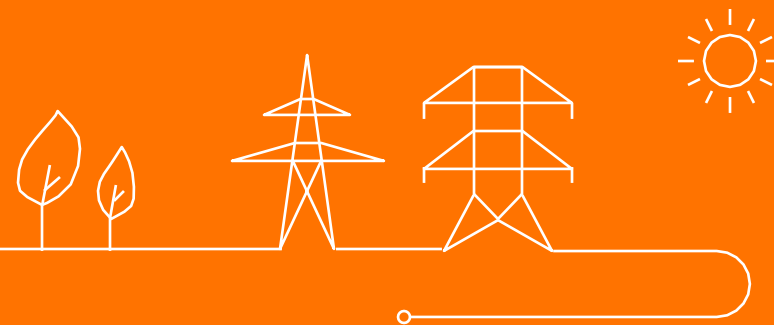
- 22/12/2023 - Submission of the Final Report including results of the // run
- WG BAL – January – Presentation of the Final Report

Update on // run

- started on 02/11 (delayed due to update on ENTSO-E transparency platform)
- Up and running since then
- Results to be extracted week per week to mitigate short timing

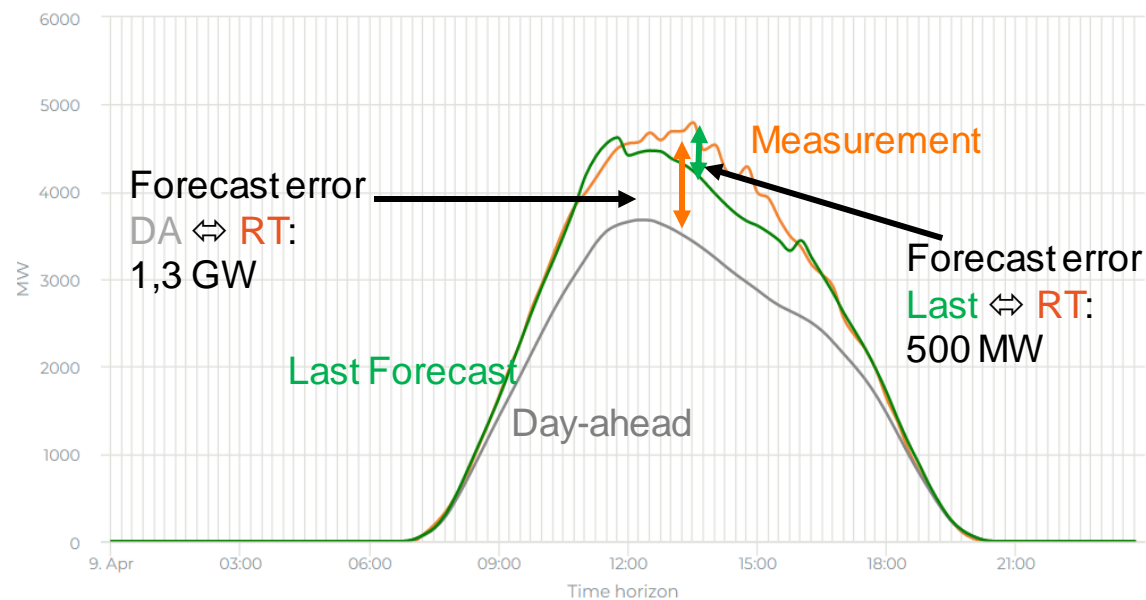
AOB – Incompressibility

Arnaud Attanasi



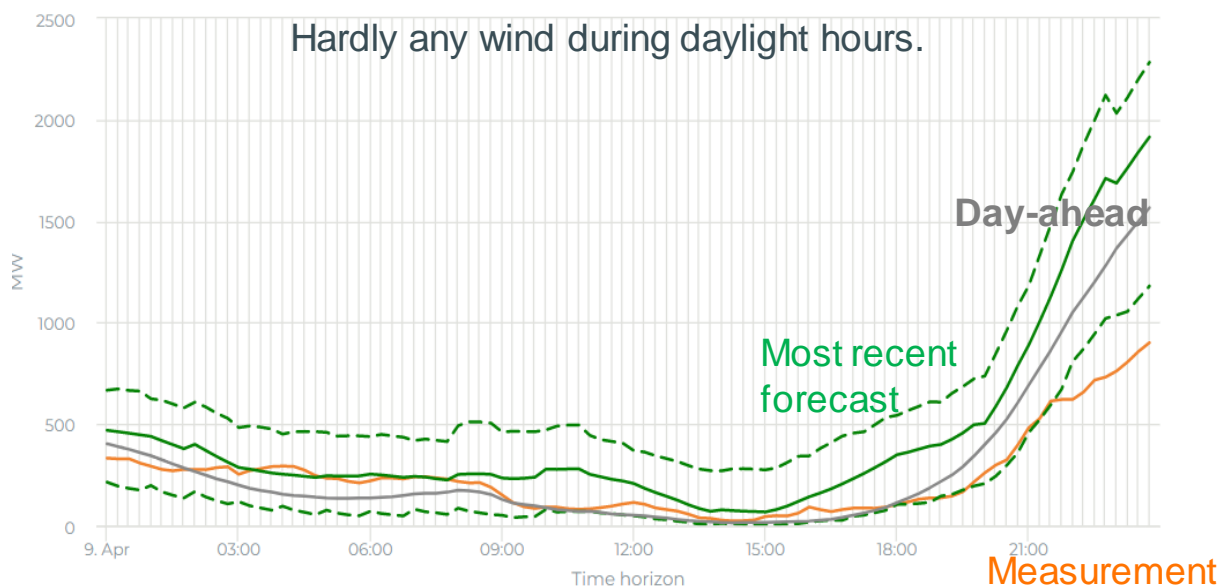
Pre-Summer 2023 - 9/4/2023 - Reminder

Solar forecast : From DA → real-time



— Measured & Upscaled — Day-ahead forecast — Most recent forecast — Week-ahead forecast

Wind forecast : From DA → real-time



— Measured & Upscaled — Most recent forecast P10 — Most recent forecast
 - - - Most recent forecast P90 - - - Day-ahead forecast P10 — Day-ahead forecast

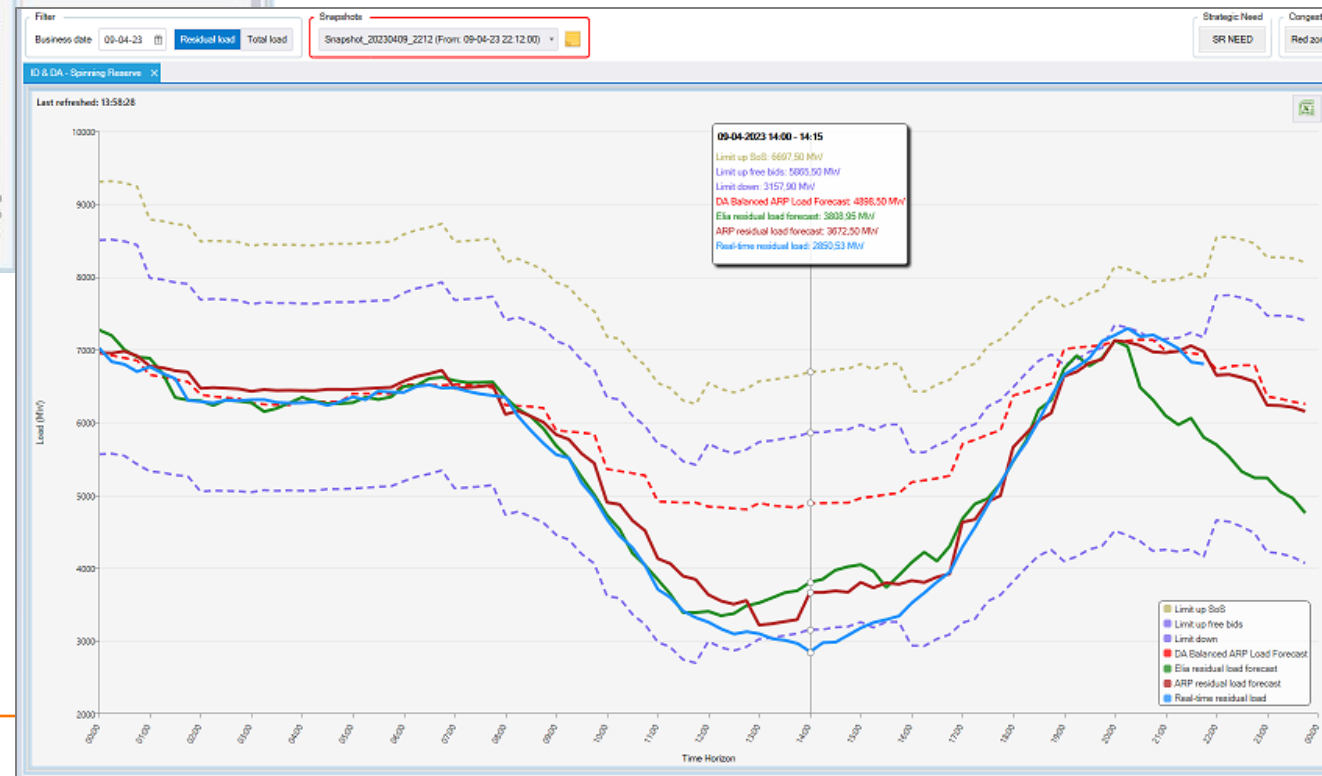
- **DA Solar forecast** has been the **key driver** of the system imbalance.
 - Forecast error of more than 1,3GW in DA compared to the measurement.
 - Even the most recent forecast (=RT-1h) shows an underestimation of 500MW.
- **Wind forecast** is **not** a root cause of the system imbalance.



Pre-Summer 2023 - 9/4/2023 - Reminder

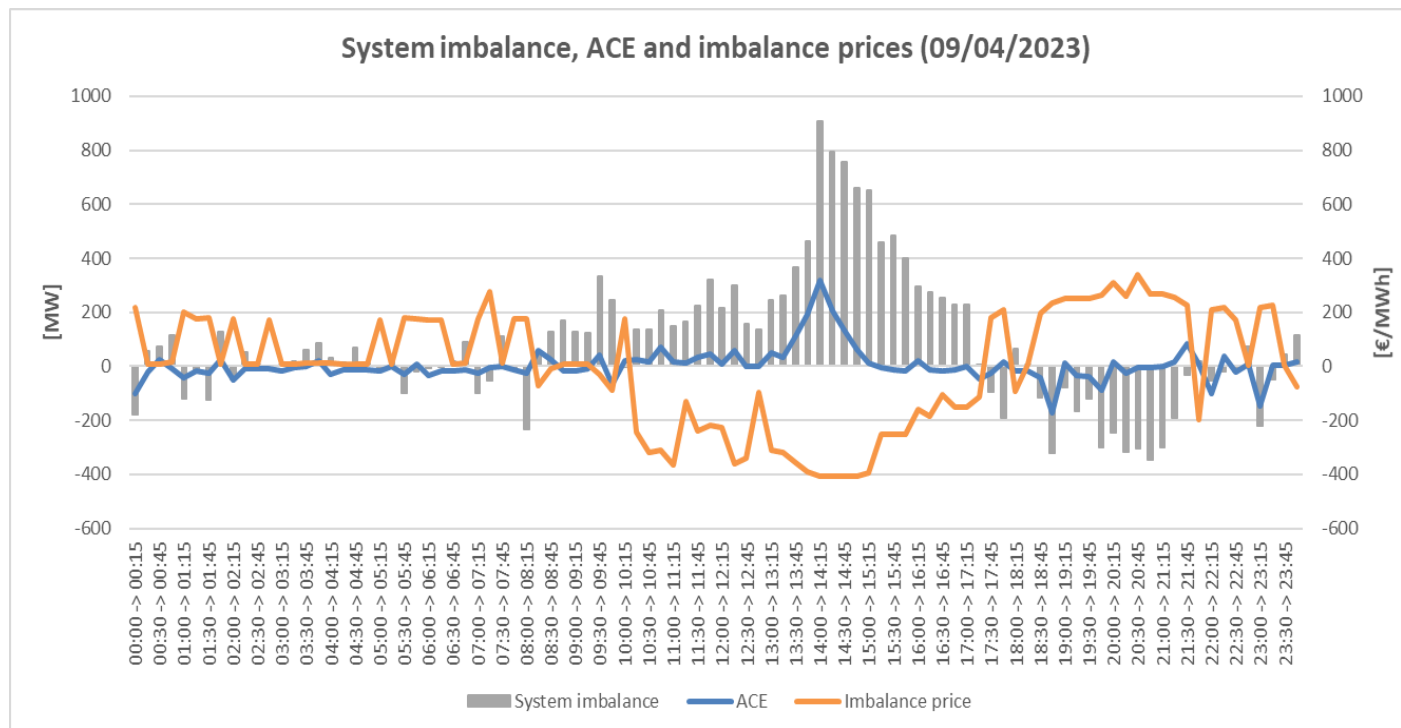


Large Incompressibility in real-time due to Large forecasting error from/In Day-Ahead



Pre-Summer 2023 - 9/4/2023 - Reminder

Real-Time system indicators showing significant incompressibility

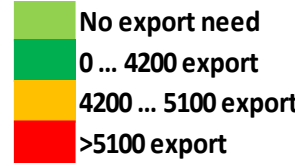
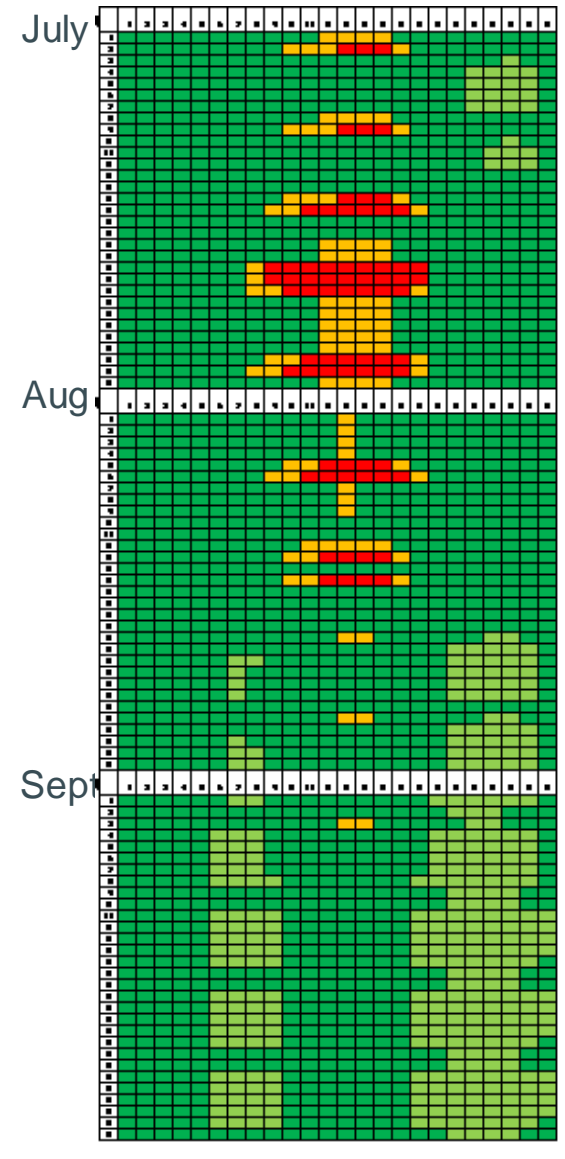
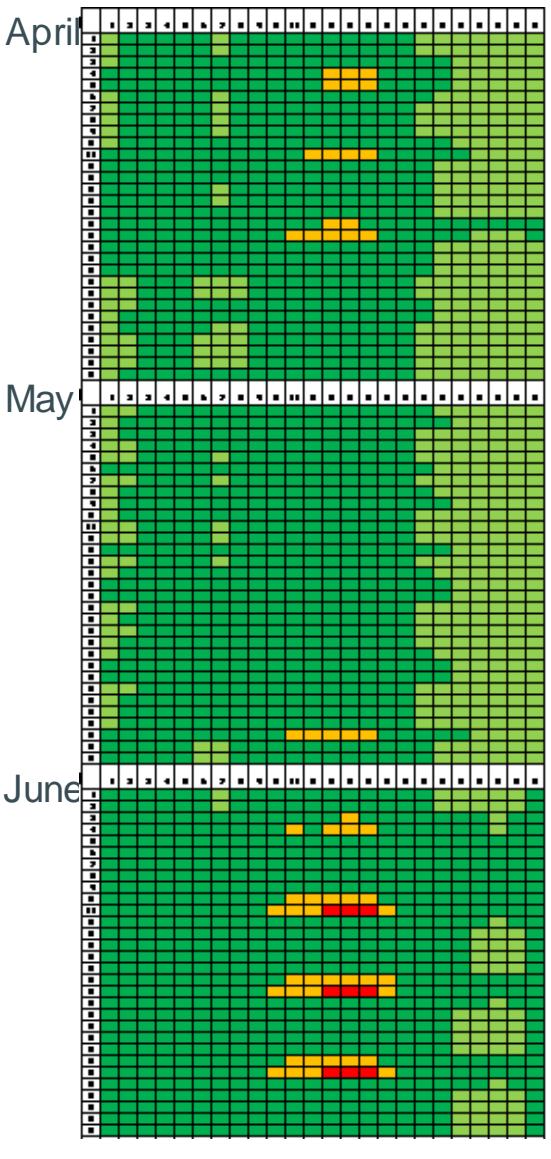
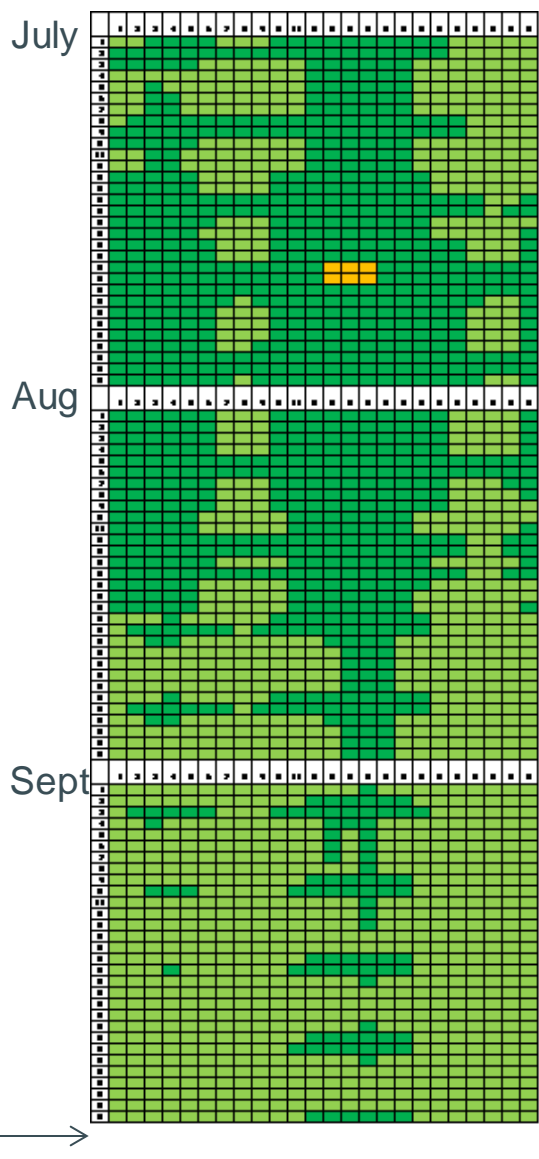
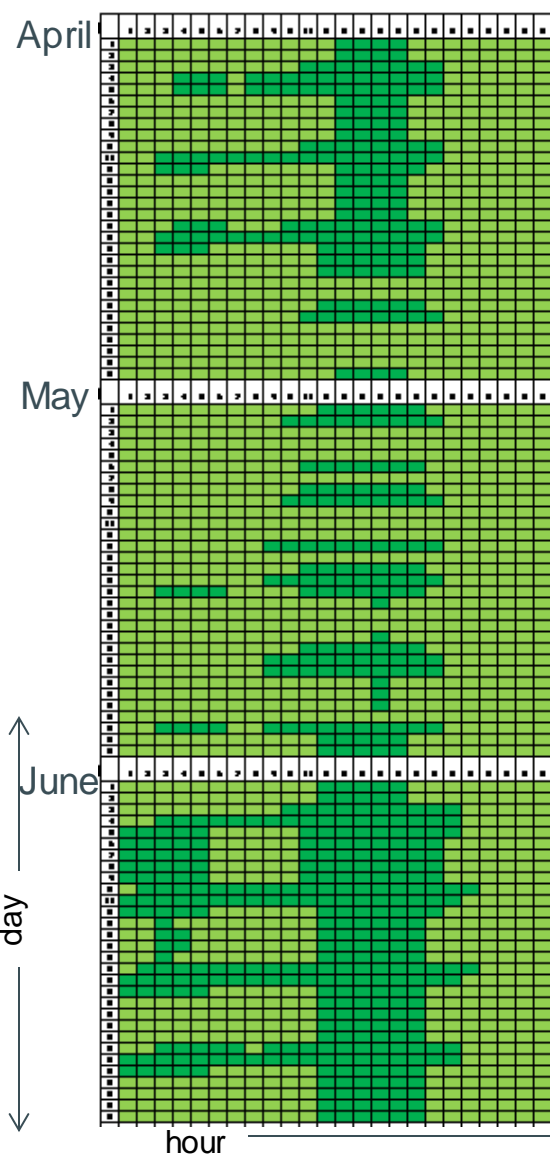


- **System imbalance (SI)** was long most of daylight hours (08:00 → 17.00)
- Peak at almost 1GW in the afternoon.
- Moreover, **ACE** peaks at 350MW in the afternoon during some QHs
- **Imbalance price** up to -400€/MWh during several QHs

Summer Outlook 2023 – Reminder from WG SO

Results P50

Results P75

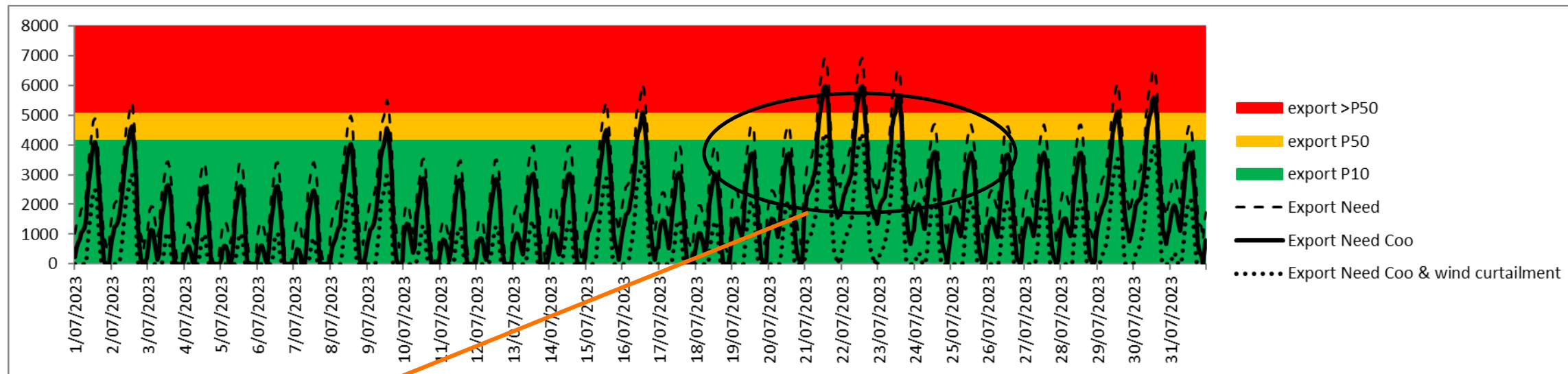


Thresholds used in graph
(DA max export)

- P10: 4200
- P50: 5100

Summer Outlook 2023 – Reminder from WG SO

P75 Focus on July – With pumping and wind offshore curtailment



In case of underestimation of solar forecast, difficult situation to handle in intraday since limited short term measures available (max value = 4400 MW).

-> Situation of 9/4

Feedback: Summer 2023

Spring (ex. Sunday 9th of April 2023,...) and the « Summer Outlook » indicated unneglectable incompressibility risk.,

A « Procedure High Risk of Incompressibility » was put in place for Summer 2023 and was triggered on:
08/07, 09/07, 21/07, 14/08, 15/08, 20/08, 03/09, 09/09.

For those days between 10am and 4pm,

- As published on IIP, Elia received little additional flexibility from limited coordonable/non-coordonnable units.
- Day-Ahead Price was in full price convergence or with a very little price difference with NL,DE,FR, AT.
- Elia grid was at the down limit (few MW margin)* except Reserve Sharing.
- Imbalance Price was mainly between -200€/MWh and -400€/MWh + punctual price peaks at -500€/MWh.

Typical day : See next Slide

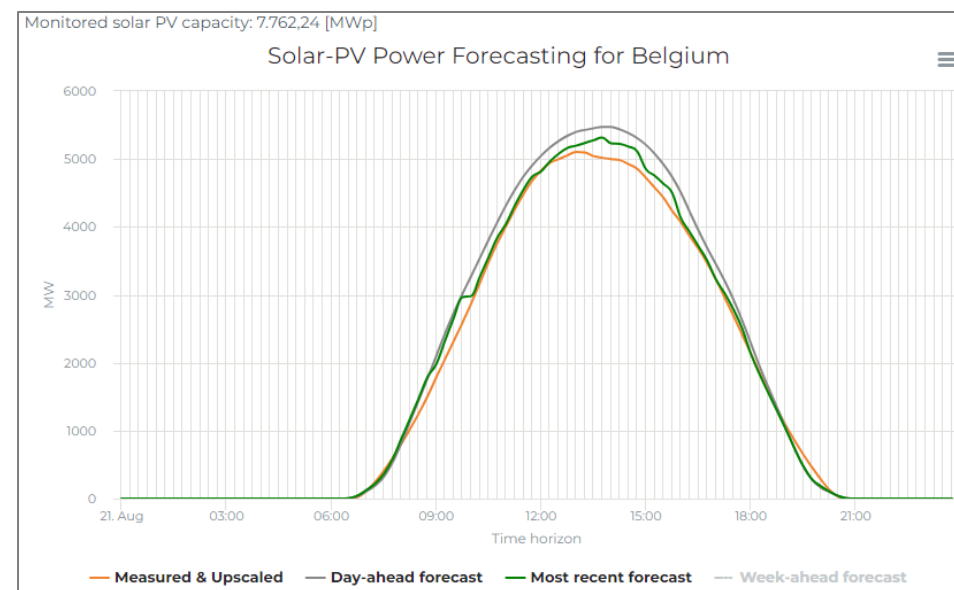
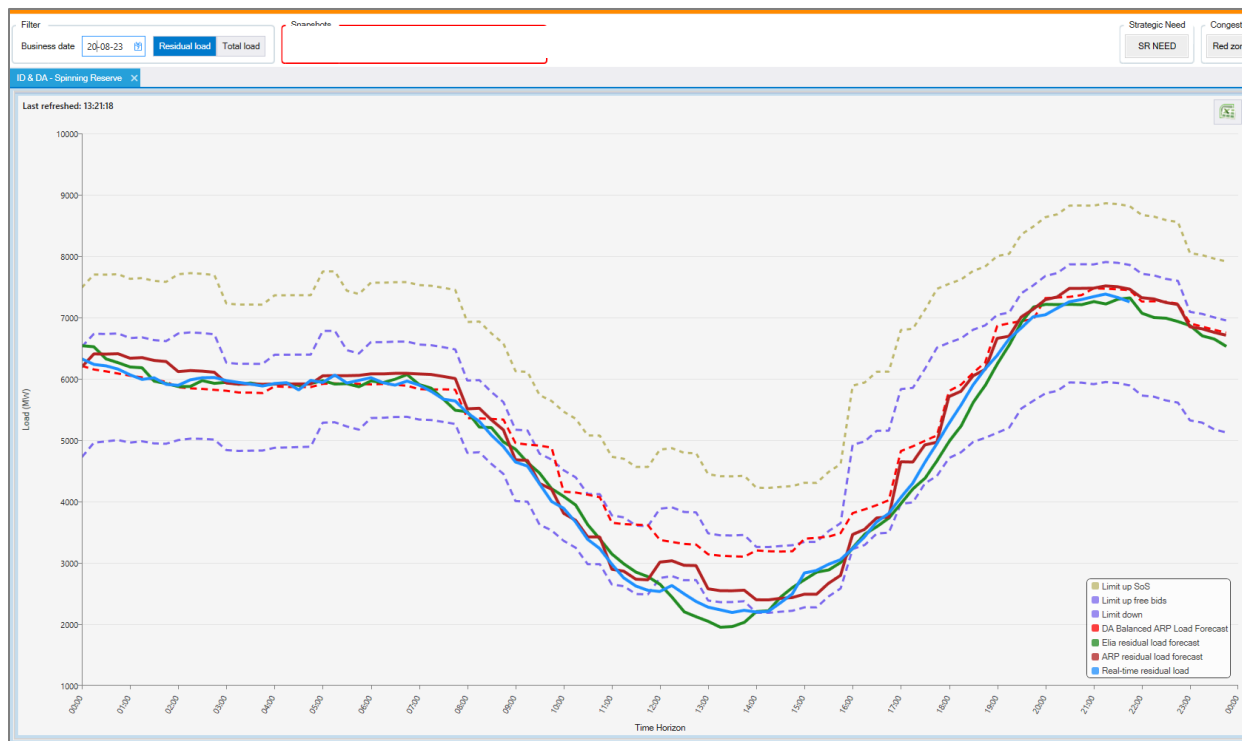
Conclusion: There was no critical situation from an incompressibility perspective, but margins were really tight.



(*) Except for those days: 08/07, 09/07, 21/07

Feedback: Summer 2023

(Typical Day)



Next Step

- Continuous improvement of Forecasting (Solar, Wind, Load,...)
- Summer Outlook 2024
- Unlocking of flexibility (& flexible devices) in the grid



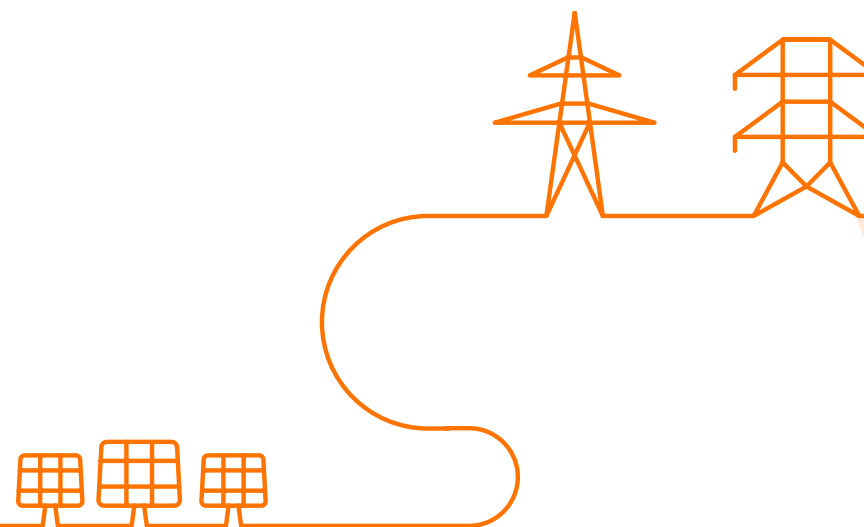
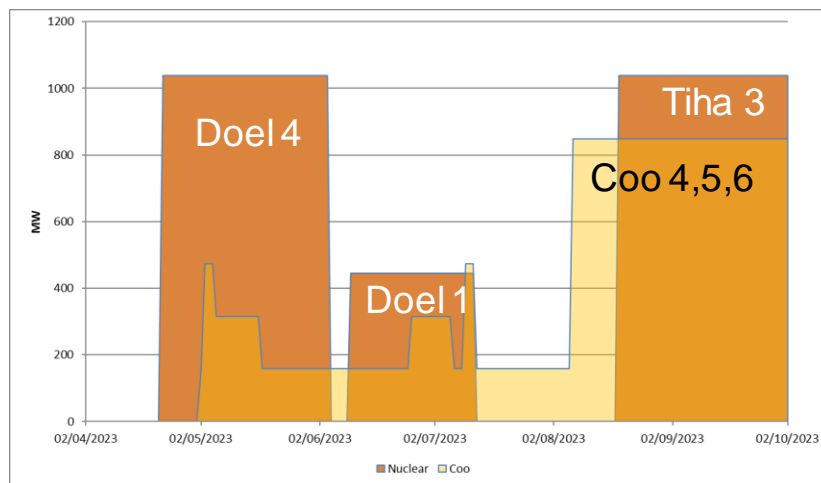
Annex



Goal of the summer outlook

Assessment of **export needs/incompressibility issues** during the **next months (May – September)**

- **Full revision of Half Coo (4,5,6)** from 07/08 until winter
- **Nuclear: high availability** between mid July and mid August (Doel 3 and Tihange 2 phase-out)
- **Lower offtake** during the summer months
- Increasing installed capacity of **renewables**



Hypothesis used in summer Outlook

	P50	P75
Nuclear	Revision	
Solar	P50 (profile)	P75 (profile)
Wind	P50 (fix)	P75 (fix)
RoR	P50 (fix)	
CHP & bio non-CIPU	P50 (fix)	
CHP & bio CIPU	Revision & forced outage	
Reserves	2 running units @ Pmin	
Demand	P50 (profile)	

Normal Day

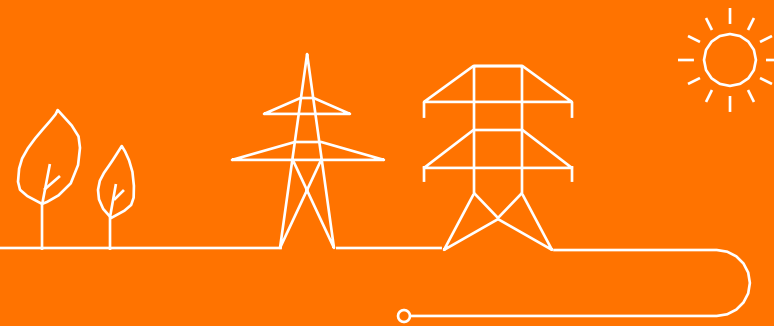
Sunny and windy Day

Pumped storage and export are not taken into account in the assessment and will be used in the post-processing of the results!



AOB – Next WG Balancing

Loup Vanderlinden



Next WG Balancing

- WG Balancing 18/12/2023 14:00 – 18:00
- **Dates for 2024:**
 - WG Balancing 07/02/2024 09:00 – 13:00
 - WG Balancing 27/03/2024 09:00 – 13:00
 - WG Balancing 21/05/2024 09:00 – 13:00
 - WG Balancing 28/06/2024 13:30 – 17:30
 - WG Balancing 30/09/2024 14:00 – 18:00
 - WG Balancing 22/11/2024 13:30 – 17:30
 - WG Balancing 19/12/2024 14:00 – 18:00

