



WG Balancing of May 21st 2024

Hybrid meeting

21/05/2024



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

09:30 – 09:35: Welcome

09:35 – 10:15: Summer Outlook: focus on incompressibility

10:15 – 10:45: EU & BE Balancing Program Update

10:45 – 11:00: Changes to T&C OPA, SA & Coordination Rules following CREG's decision on iCAROS

11:00 – 11:30: Feedback on public consultation of T&C BSP aFRR and Balancing Rules

11:30 – 11:45: Smart Testing Methodology

11:45 – 12:00: AOB



Minutes of Meeting for approval

Minutes of Meeting of WG Balancing of 27/03/2024

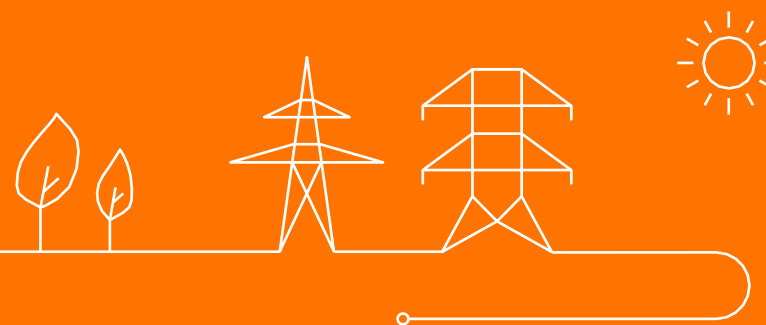
Comments

- **Suggestion to approve:**
- The MoM of 27/03/2024



Summer Outlook: focus on incompressibility

Silvio Ferreira & Arnaud Attanasi

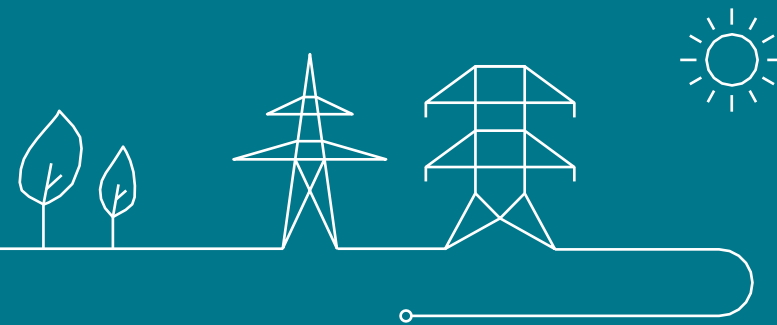


Structure of the presentation

- **Incompressibility Risk – Executive Summary**
- **Challenge A : Summer Outlook**
- **Challenge B : Un-expected deviation close to real-time (cf Incompressibility situation on 07/04/2024)**
 - Context from Day-Ahead
 - Balancing & Imbalance Price
 - Imbalance Price Impact, including Reserve Sharing with Amprion
- **Conclusion**



Incompressibility Risk – Executive Summary



Incompressibility Risk – Executive Summary

The concern about incompressibility follows a combination of two separate challenges:

A. Ability of the market to manage well ‘predicted’ situations of high renewable generation. It is related to the ability of market parties to maintain a balanced portfolio during high renewable energy conditions

- As long it does not create operational issues, this remains a market issue and Elia should not intervene
- No operational issue as long as sufficient renewable generation such as large scale wind can be curtailed, if it cannot be exported
- Typical indications of difficulties of the market to cope with such situations are negative prices (From Day-Ahead To Imbalance) and renewable self-curtailment

B. Ability of the system to maintain sufficient flexibility to manage with unexpected outages or forecasting error. It is related to available downward flexibility in the system

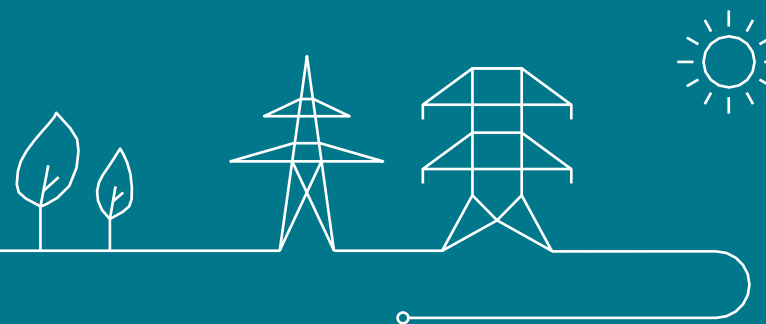
1. Elia aims for a market design where BRPs – via correct & efficient (imbalance) price signals - mitigate system imbalances as much as possible, and reduce balancing capacity needs
2. In line with SO Regulation, Elia only needs to cover 99% of expected imbalances, if it covers at least the dimensioning incident (Nemo Link)
3. The remaining risk is complemented with exceptional balancing measures to manage remaining system imbalances to the extent possible (before being covered by EU FCR)

While reserve needs coverage issues remains acceptable (and even improved over the years) it is observed that in some extreme conditions (low local liquidity, no remaining ATCs, no market reaction) could result in a real-time operational risk (to face alert state, or even emergency state) when facing large positive imbalances

Elia’s key belief is that challenge A needs to be solved within the market (RTP and PV Flex Readiness). If not, curtailment of renewable generation will grow every year linearly with PV and wind generation. However, solving challenge A would also resolve challenge B (by liberating flexibility for the balancing time frame, at least from renewable generation).

Challenge A – Summer Outlook

(with updated data from 14/05/2024)



Goal: Assessment of **export needs / incompressibility risks** from April until Sept.

Hypothesis

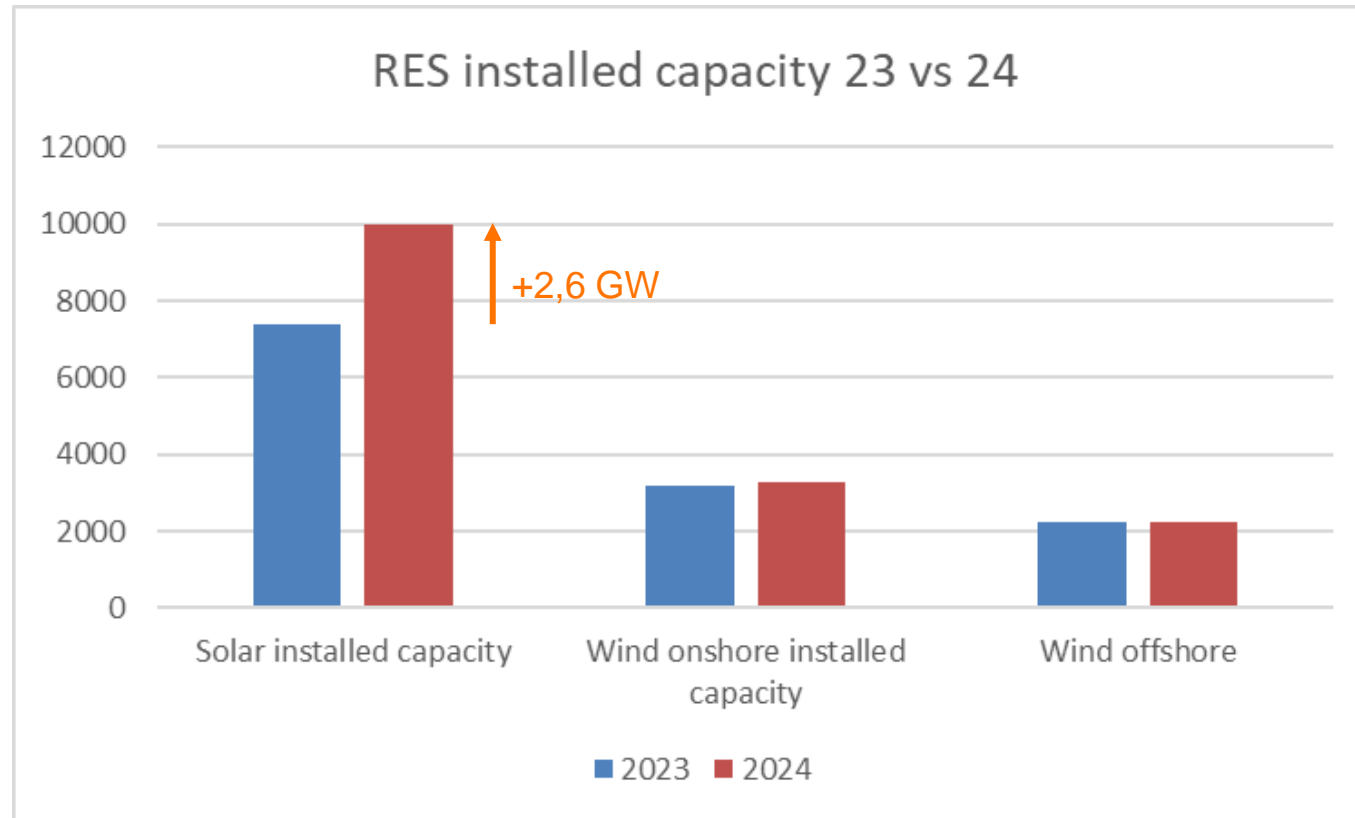
	Normal Day ↑	Sunny and windy Day ↑	Extremely sunny and windy day ↑
	P50	P75	P90
Nuclear	Revision + Phase-out		
Solar	P50 (profile)	P75 (profile)	P90 (profile)
Wind	P50 (fix)	P75 (fix)	P90 (fix)
RoR	P50 (fix)		
CHP & bio non-CIPU	P50 (fix)		
CHP & bio CIPU	Revision & forced outage		
Reserves	1 running units @ Pmin		
Demand	P50 (profile)		

Pumped storage and export are not taken into account in the assessment and are used in the post-processing of results according to their revision planning – [Planned and unplanned outages \(elia.be\)](http://elia.be)



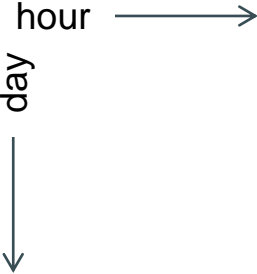
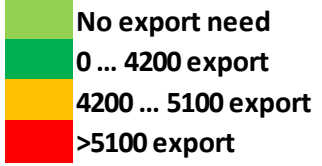
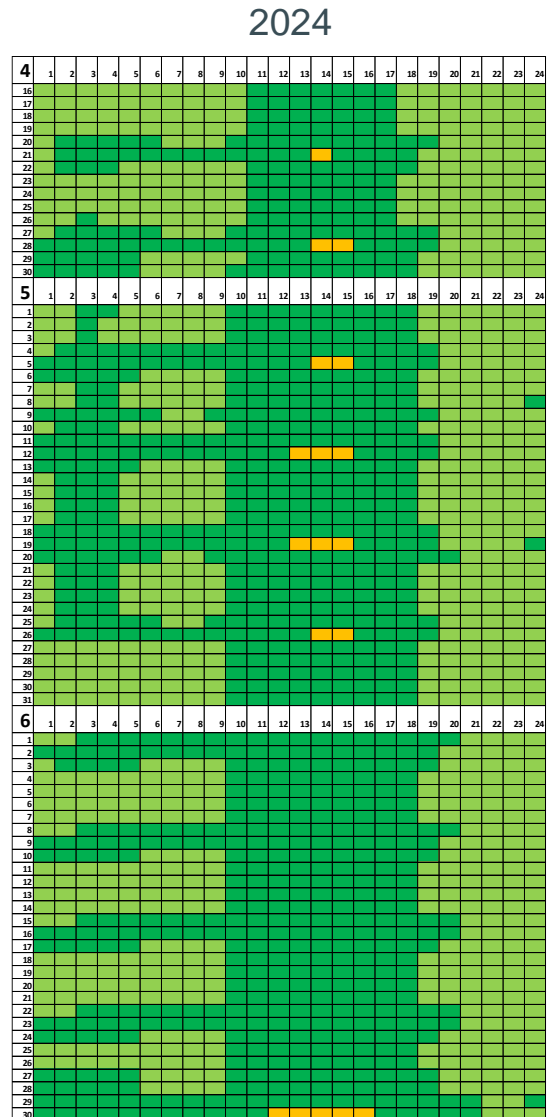
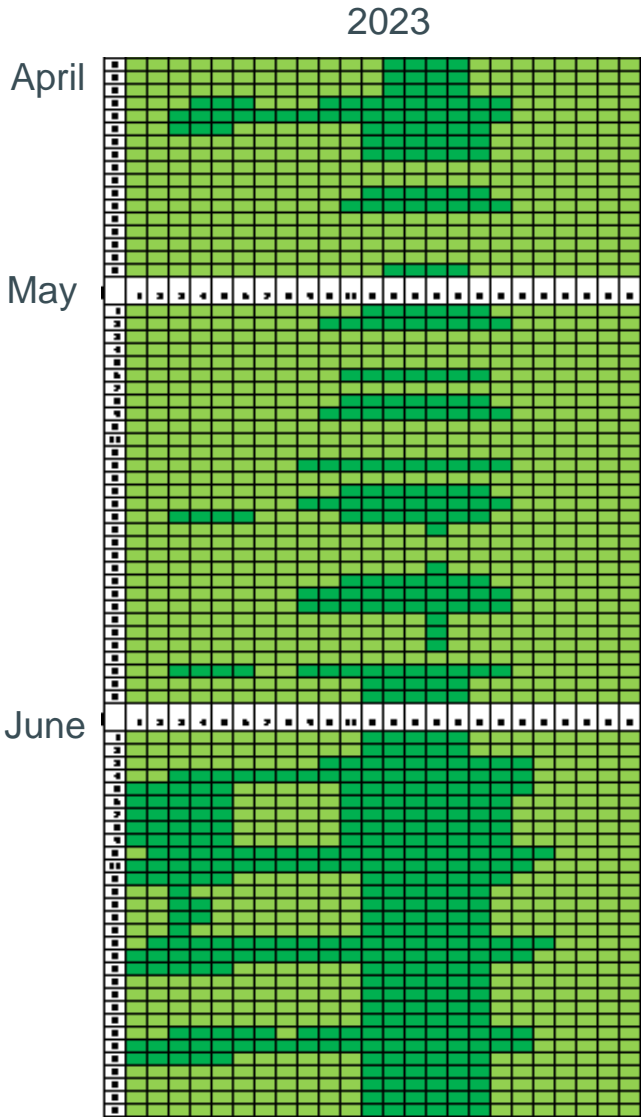
High-level BE incompressibility risks parameters for summer 2024 (versus 2023)

- Increased installed capacity of **renewables** : 10 GW Solar & 5,5 GW Wind

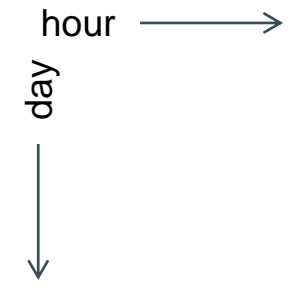
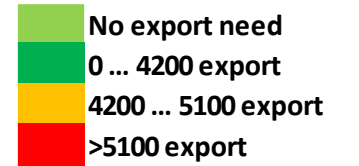
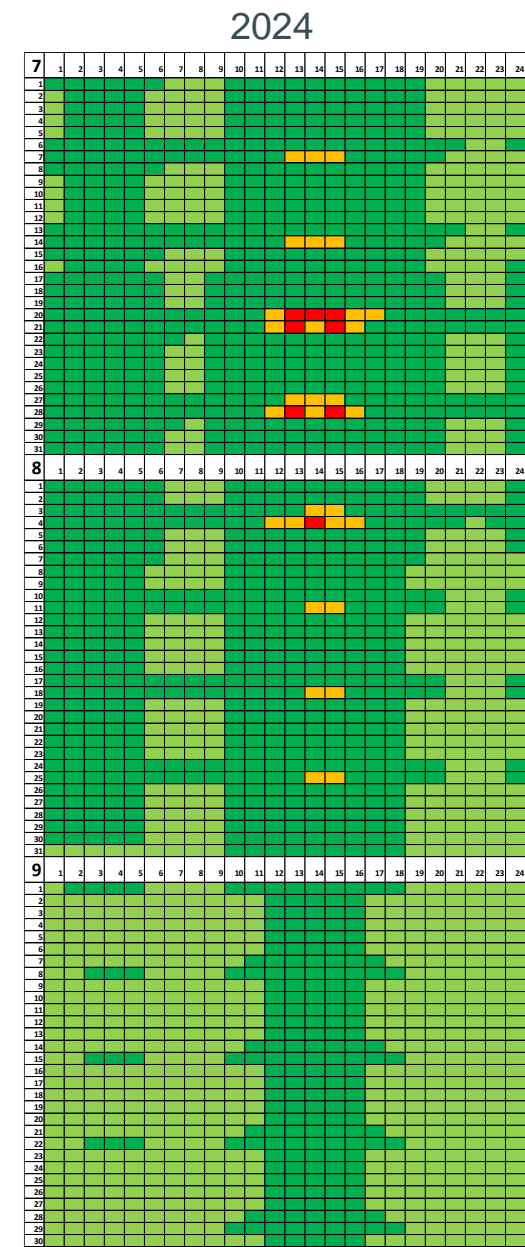
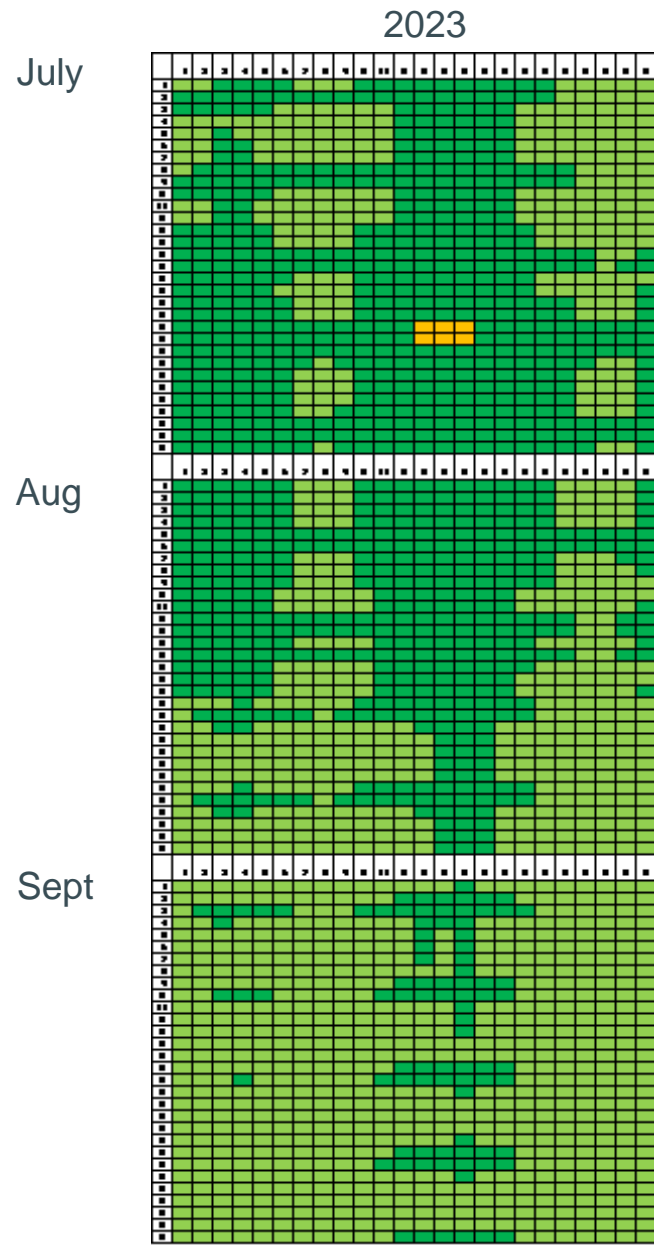


- Lower Nuclear power plant** maintenance this summer
- Lower availability of pump storage** expected this summer
- Lower offtake** during the summer months : [5,7 GW – 10,7 GW]

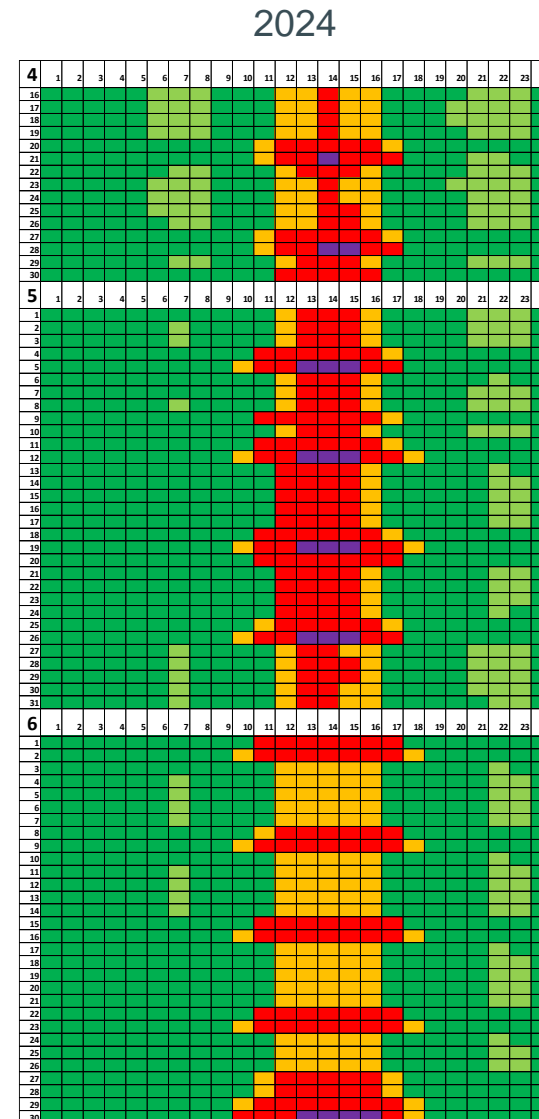
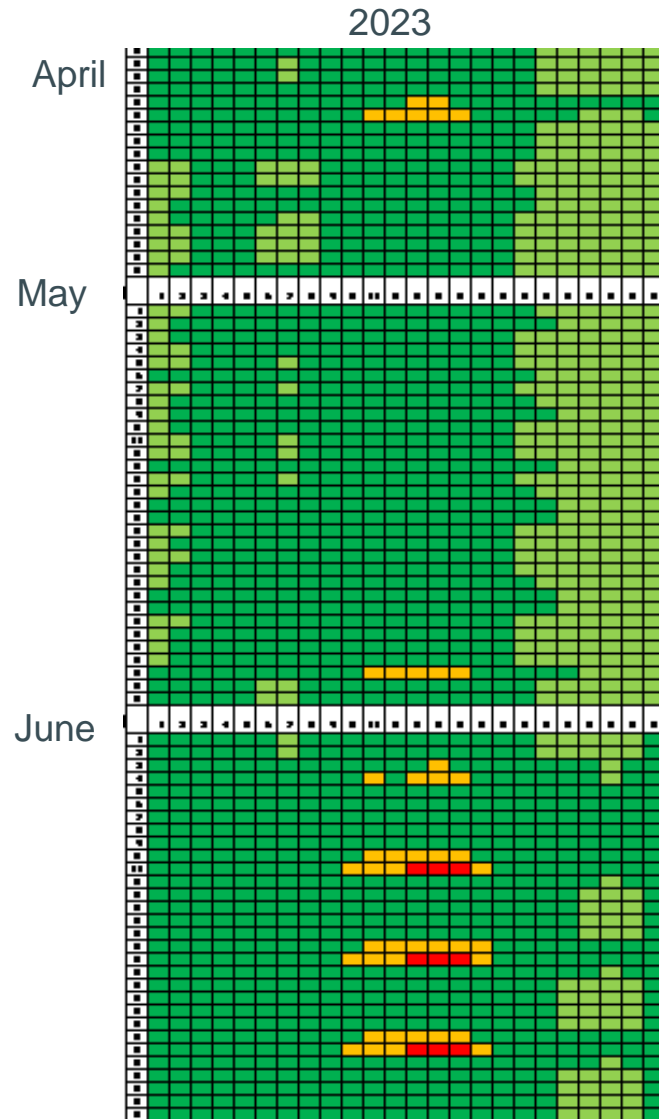
P50 2023 vs 2024



P50 2023 vs 2024



P75 2023 vs 2024

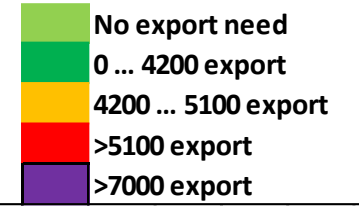
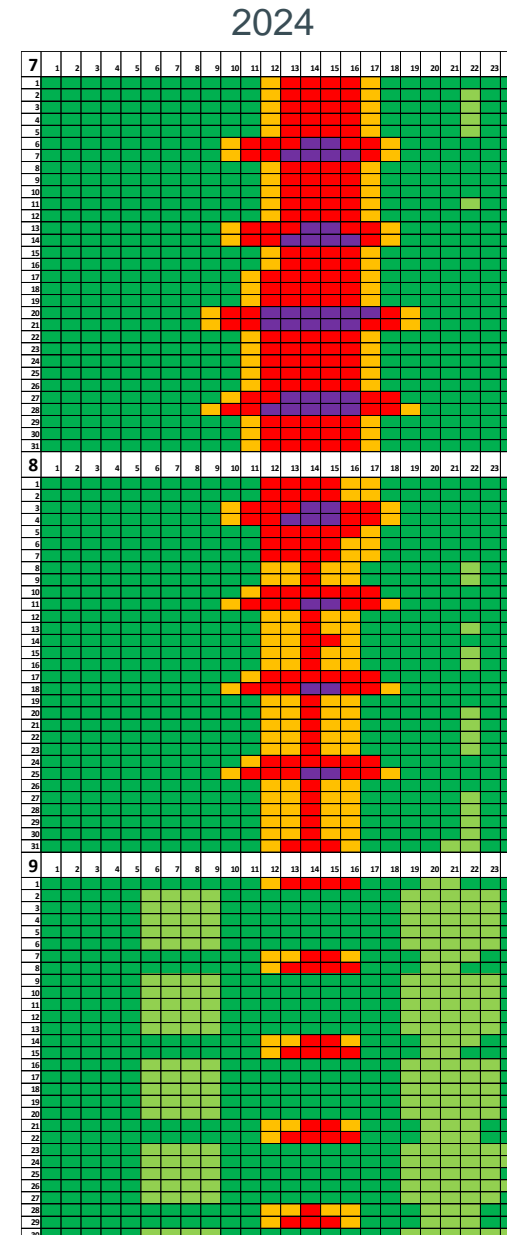
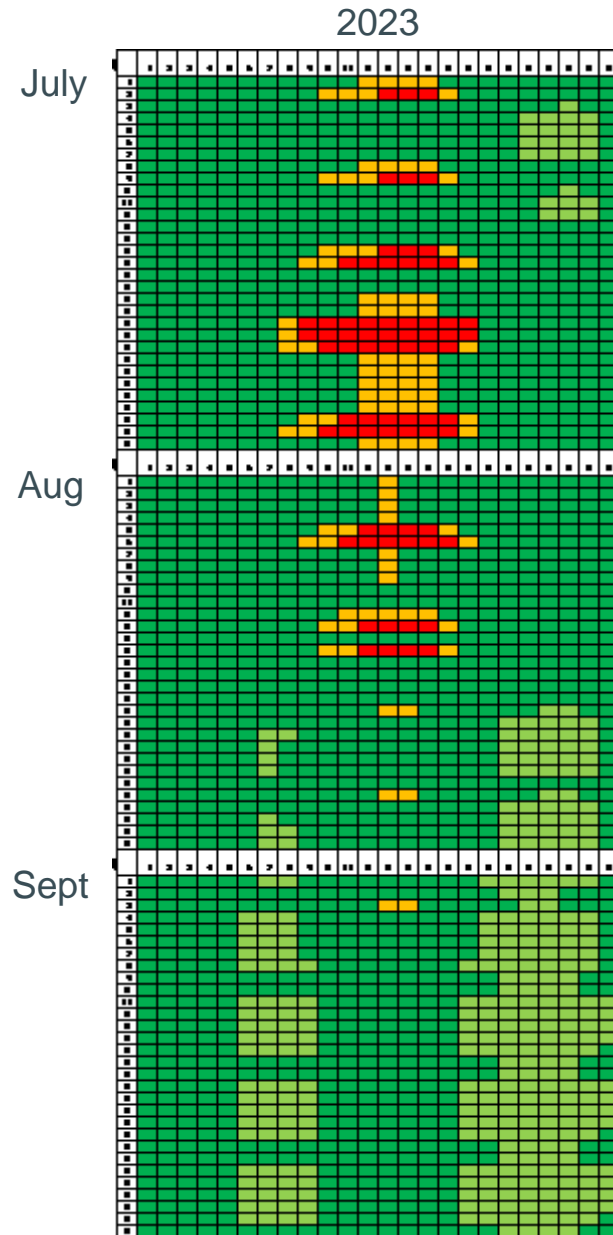


hour →

day ↓

Doel
1
stop

P75 2023 vs 2024

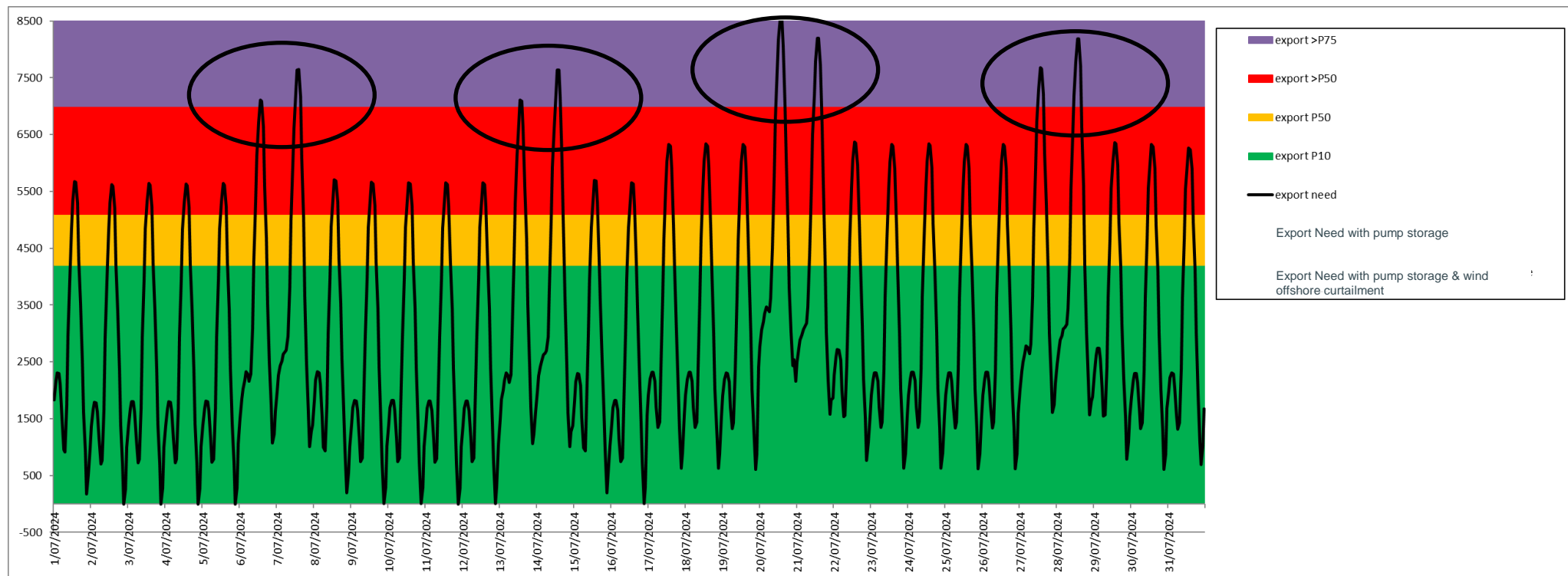


hour →

day ↓

Doel
4
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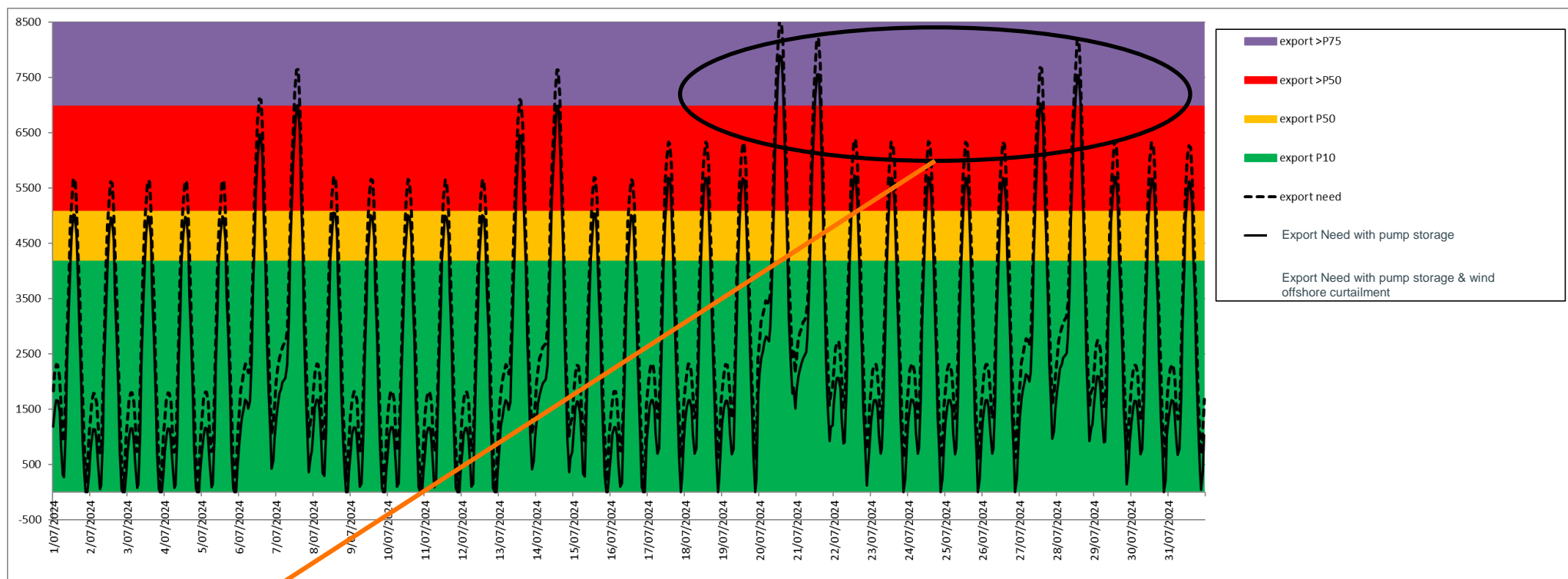
P75 Focus on July



High number of increased export need (all weekends)

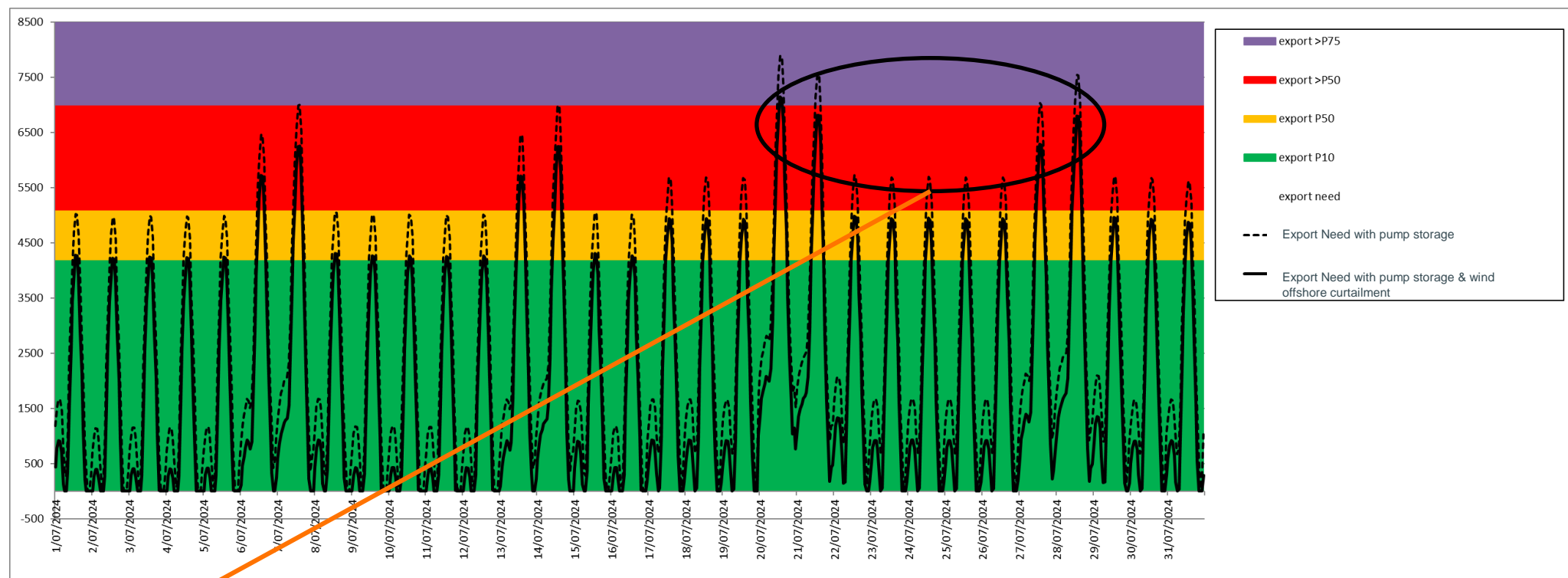
Structural dependent of export, up to very high levels (8500MW)

P75 Focus on July – With pump storage (considering planning revisions)



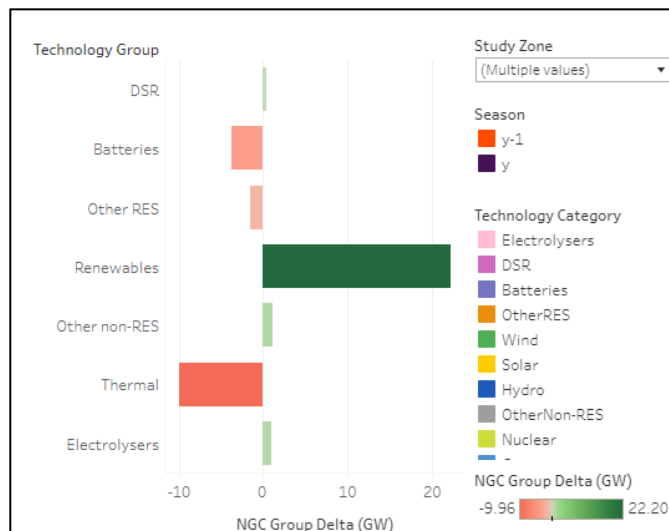
Max value = 7900 MW : In case not enough export possibilities nuclear modulation / wind curtailment / CHP reduction on top of export will be needed!

P75 Focus on July – With pump storage (considering planning revisions) and wind offshore curtailment

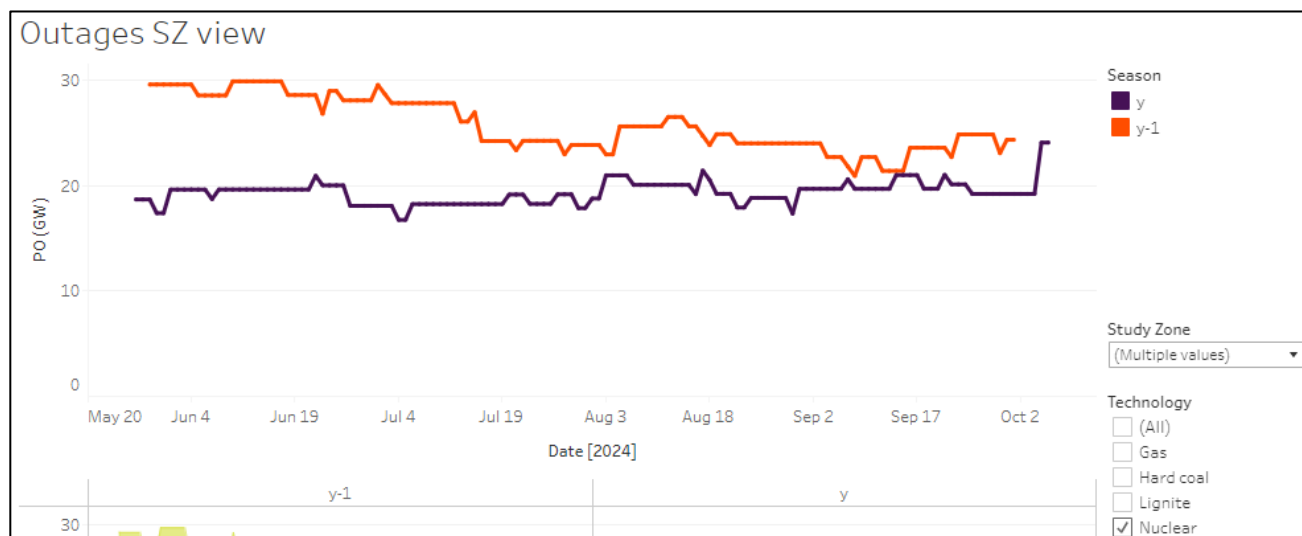


Max value = 7150 MW : In case of underestimation of solar forecast, difficult situation to handle in intraday since limited downward regulation available

Entso-E Summer Outlook: key trends from TSO inputs (focus BE/FR/NL/DE) compared to 2023



Net Generating Capacity
 +22 GW of renewables installed:
 +15 GW Solar
 +7 GW Wind



Planned maintenance of nuclear reactors
 + 5 – 10 GW of nuclear reactors available during period June – September (mostly FR)

Summer Outlook – Key Take Aways

Higher export needs expected in 2024 than 2023

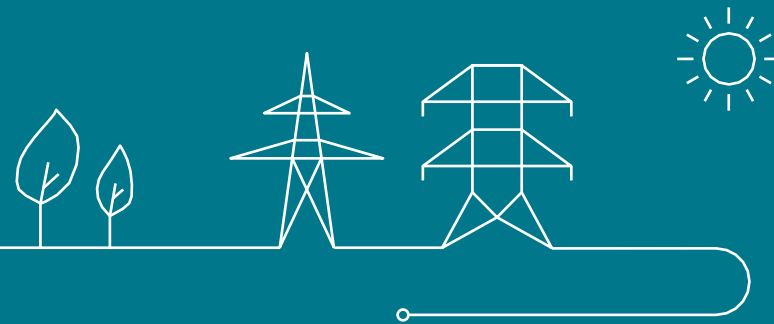
- Mainly due to solar capacity increase + lower nuclear maintenance and higher pump storage unavailability

Given that neighboring countries will face similar issues, it is very uncertain that these level can be accommodated leading to potentially (very) negative prices

Operational focus

- **Improving forecasting of the risks + well informing BRP's** about the risks (W-1, D-2 & D-1)
 - **ST : new daily adequacy checks** in service + additional informational UMM's
 - **LT : workshop with BRP's by end 2024 to exchange about future evolved forecasting services**
- **Optimizing export capacities (in both DA and ID)**
- **Monitoring availability of reserve sharing**

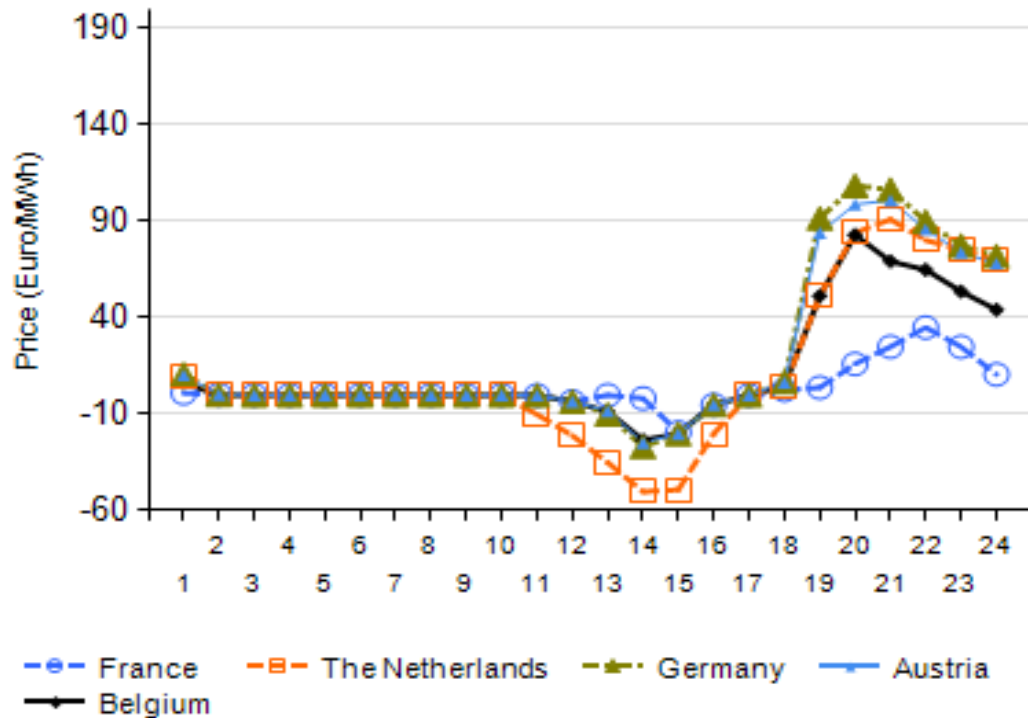
Challenge B – Unexpected deviation close to real-time (cf Incompressibility situation on 07/04/2024)



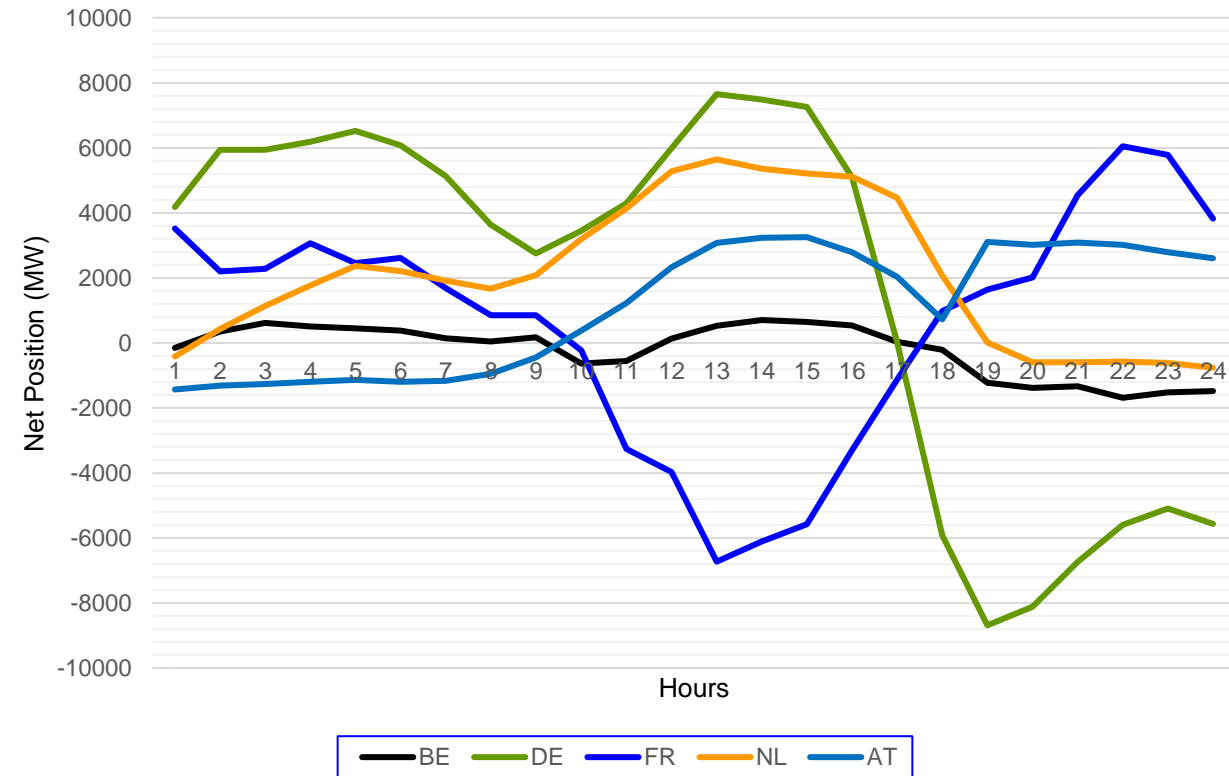
Incompressibility Situation on 07/04/2024

Context from Day-Ahead

Core Prices - CWE Hubs



Core Net Position - CWE Hubs

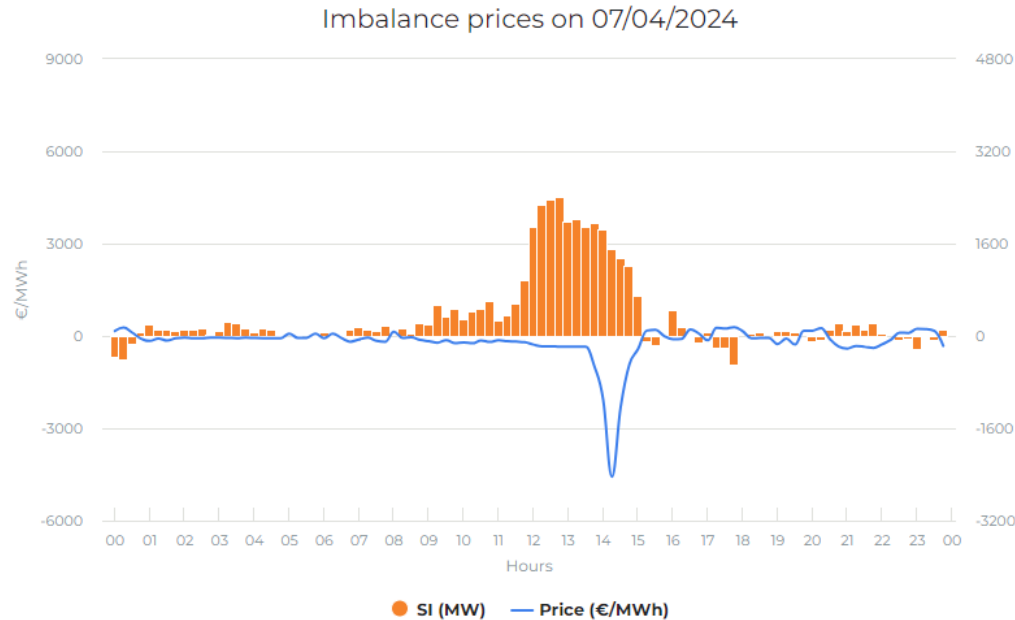


- Day-Ahead Price is mostly 0€/MWh for most of the day (Min: -23;32€/MWh)
- Belgium in Export position: around 600MW - High Export from our neighboring TSOs except France

Incompressibility Situation on 07/04/2024

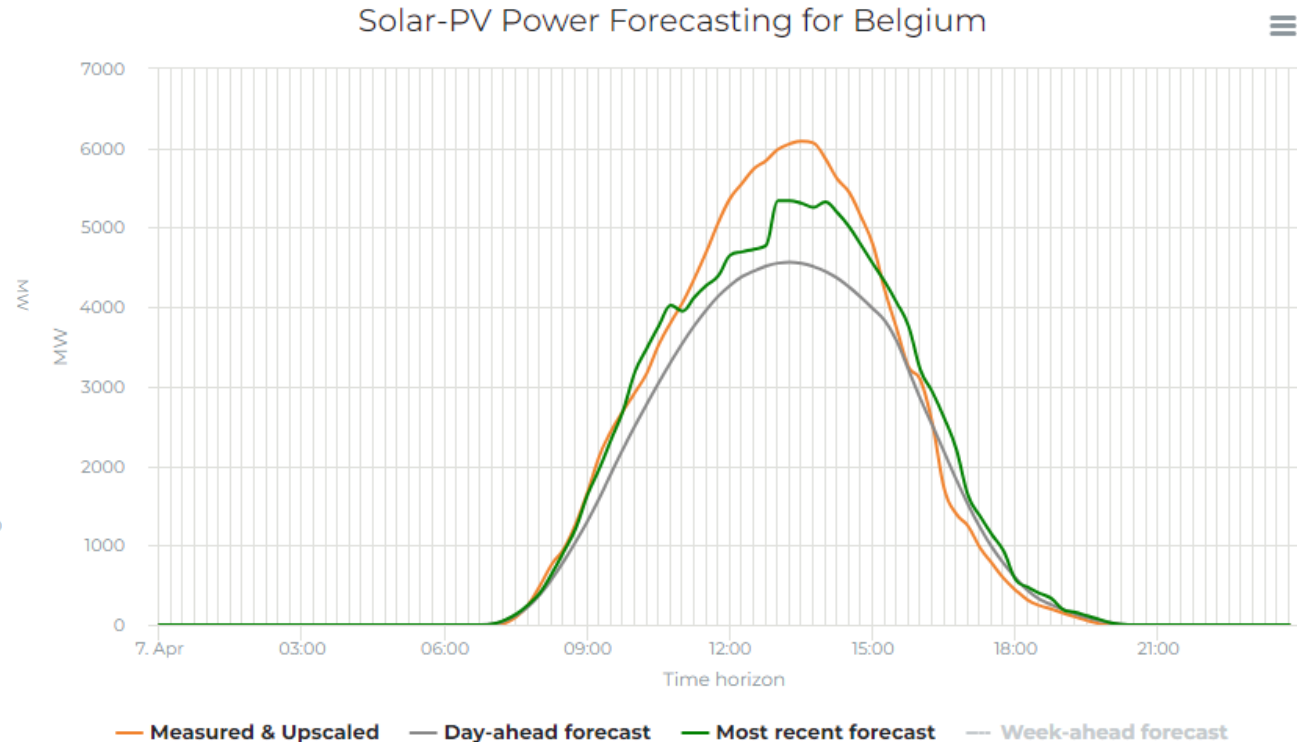
Balancing & Imbalance Price

Non validated data for 07/04/2024



[Prix de déséquilibre 15 min \(elia.be\)](https://www.elia.be)

Monitored solar PV capacity: 9.088,08 [MWp]



- Very High System Imbalance from 12.00 till 15.30: around 2GW (Max: 2,3GW) – Mainly due to a Forecasting error btw Day-Ahead & Real-Time: 1500MW (high impact of dust from Sahara) - Imbalance price: -350€/MWh*
- Elia activated downward volume for 1000MW (wind curtailment) and relied on neighboring TSOs up to 1000MW
- Elia was in **Alert State** and should have been considered **Emergency State** from 12:00 till 12.30

Incompressibility Situation on 07/04/2024

Balancing & Imbalance Price

07/04/2024 

Non validated data for 07/04/2024

Quarter	SI (MW)	NRV (MW)	Downward regulation Volume				
			GDV (MW)	IGCC- (MW)	R2- (MW)	Bids- (MW)	Inter-TSO Export (MW)
15:30 > 15:45	-158,315	171,476	58,882	41,020	17,862	0,000	0,000
15:15 > 15:30	-90,918	-262,356	826,111	0,000	0,411	675,700	150,000
15:00 > 15:15	704,021	-836,939	1,159,027	0,000	0,327	908,700	250,000
14:45 > 15:00	1,217,766	-1,236,7...	1,417,912	0,000	1,512	916,400	500,000
14:30 > 14:45	1,357,832	-1,328,4...	1,426,0...	2,516	2,737	920,800	500,000
14:15 > 14:30	1,517,140	-1,510,3...	1,582,8...	0,000	45,422	923,400	614,000
14:00 > 14:15	1,849,530	-1,581,570	1,581,594	0,000	100,894	980,700	500,000
13:45 > 14:00	1,968,948	-1,929,5...	1,930,2...	2,028	111,645	1,001,600	815,000
13:30 > 13:45	1,885,980	-1,515,140	1,515,140	40,940	154,000	1,005,2...	315,000
13:15 > 13:30	2,036,7...	-1,873,4...	1,873,4...	45,268	154,000	1,009,2...	665,000
13:00 > 13:15	1,991,944	-1,874,4...	1,874,4...	42,364	154,000	1,013,100	665,000
12:45 > 13:00	2,411,871	-2,211,6...	2,211,600	0,000	187,000	1,009,6...	1,015,000
12:30 > 12:45	2,376,9...	-1,889,0...	1,889,0...	0,000	186,557	1,037,500	665,000
12:15 > 12:30	2,281,956	-1,470,7...	1,470,7...	30,940	214,000	910,800	315,000
12:00 > 12:15	1,903,503	-920,613	920,613	6,968	209,045	704,600	0,000
11:45 > 12:00	966,668	-800,713	801,354	318,432	165,022	317,900	0,000

- Exceptional System Imbalance (2,376GW)
- Offshore wind curtailment (around 1GW)
- All of the reserve sharing contracts activated in parallel (More than 1GW) – NGESO contracts being unavailable

Start of the QH	12:15	12:30	12:45	13:00	13:15	13:30	13:45	14:00	14:15	14:30	14:45	15:00	15:15
Tennet	315	315	315	315	315	315	315						
RTE		350	350	350	350								
Amprion			350				500	500	614	500	500	250	150

TenneT & RTE stopped the reserve sharing delivery at some point of time

* : See Next Slide

Incompressibility Situation on 07/04/2024

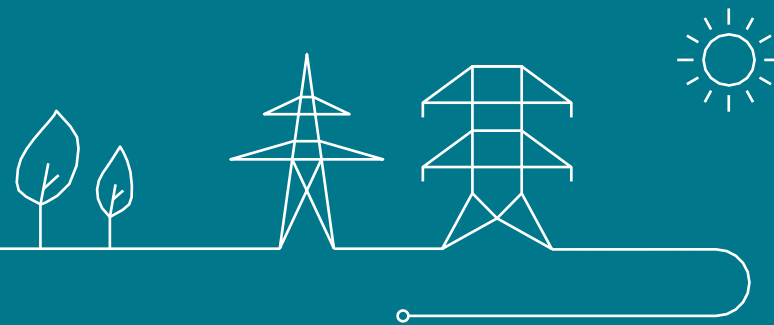
Imbalance Price impact, including Amprion Reserve Sharing

- Request by Elia for interTSO of Amprion in QH-12:45 and in the period QH-13:45 until QH-15:15
- The ex-post known activation price obviously leads to updating the imbalance price

QH	SI (in MW)	Requested volume (in MW)	Activation price (€/MWh)	Published In real-time Currently published imbalance price (€/MWh)	Published ex-post after imbalance price included the Amprion activation cost, Final Imbalance price (€/MWh)
07/04/2024 12:45	2.411,87	-350	-351,21	-319,00	-351,21
07/04/2024 13:45	1.968,95	-500	-994,72	-350,00	-994,72
07/04/2024 14:00	1.849,53	-500	-2.074,09	-314,60	-2.074,09
07/04/2024 14:15	1.517,14	-614	-4.574,64	-301,00	-4.574,64
07/04/2024 14:30	1.357,83	-500	-2.322,45	-301,00	-2.322,45
07/04/2024 14:45	1.217,77	-500	-931,55	-301,00	-931,55
07/04/2024 15:00	704,02	-250	-425,61	-301,00	-425,61
07/04/2024 15:15	-90,92	-150	-345,00	174,47	174,47



Conclusion



Conclusion

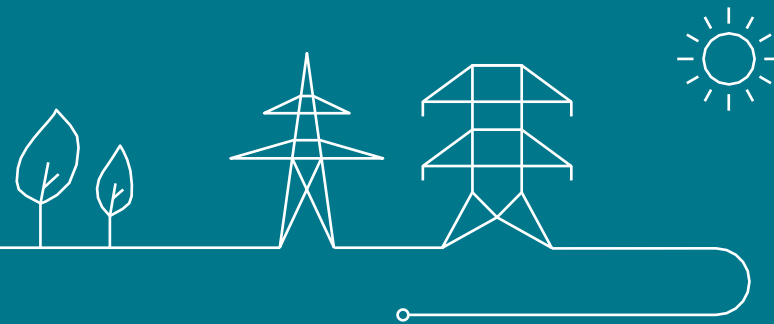
Starting point - BRP must respect their **legal obligations & so must solve the problem in the market (= only efficient & sustainable solution).**

On the short-term for Summer 2024, Elia

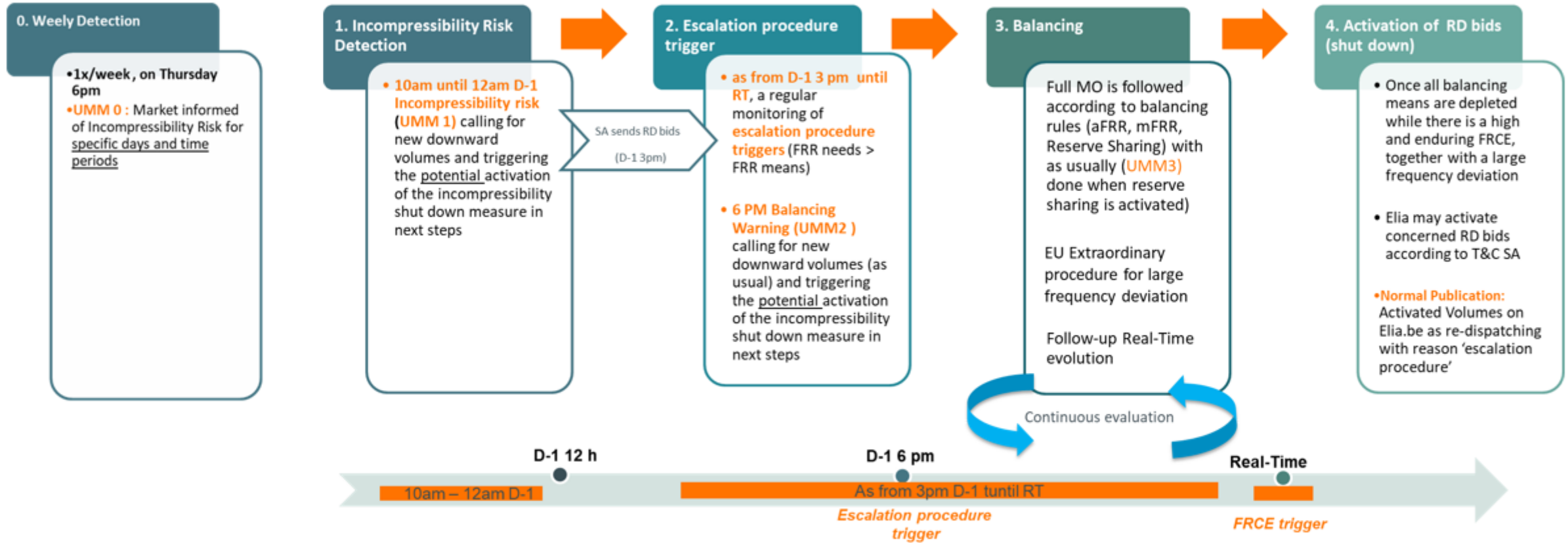
- Maintains the **High Risk of Incompressibility procedure** & updates it by 22/5/2024 (Reminder in annex)
- **Updates the solar forecast** (delivery target : 23/05/2024)
- Optimizes outage planning management & provides **additional export capacities** via Dynamic Line rating which increases the capacity of the lines (much earlier project delivery than initially foreseen)
- Is analyzing the **price signal efficiency** (more specifically for the coming months)
- After all market-based mechanisms playing their role and still facing a very large frequency deviation (EU Impact) in which Elia is playing a major contribution (very large ACE); then, as a last resort,
Elia is actively building up two technical mitigation measures:
 - **PV/Wind/Flexible asset shedding plan** at the TSO & DSO level for unit $1\text{MW} < X < 25\text{MW}$
 - **Nuclear hard stop**
- **Monitors** each incompressibility event and will report at the end of the summer.

For the next summers, Elia gears up on **RTP, (PV,...) flex ready assets, solutions on Entso-E Level (frequency)/New Market Design Mechanism**

Annex : Reminder High Risk Of Incompressibility Procedure



Process (as from 22/5)

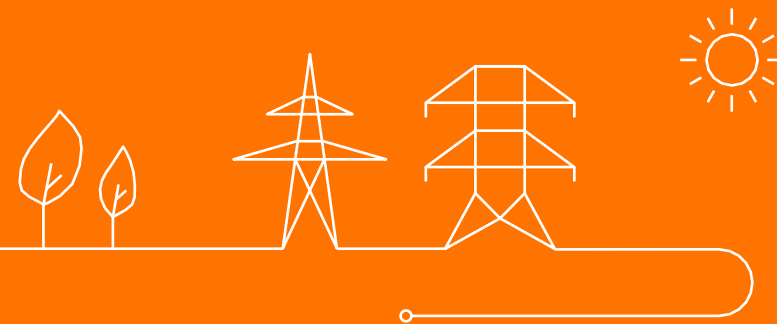


LC/NC: Limited and Non-Coorduable unit



EU & BE Balancing Program Update

Cécile Pellegrin



Agenda of today's presentation

- iCAROS phase 1 & MARI Local go live
- aFRR Design Evolutions & Connection to PICASSO
 - => See specific presentation on the “feedbacks of the public consultation of T&C aFRR and Balancing Rules” here after**
- MARI Connection





iCAROS phase 1 & MARI Local go live

USERS' GROUP

Dear Market Party,

Elia would like to inform you that the Go-Live of iCAROS phase I and the MARI Local Go-Live are confirmed. As a result, the following regulated documents, as approved by the CREG, will enter into force on the **22nd of May 2024** (1st delivery date):

Go-Live of ICAROS Phase I:

- The updated Contract for [Outage Planning Agent](#);
- The updated Contract for [Scheduling Agent](#);
- The updated [Rules for Coordination & Congestion Management](#).

MARI Local Go-Live:


- The updated [BSP Contract mFRR](#);
- The updated [BRP Contract](#);
- The updated [Balancing Rules](#).



See specific presentation on the “changes of T&C OPA, SA & coordination Rules following CREG’s decision on ICAROS” here after



iCAROS phase 1 & MARI Local go live

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MARI Local Go-Live:

- The updated [BSP Contract mFRR](#);
- The updated [BRP Contract](#);
- The updated [Balancing Rules](#).



- As of May 8, 2024, the BSP were able to submit mFRR Capacity Bids for a delivery date on May 22, 2024
- As of May 10, 2024, the OPA were able to submit an Outage Plan for a delivery date on May 22, 2024
- As of May 15, 2024, the SA were able to:
 - Submit a Daily Schedule for a delivery date on May 22, 2024
 - Submit Redispatching Energy Bids for a delivery date on May 22, 2024
- As of May 15, 2024, the BSP were able to submit mFRR Energy Bids for a delivery date on May 22, 2024.

iCAROS phase 1 & MARI Local go live

- If you want to **report** an **issue**(/bug) to ELIA, please **use the "Bug Report Template"** to ease the process during the Go-Live
- A mail on the matter was sent to all BSPs, SAs & OPAs on 16/04
- The template is to be used on the long term (**not only during the MARI-iCAROS Go-live** phases)

Bug Report Template

Summary of the issue/bug	Please enter a summary of your issue within 1 sentence max		
Application(s) concerned	Please enter the name of the ELIA application(s) concerned by the issue/bug (e.g., BIPLE, Settlement UI, Optiflex, etc.)		
Environment concerned	<input type="checkbox"/> PROD	<input type="checkbox"/> DEMO	
B2B / B2C	<input type="checkbox"/> B2C	<input type="checkbox"/> B2B	<input type="checkbox"/> I don't know
Credentials used	Please enter here the user account(s) used when the error occurred		
Start date & time of the bug	Start date of the issue/bug	Start time of the issue/bug	
End date & time of the bug	End date of the issue/bug	End time of the issue/bug	
Status	<input type="checkbox"/> Issue over	<input type="checkbox"/> Issue still ongoing	<input type="checkbox"/> I don't know
Error reproducibility	<input type="checkbox"/> I was able to reproduce the error	<input type="checkbox"/> I was not able to reproduce the error	<input type="checkbox"/> I don't know
Impact	Please describe here the impact(s) of the issue on your side as well as the urgency for ELIA to solve the issue		

Description of the issue

Description	Please enter here a description of your issue <i>Here are some examples of information useful for ELIA:</i> <ul style="list-style-type: none"> • The error message(s). • The faulty behavior of the application. • The browser used. • The URL used. • Etc.
Steps followed to get the issue	Please define here the steps followed to get the error <ul style="list-style-type: none"> • 1 – Open A. • 2 – Click B. • 3 – Provide input file C. • 4 – Access D. • 5 – etc.
Expected behaviour	Please describe here in details what you would have wanted to obtain if the error had not occurred <i>Here are some examples of information useful for ELIA:</i> <ul style="list-style-type: none"> • Information on how the application looked alike before the bug. • The energy/capacity bids that you wanted to submit/update. • Etc.

Please do not forget to attach to this document all necessary documentation to help ELIA to fully understand the issue (e.g., .json, .xml file, screenshots, graphs, input file, output file, reason codes, etc.)

MARI Connection

- In December 2023, the consolidated planning for MARI, iCAROS Phase 1 and PICASSO was updated for the go live dates of MARI & ICAROS as follows :
 - Local go live of the new mFRR bidding and iCAROS phase 1 Mid May 2024
 - Connection to EU mFRR balancing energy platform June 2024
- iCAROS phase 1 & MARI Local go live was confirmed for the 22nd of May 2024 (Delivery date).
- Due to an insufficient progress of the Interoperability Tests (IOP Tests) with the MARI European Platform, ELIA's connection in June 2024 will unfortunately not be possible and ELIA will have to delay its accession for after the summer.
- A detailed assessment is ongoing to be able to provide the updated Roadmap at the latest by the end of June.

Contact persons



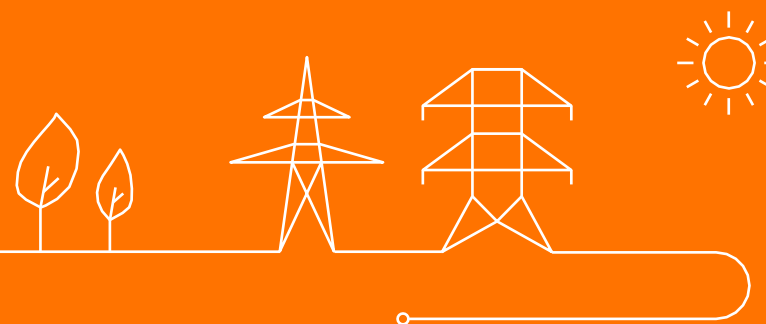
KAM Energy

Amandine Leroux / Nicolas Koelman / Sybille Mettens



Changes to T&C OPA, SA & Coordination Rules following CREG's decision on iCAROS

Raphaël Dufour



iCAROS phase 1 – CREG decision

- **The CREG has approved the regulated documents in the framework of iCAROS phase 1 (29/02/2024)**
 - T&C OPA in decision [B2751](#)
 - T&C SA in decision [B2750](#)
 - Rules for Coordination and Congestion Management in decision [B2752](#)
- **The CREG has requested the following elements:**
 - **Content modifications** of the approved documents – See next slides
 - **Additional monitoring and reporting** in the framework of iCAROS phase 1– See next slides
 - Textual modifications of the approved documents
 - Analysis/modifications for the next versions of these documents – Not in scope of this presentation
- **The final versions of the documents are available on the Elia website:**
 - T&C OPA and T&C SA: [How to become an Outage Planning and Scheduling Agent \(elia.be\)](#)
 - Rules for Coordination and Congestion Management: [Alleviating congestion risk \(elia.be\)](#)
 - Updated version of the explanatory document: [Alleviating congestion risk \(elia.be\)](#)

T&C OPA

Point of CREG decision	Content	Modifications to the submitted version
115/121	<ul style="list-style-type: none">• CREG does not approve incentives related to data consistencies as these have to be considered as administrative penalties for which no legal basis exist in the framework of SA/OPA• CREG still recognizes the importance of the control related to data consistencies and asks for monitoring and regular reporting	<ul style="list-style-type: none">• Articles II.10.3 and II.12 have been removed• Article II.10.4 states that the report about data consistencies is provided to the CREG• Article 13 has been adapted

T&C SA – Content modifications

Point of CREG decision	Content	Modifications to the submitted version
58 & 112	<ul style="list-style-type: none"> • Settlement for RD activation control: CREG conditions the increase of the incentive factor to 5 and 10% to a justified legal basis or if it can be linked to a damage caused by non-delivery of the service 	<ul style="list-style-type: none"> • Article 2 (6) of the Whereas
90	<ul style="list-style-type: none"> • CREG requests to add clarifications about the modalities for requesting a Return to Schedule (RTS) and link with the CRI i.e. RTS has to be sent during the first qh of an hour in case of a medium or high CRI 	<ul style="list-style-type: none"> • Clarifications in the section 5.4 of the updated explanatory document
92	<ul style="list-style-type: none"> • CREG requests to remove the possibility to modify CRI 15 min after RTS request 	<ul style="list-style-type: none"> • Article II.10.5 has been modified accordingly
119	<ul style="list-style-type: none"> • CREG does not approve incentives related to data consistencies as these have to be considered as administrative penalties for which no legal basis exist in the framework of SA/OPA • CREG still recognizes the importance of the control related to data consistencies and asks for monitoring and regular reporting 	<ul style="list-style-type: none"> • Articles II.13.4 and II.15.4 has been removed • Article II.13.5 states that the report about data consistencies is provided to the CREG • Article II.16 has been adapted
120	<ul style="list-style-type: none"> • CREG accepts Elia's correction of invoicing process related to the settlement of the RTS control: an invoice will be sent by Elia instead of a credit note sent by the SA (credit note cannot be used as RTS is not linked to any remuneration) 	<ul style="list-style-type: none"> • Article II.16.4 has been adapted • Article II.16.7 has been added

T&C SA – Additional monitoring/reporting

Point of CREG decision	Content
84	<ul style="list-style-type: none">Monitoring and reporting (to CREG) of the possible ex-post settlement for correction of BRP perimeter (for start-up/shut-down as the ramp-up/down are not corrected)
98	<ul style="list-style-type: none">Monitoring and regular reporting (to CREG and market parties) of the results of the RD activation control
99/133	<ul style="list-style-type: none">Monitoring and regular reporting (to CREG and market parties) of the results of the RTS control
104	<ul style="list-style-type: none">Monitoring and regular reporting (to CREG and market parties) of data consistency controls
115	<ul style="list-style-type: none">Monitoring and regular reporting (to CREG and market parties) of the quality and impact of the term related to DA price in the RTS settlement formula

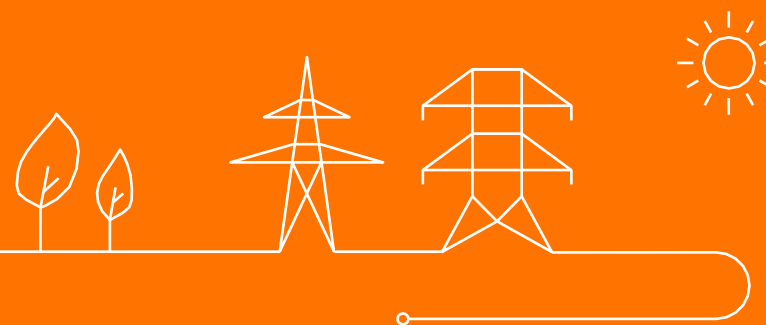
- 
- Exact modalities of these reporting and monitoring are still to be defined
 - Based on these reporting and monitoring, future evolutions of the design could be identified

Rules for Coordination and Congestion Management

Point of CREG decision	Content	Modifications to the submitted version
46	<ul style="list-style-type: none"> CREG requests the addition of quality monitoring of the CRI computations via some KPIs (e.g. information about grid elements leading to high/medium CRI: actual and forecasted loading in N and N-1, thermal limits used, remaining margins for flexibility and actual use of these margins etc) 	<ul style="list-style-type: none"> Article 17.5 has been modified to precise the yearly report about CRI will contain KPIs on the accuracy of the CRI computations
47/48	<ul style="list-style-type: none"> CREG requests some clarifications about the compensation mechanism in the explanatory note and in the article 13 of the coordination rules CREG requests a monitoring of the impact of compensation on the balancing market 	<ul style="list-style-type: none"> Section 6.2 of the explanatory document and article 13 of the Rules for Coordination and Congestion Management have been clarified accordingly
87	<ul style="list-style-type: none"> CREG requests a monitoring related to the reason of refusal by Elia of an availability plan update 	<ul style="list-style-type: none"> Article 17.1 e has been added to integrate this monitoring

PICASSO and aFRR design evolutions – feedback public consultation T&C BSP aFRR and Balancing Rules

Kris Poncelet



Overview public consultations related to PICASSO and aFRR design evolutions

- For the connection to PICASSO and the aFRR design evolutions, Elia organized two public consultations:
 1. **T&C BSP aFRR** (28th of February to 29th of March)
 - Temporary bid price limit for contracted aFRR Energy Bids
 - aFRR Design evolutions
 2. **Balancing Rules** (29th of March to 29th of April)
 - Rules for the local application of elastic demand for aFRR
- Elia received the responses from the following stakeholders:

T&C BSP aFRR

- Bnewable
- BSTOR
- Centrica
- FEBEG
- Febeliec
- + 2 confidential responses

Balancing Rules

- Centrica
- FEBEG
- Febeliec
- + 1 confidential response

Objective today: Provide an overview of the main comments received related to the proposed amendments and share Elia's view on these comments

Feedback related to the temporary bid price limit for contracted aFRR Energy Bids

Subject	Stakeholder	Feedback received	Elia's view
Temporary bid price limit for contracted aFRR Energy Bids of +/- 1.000 €/MWh (T&C BSP aFRR)	Bnewable	<ul style="list-style-type: none"> Understands the need for mitigation measures but does not support a fixed price cap and encourages Elia to look for alternative risk mitigation measures, e.g., an obligation to bid at cost-reflective prices Argues that in case price caps would be applied, it should be at values above 1.000 €/MWh 	Elia remarks that the proposed measure is supported by the vast majority of stakeholders The process for the evaluation of the temporary bid price limit is still under discussion with the CREG and will be proposed as soon as possible.
	Centrica	<ul style="list-style-type: none"> Understands the need to prevent price incidents but ask for more transparency on timing related to the evaluation of the temporary measure 	
	Febeg	<ul style="list-style-type: none"> Understands the amendments of the T&C as strictly necessary and an acceptable solution to allow for a fast connection to PICASSO. Calls for pragmatism and to focus on a timely connection Is convinced that the cap/ floor should be relaxed and removed in the next years (2025,2026,2027) in close discussion with the market 	
	Febeliec	<ul style="list-style-type: none"> Appreciates the extensive effort from Elia and all other stakeholders to come with a supported proposal in order to allow for connection to PICASSO, taking into account the concerns of a.o. Febeliec regarding the risk of undue cost increases at the detriment of grid tariffs. Reserves the right to ask for additional safeguards whenever negative outcomes occur which would greatly jeopardize grid security and/or increase grid costs beyond an acceptable level. 	

Feedback related to aFRR elastic demand

Subject	Stakeholder	Feedback received	Elia's view
<p>Proposal to consider every aFRR demand above the dimensioned volume as elastic aFRR demand with price thresholds of +/- 1.000 €/MWh</p>	Centrica	<ul style="list-style-type: none"> Understands the value of elastic demand Believes elastic demand should be subject to the publication of the elastic demand curve in advance and urges Elia in the future to not deduct free bids from the aFRR needs while not activating them 	<p>Elia remarks that the proposed measure is generally supported by the stakeholders.</p> <p>With respect to transparency, Elia believes the proposal for the Balancing Rules provides transparency on the price and volume thresholds for the application of elastic demand. The actual demand curve in a given MTU is however dependent on the total aFRR demand which is only known in real time.</p> <p>With respect the consideration of free bids, Elia would like to clarify that the required aFRR reserve capacity is determined pursuant the LFCBOA and independently from the availability of free bids.</p> <p>With respect to handling critical events, Elia would like to clarify that Art. 12.7 of the BR foresee the possibility for Elia to decrease the elastic part of the aFRR demand (and hence increase the elastic part of the aFRR demand) in critical situations.</p>
	Febeg	<ul style="list-style-type: none"> Supports the application of an elastic demand for aFRR balancing energy. FEBEG believes that this is necessary to mitigate the risk of high prices. Asks for clarity related to the possibility to declare a higher inelastic demand in case of critical events as the price thresholds are fixed 	
	Febeliec	<ul style="list-style-type: none"> Has no comments related to this publication as the proposal is in line with the discussed compromise solution 	

Feedback related to aFRR design evolutions (1/3)

Subject	Stakeholder	Feedback received	Elia's view
Evolution of the FAT from 7,5 minutes to 5 minutes	Febeg	<ul style="list-style-type: none"> Understands that the move to Full Activation Time 5' is necessary to comply with European balancing guidelines Warns that the move to FAT 5' will most likely lead to less volumes offered by certain technologies 	<p>Elia confirms the move to the 5-min FAT is a requirement following from harmonization at European level in line with Art. 7(3) of the aFRR IF.</p> <p>Elia understands BSPs need to consider the volume that can be made available with the FAT.</p>
Moving the aFRR capacity auction from D-2 to D-1	Febeg	<ul style="list-style-type: none"> Supports the proposal Express an operational risk in case of delays in the awarding process and therefore expect the auction results to be available by 9h10 and only exceptionally at 9h30. If auction results cannot be made available within this timeframe, Febeg requests that a second gate is triggered. 	<p>Elia confirms that in normal conditions BSPs are informed about the aFRR Awarded within 10 minutes after the aFRR Capacity GCT. However, in exceptional moments where issues would occur during the auction process, 10 minutes might not suffice to take the necessary actions to resolve the issue, to perform the validation of results and to inform the BSPs.</p> <p>In very exceptional situations, where more severe issues would prevent informing BSPs of the auction results within about 30 minutes after the aFRR Capacity GCT, Elia agrees with FEBEG that a second gate would need to be triggered (in line with current Elia procedures).</p>

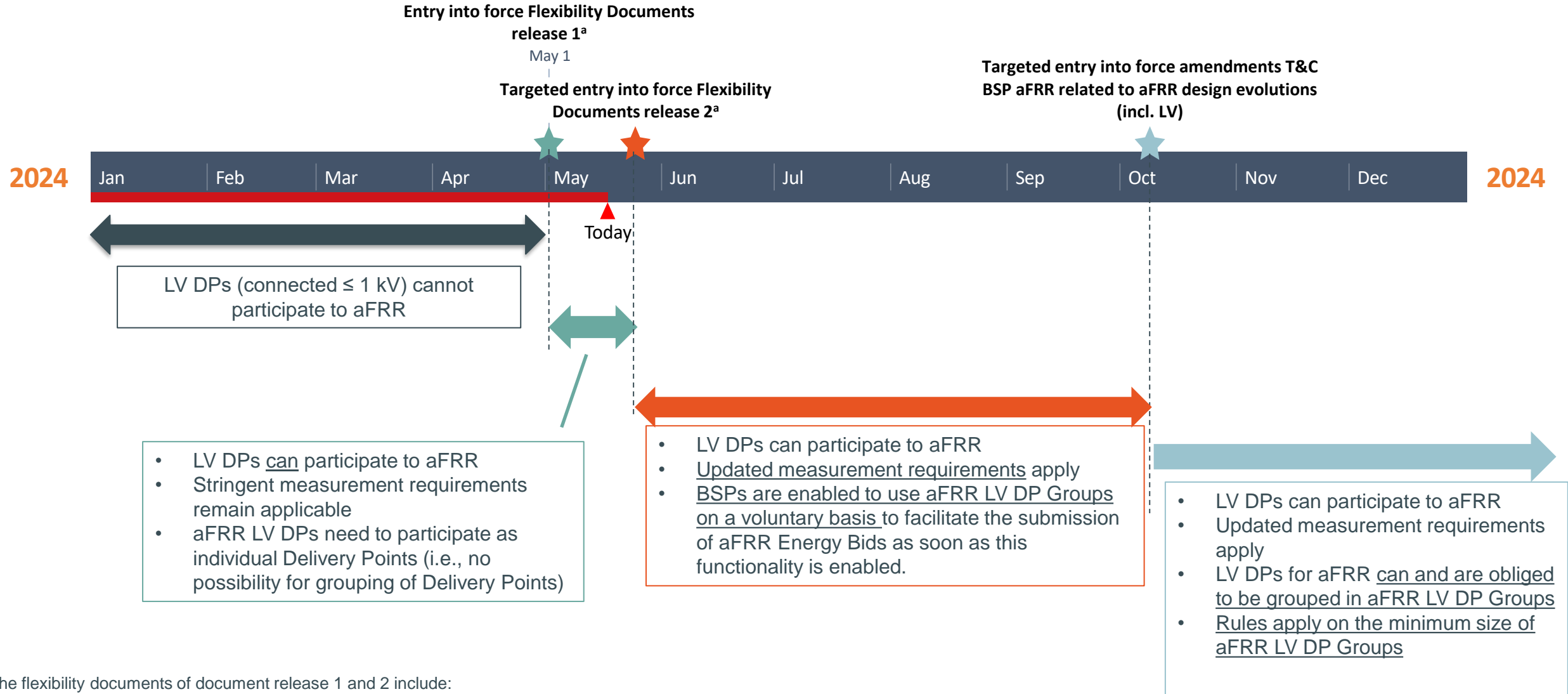
Feedback related to aFRR design evolutions (2/3)

Subject	Stakeholder	Feedback received	Elia's view
aFRR activation method (possibility for BSPs to specify a ramping period shorter than the FAT)	BSTOR	<ul style="list-style-type: none"> Asks whether there is a minimum ramping period > 0 minutes applicable 	<p>Elia clarifies that the $FAT_{\text{Energy Bid, (de)activation}}$ can be expressed with maximally one decimal and that the minimum value that can be provided equals 0 minutes. Elia proposes to clarify this in the T&C BSP aFRR.</p> <p>Elia clarifies that the selection of aFRR Energy Bids indeed remains purely based on the economic merit order (i.e., independent of the ramping period specified by the BSP).</p> <p>Only after the selection of aFRR Energy Bids has been performed, the shorter ramping period specified by the BSP instead of the FAT would be considered for determining the aFRR Requested per bid.</p>
	Centrica	<ul style="list-style-type: none"> Welcomes the proposal including the possibility to apply asymmetric ramps, which support energy management strategy optimization Asks what the granularity is for the ramping period and what the minimum allowed ramping period is 	
	Febeg	<ul style="list-style-type: none"> Requests information how the different ramping periods will be considered in the common merit order list and the Elia controller Argues that the selection of aFRR Energy Bids should strictly follow an economical merit order 	
Possibility to use a RT baseline	Febeg	<ul style="list-style-type: none"> Supports Elia's proposal 	/

Feedback related to aFRR design evolutions (3/3)

Subject	Stakeholder	Feedback received	Elia's view
Amendments related to LV Delivery points	Febeg	<ul style="list-style-type: none"> • Don't see sufficient changes in the proposal to enable a positive business case for the delivery of aFRR at low voltage level • Believes Elia should strike a better balance between metering accuracy and the cost to delivery the service • Ask whether multiple assets within a same household/EAN are connected to the same gateway and are all in the same pool by design 	<p>Elia would like to highlight that the amendments proposed in the T&C BSP aFRR should be seen as complementary to the amendments in the so-called "Document release 1" and "Document release 2" as part of which the measurement requirements for small assets have been significantly relaxed.</p> <p>Elia further acknowledges that continued efforts are needed to further reduce barriers for LV DPs (e.g., related to the prequalification process or communication requirements).</p> <p>With respect to multiple assets within a same household/EAN, Elia confirms that the current FSP-DSO Agreement requires that for a LV DP, only one DP can be registered per product/FSP and this at the level of the access point. As such, it is currently not possible to have multiple aFRR LV DPs for one household/EAN.</p>

aFRR LV – status and planning



^a The flexibility documents of document release 1 and 2 include:

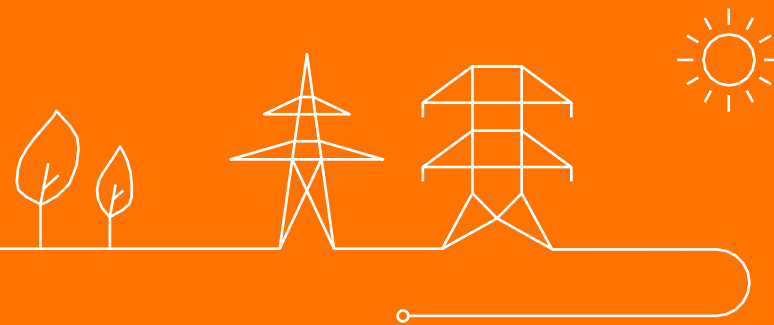
- “Market guide flexibility”
- Synergrid C8/01 (network flexibility study)
- Synergrid C8/06 (general technical requirements including measurement system and gateway requirements)
- FSP-DSO agreement

Next steps

- Submit and publish the T&C BSP aFRR (incl. consultation report) ⇒ targeted by 31/5/2024
- Submit and publish the Balancing Rules (incl. consultation report) ⇒ targeted by 28/6/2024
- Discuss the proposal for the evaluation process related to the temporary bid price limit for contracted aFRR Energy Bids ⇒ WG BAL of 28/6/2024

Smart Testing Methodology

Carsten Bakker



A small reminder – Smart testing methodology

Smart testing uses **two scoring systems** to select the bids for an availability test:

- A scoring system to **select the CCTU** for an availability test
- A scoring system to **select a bid** within that CCTU for an availability test

Focus of
today

The scoring is based on activation control, availability tests and margin control

Additional to the scoring system, **two test regimes** are introduced to limit the impact (in volume) of availability tests:

1. The first test regime **aims to ensure** that a significant part of **the contracted capacities** from a BSP is **compliant**
2. The second test regime aims **to keep in check the compliancy** of a BSP but with a **lower volume of availability tests**

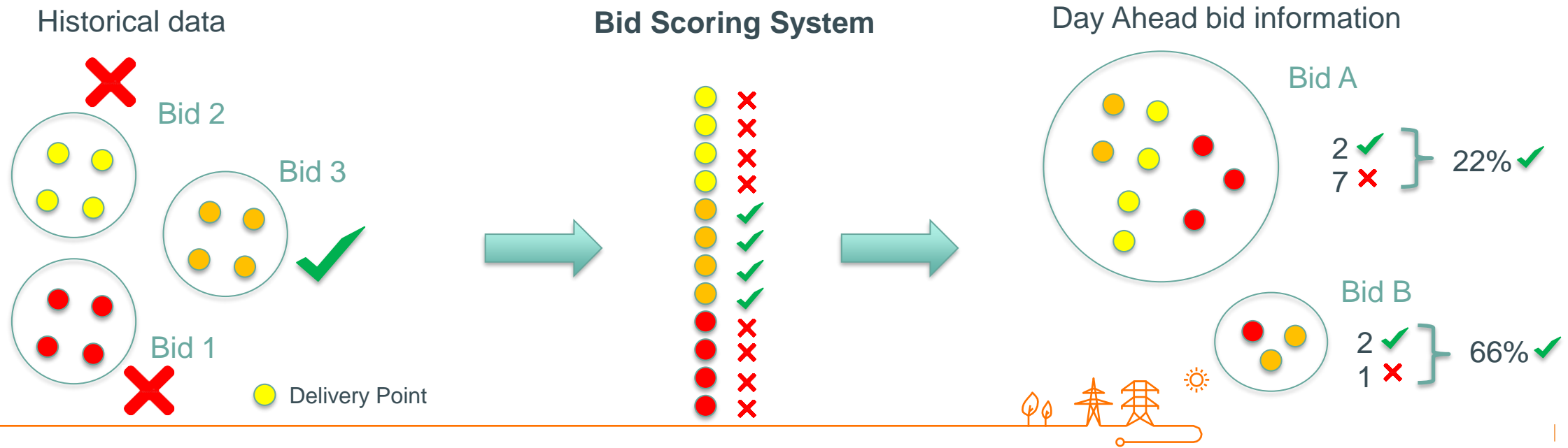


Bid scoring system determines which bid to select for an availability test

Calibration to be done

Features	Weight	Bid 1	Bid 2	Bid 3
Volume		60 MW	30 MW	10 MW
Activation Control	33%	39	12	34
Availability test	33%	89	86	50
Margin Analysis	33%	30	18	9
Final Score	100%	52	39	31

- The Score per Bid is based on same 3 features but are adapted to the Bid Scoring System
- The results of control and test **are disaggregated on a Delivery Point level**



Impact on the smart testing methodology (activation control in bid scoring system, from previous WG bal)

- **Purpose of this control:** Ensure that the volume offered in a contracted Bid is available & that a lack of volume cannot be compensated through DP offered in a non-contracted bid

→ Availability test aims at addressing that risk too

- **Conclusion:** ELIA proposes to remove the additional control & therefore the obligation to only use DPs listed in the bid*

→ It removes a barrier to entry for the BSPs

→ It simplifies the design as the process for non-contracted bids will apply for contracted bids

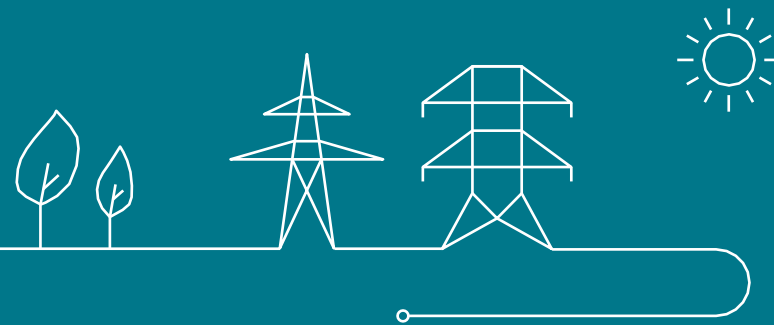
→ It avoids unnecessarily complications in the design (and therefore possible issues for BSPs & for ELIA's implementation)



- Given that the obligation to the availability test remain, the methodology of smart testing will also still consider that the bid should be available for margin control.
- However, for failures in activation control the source of the error is complex to attribute
→ **modification needed to the current methodology**



Modification to the methodology



Bid scoring – activation control

The Bid Scoring System looks at the inclusion of a Delivery Point in a bid and, whether the Delivery Point already demonstrated its contribution in satisfying obligations.

$$Score_{Activation}(bid) = \sum_M F_{freshness}(M) * Adjust(bid) * \left(\sum_{dp \in bid} Score_{refActivation}(dp, M) * F_{ratio}(dp, M) * Adjust(dp) \right)$$

The higher the contribution of a Delivery Point (in volume) is in an activated bid, the higher its initial score is. Only Delivery Points which are listed in the confirmation message are taken into account as those are the ones effectively activated.

$$Score_{refActivation}(dp, M) = \frac{\text{\#of QH of successful activation } (dp, M)}{\text{total \# of QH of activation } (dp, M)}, \text{ for all Delivery Points DP which are "Confirmed DPs"}$$

**Ratio of the successful activations
versus the total number of activations**



These values cannot be determined since all assets in the bids and the supporting group can be used to comply with the request from Elia.

Modification:

For every failure, all bids with a non-zero value in the BU ACK (so DPs in the bids and supporting providing group) will receive a “negative score”.

Bid scoring – activation control

The Activation Ratio (F_{ratio}) aims to get a better grasp of the quality of the information in the initial score. For example, the information about a Delivery Point which is always activated but fails from time to time is more reliable than the information about a Delivery Point which has only a limited number of activations even if these would all be successful.

How often is the DP activated compared to the moments that it could have been activated

How often is the asset activated compared to the amount of QHs in the month

$$F_{ratio}(dp, M) = \frac{\# \text{ of QH of activation } (dp, M)}{\text{total \# of QH of activation } (dp, M)} * \frac{\# \text{ of QH of activation } (dp, M)}{\text{total \# of QH in month } M}$$

for all Delivery Points which are part of an activated bid

“# of QH of activation (dp)” represents the number of QH where a certain Delivery Point is actually used by the BSP while “total # of QH of activation (dp)” represents the number of QH where a certain Delivery Point was in an activated bid and could have been used by the BSP.



Bid scoring – availability test

The general formula is as follows:

$$Score_{refAvailability}(bid) = \sum_M F_{freshness}(M) * Adjust(bid) * \left(\sum_{dp \in bid} Score_{refAvailability}(dp, M) * Adjust(dp) \right)$$

With the values for the availability test:

$$Score_{refAvailability}(dp, M) = \begin{cases} 100, & \text{if successful availability test} \\ 0, & \text{if failed availability test} \\ 50, & \text{if no availability test occurred} \end{cases} \quad , \text{ for all Delivery Points which are "confirmed DPs"}$$



Bid scoring – margin control

The Margin Analysis Score of the bid is based on the score of each individual Delivery Point. The score of the Delivery Point excludes periods of activation control and availability tests in order to avoid an overlap of information.

$$Score_{margin}(bid) = \sum_M \left(F_{freshness}(M) * Adjust(bid) * \left(\sum_{dp \in bid} \sum_{qh \in M} \frac{Score_{refMargin}(dp, qh)}{\#qh} * Adjust(dp) \right) \right)$$

Where:

$$Score_{refMargin}(dp, qh) = \begin{cases} 100, & \text{if } bid\ margin(qh) \geq 0 \\ 0, & \text{else} \end{cases}, \text{ only when a DP is part of a non-activated bid}$$

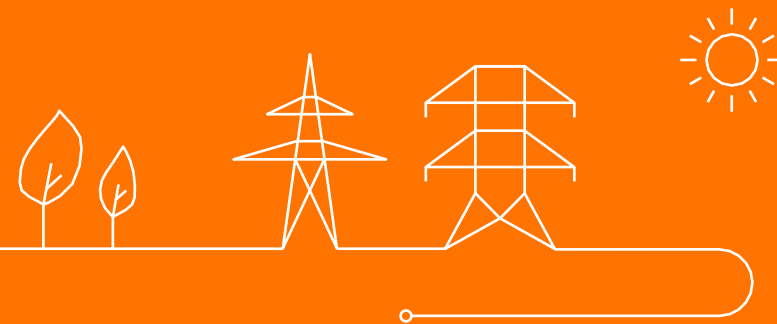
No impact:

The margin needs to be assured for every QH by every individual DP since they are also still subject to availability testing.



AOB – Next WG Balancing

Alexandre Torreele



Next WG Balancing

- **Dates for 2024:**
 - WG Balancing 07/02/2024 09:00 – 13:00
 - WG Balancing 02/04/2024 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

