

NORDIC BALANCING MODEL

NORDIC MFRR ENERGY ACTIVATION MARKET

May 15, 2024, 2PM-4PM

Webinar

AGENDA

Welcome

Local direct activation after go-live

Change in FAT-requirements

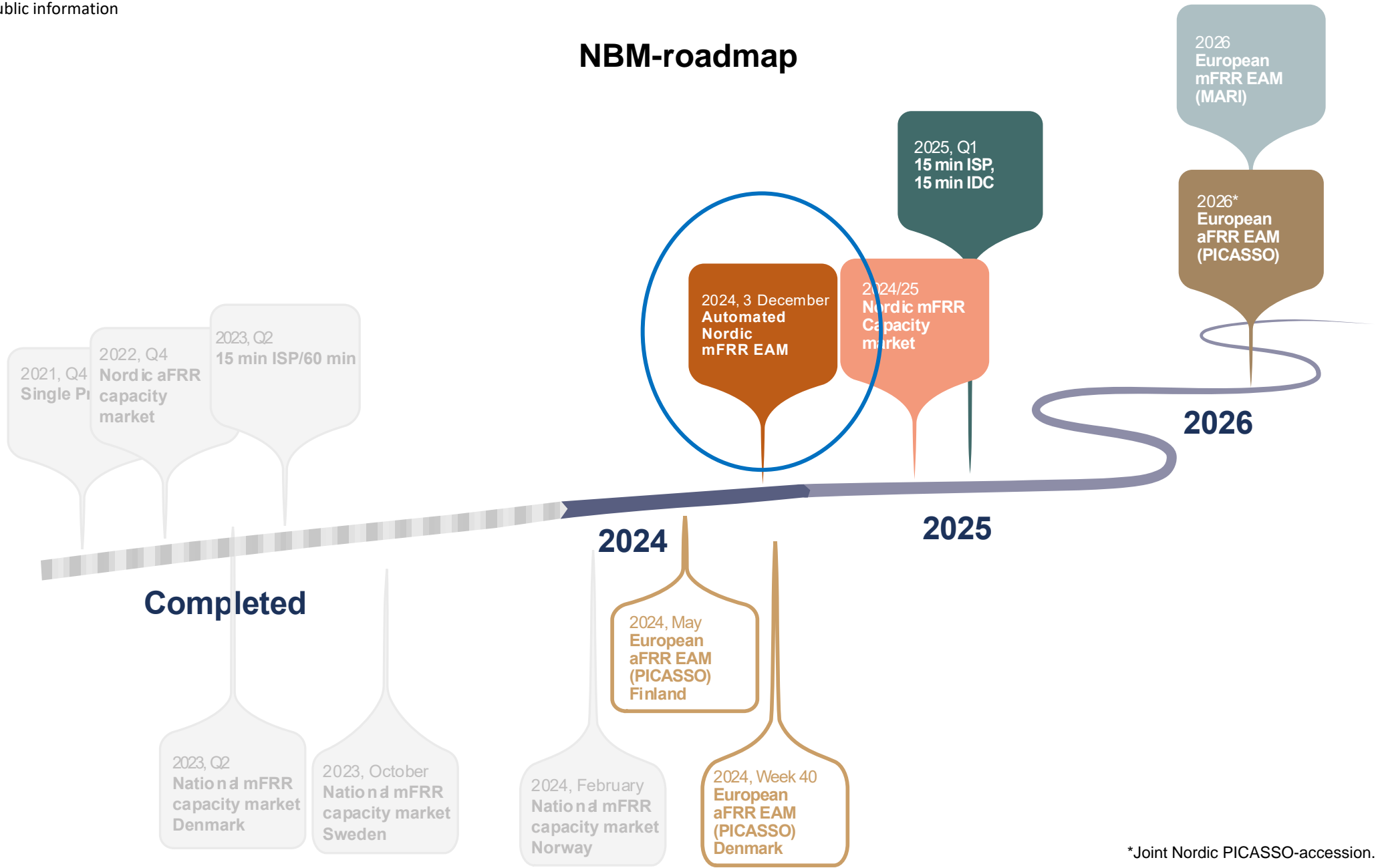
Information about parallel operation, rollback, and testing

Changes in the new self-service portal

Testing, support needs, next meeting

Thank you for today 😊

NBM-roadmap



* Joint Nordic PICASSO-accession.

PARTICIPANTS

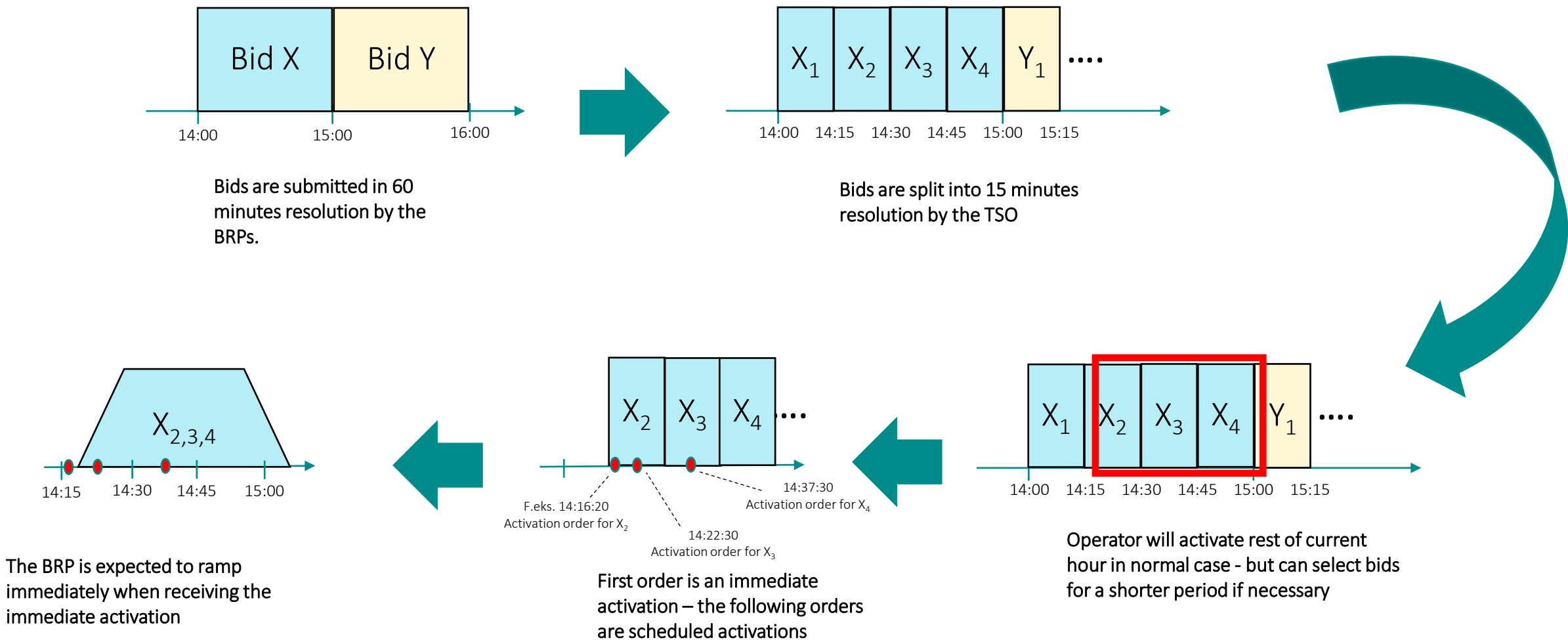
The following actors/companies are represented at the mFRR EAM stakeholder meeting:

- ABB A/S
- Blue Power Partners
- Danfoss
- Danske Commodities
- Grønnegaard I/S
- Kinect Energy
- Norlys Energy Trading A/S
- Steen Lærke Consult
- Volute Energy Market Service
- Ørsted A/S
- BeGreen
- Centrica Energy
- Dansk Fjernvarme
- Everfuel A/S
- HOFOR
- Nordic Energy Trading
- Rambøll
- Vattenfall A/S
- Zeppelin Power Systems

LOCAL DIRECT ACTIVATION - AFTER GO-LIVE

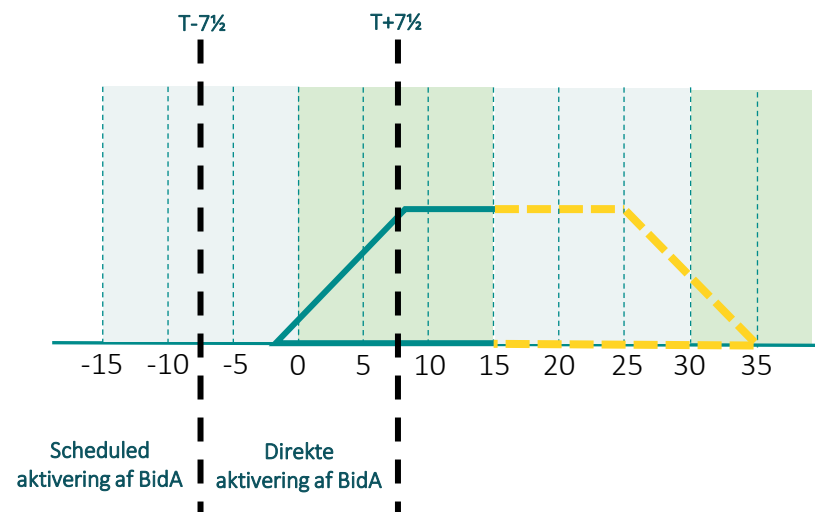
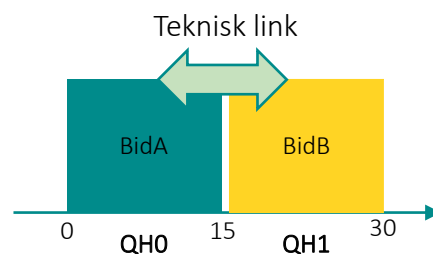
EXISTING MODEL FOR DIRECT ACTIVATION

15 minutes activation resolution – but still 60 minutes balancing timeframe



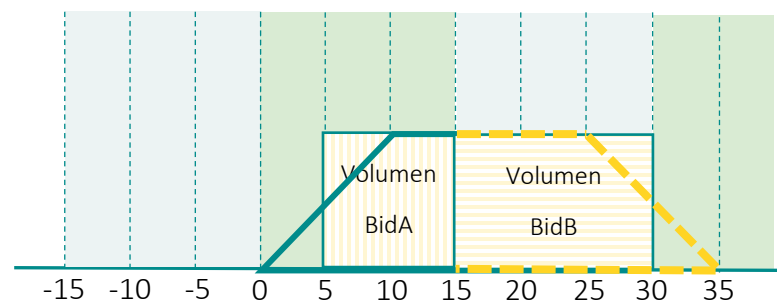
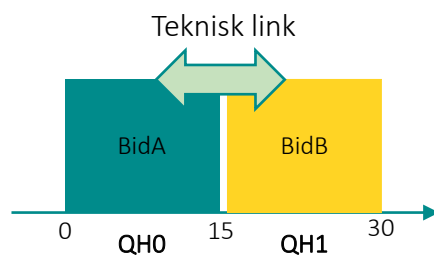
LOCAL DIRECT ACTIVATION (AFTER GO-LIVE DECEMBER 3, 2024)

BidA runs for the rest of the current quarter – BidB is always activated in the following quarter.



LOCAL DIRECT ACTIVATION

Calculation of ordered quantity – for energy settlement and imbalance settlement



linkedBidsIdentification	O	<p>Unique identification used to associate technically linked bids. Proper UUID is required.</p> <p>Not used if bid is not technically linked.</p> <p>For non-standard <i>överbelastningshantering - störning</i> bids in Sweden <u>all bids for the same regulation object must be technically linked</u></p>
--------------------------	---	--

standard_MarketProduct.marketProductType	M	<p>A05 – Standard mFRR product eligible for scheduled activation only</p> <p>A07 – Standard mFRR product eligible for scheduled and direct activation</p> <p>A02 – Non-standard product not eligible for the scheduled or direct activation processes.</p> <p>Z01 – Stand-alone period shift. To be used when period shift is not combined with standard mFRR product (A05 or A07). Must be indivisible simple bids⁴. Applicable only to bids in Norway.</p>
--	---	---

LOCAL DIRECT ACTIVATION

- Bids that can be directly activated must be technically linked to another bid in the subsequent quarter and be registered with marketProductType = A07.
- Quantity and price can vary between the two linked bids.
- The linked bid in the subsequent quarter will always be activated if a bid in the current quarter is directly activated.
- The quantity for bids that are directly activated (BidA) is calculated with a ramp - both in terms of energy billing and imbalance settlement. Standard ramp is 10 minutes.
- Both bid activations only affect the marginal price for the quarter in which they are registered.
- Quantity corresponding to the result from the capacity market must be registered as directly activatable bids in the energy activation market.

CHANGE IN FAT- REQUIREMENTS

CHANGE IN FAT-REQUIREMENTS IN MFRR EAM

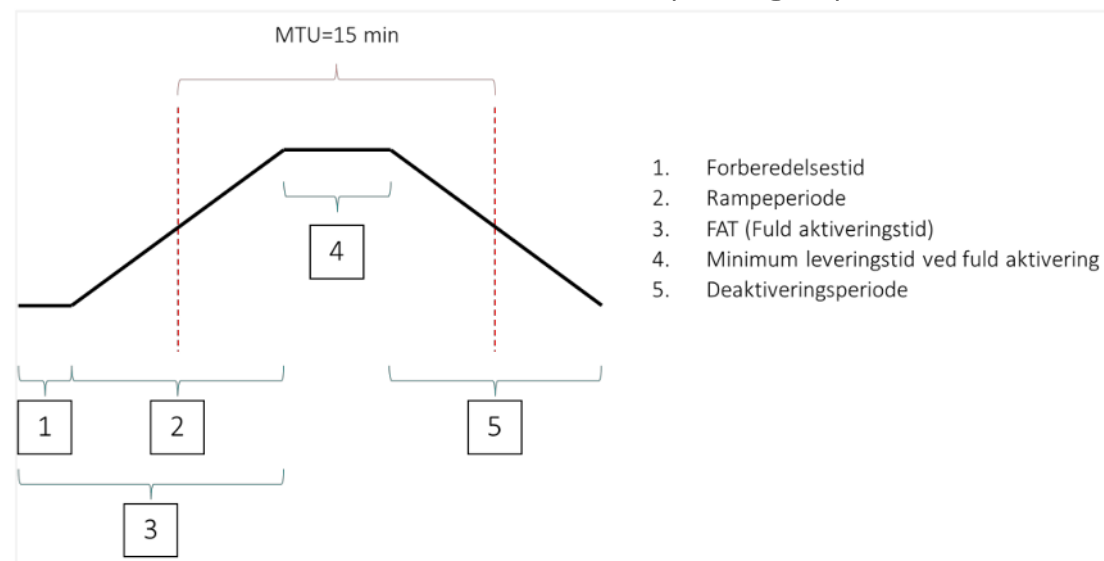
From 15 minutes to 12,5 minutes FAT

- From the go-live of mFRR EAM, the requirement for a full activation time of 12.5 minutes for mFRR energy activations will come into effect.
- Initially, Energinet announced that the requirement would come with the transition to MARI, to give actors ample time to adjust to a FAT of 12.5 minutes. As MARI has been postponed to 2026, the requirement will be implemented instead from the go-live of mFRR EAM on December 3, 2024.
- Energinet aims to implement a FAT of 12.5 minutes for mFRR EAM for several reasons. Firstly, it relates to the automated, quarter-hourly operation where activations are sent to the actor 7.5 minutes before the quarter-hour. Additionally, Energinet desires harmonized rules among the Nordic TSOs. Moreover, deliveries according to a FAT of 12.5 minutes will be more in line with exchanges over HVDC.
- During prequalification for mFRR EAM, actors will be prequalified according to a FAT of 12.5 minutes. If a facility is not prequalified according to a FAT of 12.5 minutes before the go-live of mFRR EAM, Energinet will adjust the previous prequalification to ensure that the possible bid volume corresponds to a FAT of 12.5 minutes. For further information on prequalification, please go to [Prequalification and test \(energinet.dk\)](#) and [Krav til prækvalifikation af frivillige/energibud \(energinet.dk\)](#). If you have any questions regarding prequalification, please feel free to contact us at pq.audits@energinet.dk.

FAT 12.5 MIN IN SUM

- FAT 12.5 min is part of the standard product (mFRR Implementation Framework, article 7, paragraph 1).
- With specified delivery (mFRR Implementation Framework, article 7, paragraph 6).

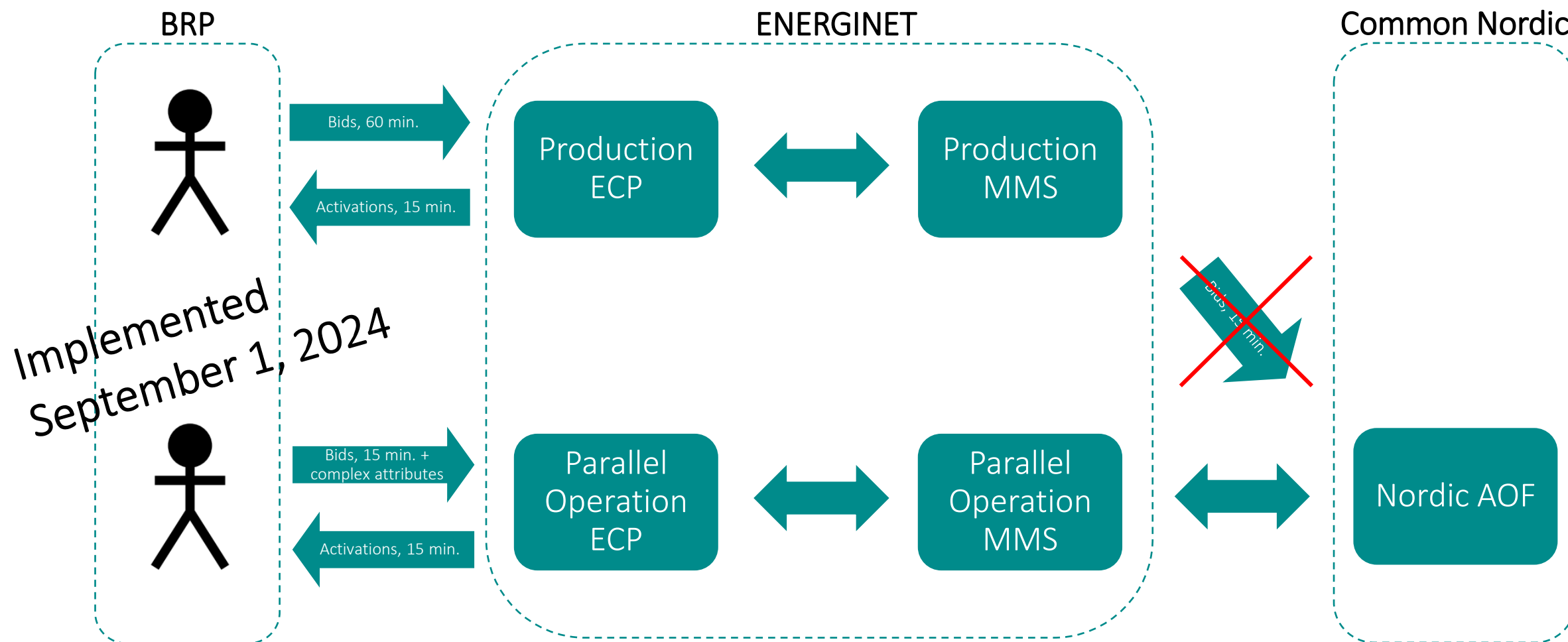
- Preparation time (2.5 min)
- Ramping period (10 min)
- Deactivation period (10 min)



Figur 2: Standardproduktet

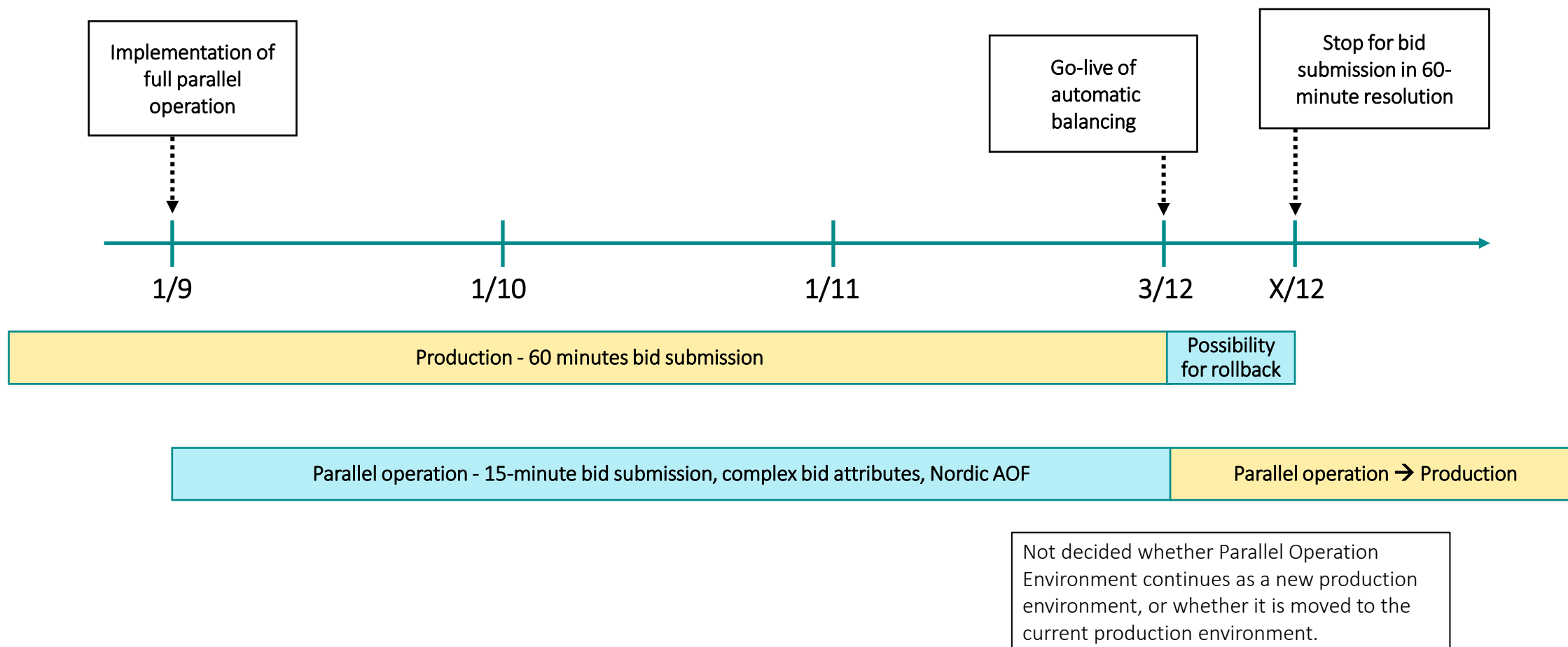
PARALLEL OPERATION, ROLLBACK AND TESTING

PARALLEL OPERATION FOR AUTOMATIC BALANCING



PRODUCTION VS. PARALLEL OPERATION

Princip skitse



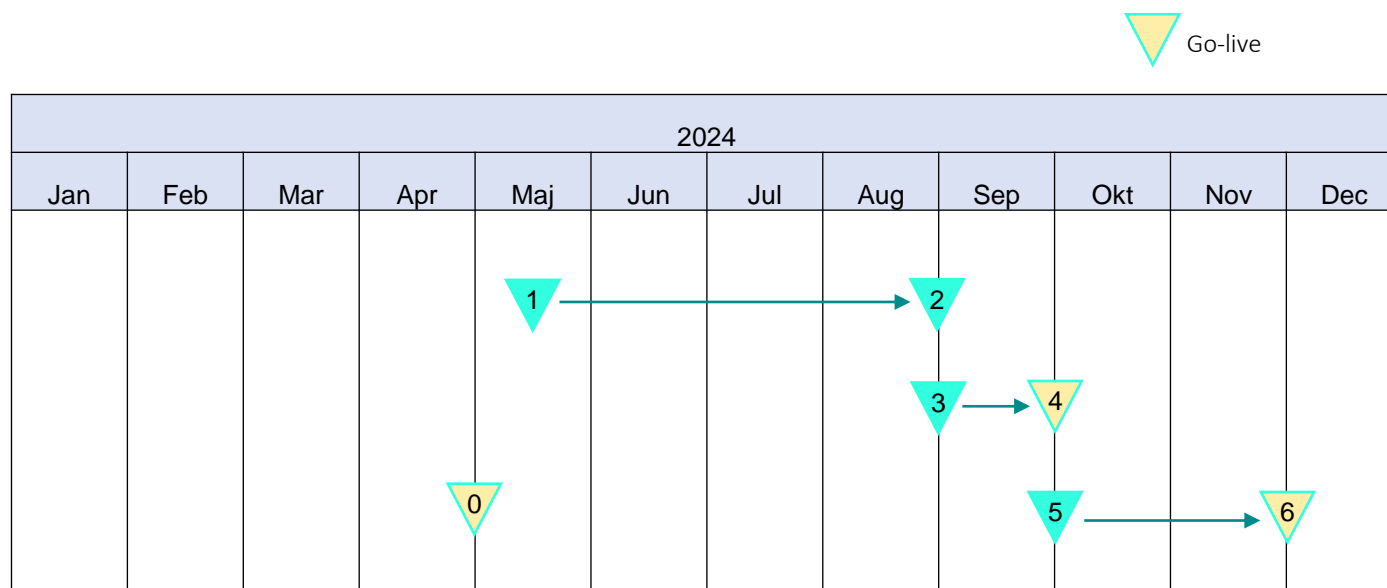
ROLLBACK








There is a clear distinction between *rollback* and *fallback*.

In a fallback scenario, the Nordic AOF is temporarily unavailable, and the Nordic TSO's balance their own control areas using local mFRR EAM bids alone until the AOF is available again. The need to fallback will occur intermittently – especially immediately after go-live, it is expected to happen more frequently than usual.

In a rollback scenario, the IT support is rolled back to before go-live. This means reverting to 60-minute bid submission and activation without the Nordic AOF. It is a permanent rollback, and it will require a new go-live to resume activation via the Nordic AOF. Rollback will only be an option for a few days after go-live, and it's a lever the Nordic TSO's need to have but do not expect to use.

BRP PLAN FOR AUTOMATIC BALANCING







Milestone	Milestone description	Date
	Redundant mechanism for bud submission in webportal	01.05.2024 ✓
	BRPs can start testing bids in 15 minutes resolution and complex bid attributes.	Medio maj 2024
	Full parallel operation established with all BRPs submitting bids in 15 minutes resolution.	01.09.2024
	Start testing of Bid Availability Report (for both mFRR and aFRR)	01.09.2024
	Go-live of Bid Availability Report	01.10.2024
	Start testing of Health Check message and Activation Result message (ReserveAllocationResult).	01.10.2024
	Go-live of automatic balancing	03.12.2024

































CHANGES IN THE NEW SELF-SERVICE PORTAL

OVERVIEW OF IMPROVEMENTS

- Redundant bid submission - limit of 13MB for manually submitted CIM bids
- Added two new attributes: Geolocations and Note
- Refresh button
- Improved look-and-feel

01/04/2024 09:30     **DK1 and DK2** DK1 DK2 **MW up and down** MW up MW down





















































CHOOSE / DROP FILE **UPLOAD** **REFRESH BIDS** 

09:30 - 09:45			09:45 - 10:00			10:00 - 10:15			10:15 - 10:30			10:30 - 10:45			10:45 - 11:00			11:00 - 11:15			11:15 - 11:30			11:30 - 11:45	
Area	MW	Price	Area	MW	Price	Area	MW	Price	Area	MW	Price	Area	MW	Price	Area	MW	Price	Area	MW	Price	Area	MW	Price	Area	MW
DK1	-38	30.57	DK1	-38	30.57	DK2	-27 	182.79	DK2	-27 	182.79	DK2	-27 	182.79	DK2	-27 	182.79	DK1	-24	57.66	DK1	-24	57.66	DK1	-24
DK2	21 	125.24	DK2	21 	125.24	DK2	-37	147.08	DK2	-37	147.08	DK2	-37	147.08	DK2	-37	147.08	DK2	-32 	97.73	DK2	-32 	97.73	DK2	-32 
DK1	-42 	10.38	DK1	-42 	10.38	DK2	19 	51.92	DK2	19 	51.92	DK2	19 	51.92	DK2	19 	51.92	DK1	-49 	104.37	DK1	-49 	104.37	DK1	-49 
DK2	-46	2.78	DK2	-46	2.78	DK1	-10 	139.47	DK1	-10 	139.47	DK1	-10 	139.47	DK1	-10 	139.47	DK2	-31	84.49	DK2	-31	84.49	DK2	-31
DK1	24	85.98	DK1	24	85.98	DK2	23 	115.02	DK2	23 	115.02	DK2	23 	115.02	DK2	23 	115.02	DK2	8	174.14	DK2	8	174.14	DK2	8
DK1	48	97.05	DK1	48	97.05	DK1	31 	32.85	DK1	31 	32.85	DK1	31 	32.85	DK1	31 	32.85	DK1	-6	112.06	DK1	-6	112.06	DK1	-6
DK1	50	42.80	DK1	50	42.80	DK1	-7	113.00	DK1	-7	113.00	DK1	-7	113.00	DK1	-7	113.00	DK1	32 	42.17	DK1	32 	42.17	DK1	32 
DK1	37	133.79	DK1	37	133.79	DK1	-50	157.43	DK1	-50	157.43	DK1	-50	157.43	DK1	-50	157.43	DK2	18	54.19	DK2	18	54.19	DK2	18
DK2	-10 	168.86	DK2	-10 	168.86	DK2	-9	114.36	DK2	-9	114.36	DK2	-9	114.36	DK2	-9	114.36	DK1	-39 	67.57	DK1	-39 	67.57	DK1	-39 
DK2	-19	42.85	DK2	-19	42.85	DK1	-8 	2.37	DK1	-8 	2.37	DK1	-8 	2.37	DK1	-8 	2.37	DK2	-31	150.57	DK2	-31	150.57	DK2	-31
DK2	-40	187.32	DK2	-40	187.32	DK1	16 	91.75	DK1	16 	91.75	DK1	16 	91.75	DK1	16 	91.75	DK1	-36	62.65	DK1	-36	62.65	DK1	-36
DK1	12 	157.17	DK1	12 	157.17	DK1	48	18.30	DK1	48	18.30	DK1	48	18.30	DK1	48	18.30	DK2	-15	47.65	DK2	-15	47.65	DK2	-15
DK2	9 	19.12	DK2	9 	19.12	DK1	37	141.96	DK1	37	141.96	DK1	37	141.96	DK1	37	141.96	DK2	48	3.22	DK2	48	3.22	DK2	48
DK1	-9	94.26	DK1	-9	94.26	DK1	48	62.22	DK1	48	62.22	DK1	48	62.22	DK1	48	62.22	DK1	-47	150.07	DK1	-47	150.07	DK1	-47
DK1	-41	123.29	DK1	-41	123.29	DK1	-15 	6.96	DK1	-15 	6.96	DK1	-15 	6.96	DK1	-15 	6.96	DK2	12 	25.93	DK2	12 	25.93	DK2	12 
DK2	-16	176.26	DK2	-16	176.26	DK1	37	122.73	DK1	37	122.73	DK1	37	122.73	DK1	37	122.73	DK1	50	0.33	DK1	50	0.33	DK1	50
DK1	11 	153.68	DK1	11 	153.68	DK2	-11 	12.51	DK2	-11 	12.51	DK2	-11 	12.51	DK2	-11 	12.51	DK2	23 	60.55	DK2	23 	60.55	DK2	23 
DK2	19	166.35	DK2	19	166.35	DK1	44 	94.02	DK1	44 	94.02	DK1	44 	94.02	DK1	44 	94.02	DK2	-42 	167.19	DK2	-42 	167.19	DK2	-42 
DK1	20 	113.00	DK1	20 	113.00	DK1	-17 	69.69	DK1	-17 	69.69	DK1	-17 	69.69	DK1	-17 	69.69	DK2	-40	185.79	DK2	-40	185.79	DK2	-40
DK1	13	152.46	DK1	13	152.46	DK1	-6 	38.24	DK1	-6 	38.24	DK1	-6 	38.24	DK1	-6 	38.24	DK2	-20 	153.62	DK2	-20 	153.62	DK2	-20 
DK2	-15	9.69	DK2	-15	9.69	DK1	50	55.69	DK1	50	55.69	DK1	50	55.69	DK1	50	55.69	DK1	38 	91.30	DK1	38 	91.30	DK1	38 
DK2	-37 	158.98	DK2	-37 	158.98	DK1	23	28.06	DK1	23	28.06	DK1	23	28.06	DK1	23	28.06	DK2	-38 	72.00	DK2	-38 	72.00	DK2	-38 
DK2	7	198.32	DK2	7	198.32	DK2	-43	111.71	DK2	-43	111.71	DK2	-43	111.71	DK2	-43	111.71	DK1	16	176.35	DK1	16	176.35	DK1	16
DK1	6	126.30	DK1	6	126.30	DK2	46	119.36	DK2	46	119.36	DK2	46	119.36	DK2	46	119.36	DK2	-19	101.81	DK2	-19	101.81	DK2	-19
DK1	-16	114.29	DK1	-16	114.29	DK1	-39 	169.03	DK1	-39 	169.03	DK1	-39 	169.03	DK1	-39 	169.03	DK1	41	114.75	DK1	41	114.75	DK1	41
DK2	43	36.55	DK2	43	36.55	DK1	-7 	10.83	DK1	-7 	10.83	DK1	-7 	10.83	DK1	-7 	10.83	DK1	-47	125.28	DK1	-47	125.28	DK1	-47

01/04/2024 08:00    

DK1 and DK2 **DK1** DK2 MW up and down MW up MW down

CHOOSE / DROP FILE  REFRESH BIDS 



08:00 - 08:15					08:15 - 08:30					08:30 - 08:45					08:45 - 09:00			
Area	MW	Price ↑	Reason Code	Geolocations	Area	MW	Price ↑	Reason Code	Geolocations	Area	MW	Price ↑	Reason Code	Geolocations	Area	MW	Price ↑	Reason Code
DK1	49	0.25	Balance Nordisk	ADL_150, AHA_220	DK1	49	0.25	Balance Nordisk	ADL_150, AHA_220	DK1	49	0.25	Balance Nordisk	ADL_150, AHA_220	DK1	49	0.25	Balance Nordisk
DK1	9	1.31	Balance Nordisk	ADL_150, AHA_220	DK1	9	1.31	Balance Nordisk	ADL_150, AHA_220	DK1	9	1.31	Balance Nordisk	ADL_150, AHA_220	DK1	9	1.31	Balance Nordisk
DK1	-23	1.59	Balance Nordisk	ADL_150, AHA_220	DK1	-23	1.59	Balance Nordisk	ADL_150, AHA_220	DK1	-23	1.59	Balance Nordisk	ADL_150, AHA_220	DK1	-23	1.59	Balance Nordisk
DK1	-13	5.05	Balance Nordisk	ADL_150, AHA_220	DK1	-13	5.05	Balance Nordisk	ADL_150, AHA_220	DK1	-13	5.05	Balance Nordisk	ADL_150, AHA_220	DK1	-13	5.05	Balance Nordisk
DK1	-45 	6.07	Balance Nordisk	ADL_150, AHA_220	DK1	-45 	6.07	Balance Nordisk	ADL_150, AHA_220	DK1	-45 	6.07	Balance Nordisk	ADL_150, AHA_220	DK1	-45 	6.07	Balance Nordisk
DK1	-19	8.82	Balance Nordisk	ADL_150, AHA_220	DK1	-19	8.82	Balance Nordisk	ADL_150, AHA_220	DK1	-19	8.82	Balance Nordisk	ADL_150, AHA_220	DK1	-19	8.82	Balance Nordisk
DK1	-38	10.36	Balance Nordisk	ADL_150, AHA_220	DK1	-38	10.36	Balance Nordisk	ADL_150, AHA_220	DK1	-38	10.36	Balance Nordisk	ADL_150, AHA_220	DK1	-38	10.36	Balance Nordisk
DK1	48 	10.64	Balance Nordisk	ADL_150, AHA_220	DK1	48 	10.64	Balance Nordisk	ADL_150, AHA_220	DK1	48 	10.64	Balance Nordisk	ADL_150, AHA_220	DK1	48 	10.64	Balance Nordisk
DK1	46 	10.85		ADL_150, AHA_220	DK1	46 	10.85		ADL_150, AHA_220	DK1	46 	10.85		ADL_150, AHA_220	DK1	46 	10.85	
DK1	43 	11.59		ADL_150, AHA_220	DK1	43 	11.59		ADL_150, AHA_220	DK1	43 	11.59		ADL_150, AHA_220	DK1	43 	11.59	
DK1	-29 	12.31		ADL_150, AHA_220	DK1	-29 	12.31		ADL_150, AHA_220	DK1	-29 	12.31		ADL_150, AHA_220	DK1	-29 	12.31	
DK1	-35 	15.21		ADL_150, AHA_220	DK1	-35 	15.21		ADL_150, AHA_220	DK1	-35 	15.21		ADL_150, AHA_220	DK1	-35 	15.21	
DK1	-49	16.92		ADL_150, AHA_220	DK1	-49	16.92		ADL_150, AHA_220	DK1	-49	16.92		ADL_150, AHA_220	DK1	-49	16.92	
DK1	-31 	17.14		ADL_150, AHA_220	DK1	-31 	17.14		ADL_150, AHA_220	DK1	-31 	17.14		ADL_150, AHA_220	DK1	-31 	17.14	
DK1	-22	21.62		ADL_150, AHA_220	DK1	-22	21.62		ADL_150, AHA_220	DK1	-22	21.62		ADL_150, AHA_220	DK1	-22	21.62	
DK1	48 	23.27		ADL_150, AHA_220	DK1	48 	23.27		ADL_150, AHA_220	DK1	48 	23.27		ADL_150, AHA_220	DK1	48 	23.27	
DK1	-20 	24.91		ADL_150, AHA_220	DK1	-20 	24.91		ADL_150, AHA_220	DK1	-20 	24.91		ADL_150, AHA_220	DK1	-20 	24.91	
DK1	5	25.59		ADL_150, AHA_220	DK1	5	25.59		ADL_150, AHA_220	DK1	5	25.59		ADL_150, AHA_220	DK1	5	25.59	
DK1	6 	26.83		ADL_150, AHA_220	DK1	6 	26.83		ADL_150, AHA_220	DK1	6 	26.83		ADL_150, AHA_220	DK1	6 	26.83	
DK1	-7 	27.64		ADL_150, AHA_220	DK1	-7 	27.64		ADL_150, AHA_220	DK1	-7 	27.64		ADL_150, AHA_220	DK1	-7 	27.64	
DK1	31 	28.45		ADL_150, AHA_220	DK1	31 	28.45		ADL_150, AHA_220	DK1	31 	28.45		ADL_150, AHA_220	DK1	31 	28.45	
DK1	-46 	28.61		ADL_150, AHA_220	DK1	-46 	28.61		ADL_150, AHA_220	DK1	-46 	28.61		ADL_150, AHA_220	DK1	-46 	28.61	
DK1	-45	28.69		ADL_150, AHA_220	DK1	-45	28.69		ADL_150, AHA_220	DK1	-45	28.69		ADL_150, AHA_220	DK1	-45	28.69	
DK1	50	30.53		ADL_150, AHA_220	DK1	50	30.53		ADL_150, AHA_220	DK1	50	30.53		ADL_150, AHA_220	DK1	50	30.53	
DK1	17	31.61		ADL_150, AHA_220	DK1	17	31.61		ADL_150, AHA_220	DK1	17	31.61		ADL_150, AHA_220	DK1	17	31.61	
DK1	20	32.67		ADL_150, AHA_220	DK1	20	32.67		ADL_150, AHA_220	DK1	20	32.67		ADL_150, AHA_220	DK1	20	32.67	

RESOURCE SCHEDULES

STATUS

BIDS AND ACTIVATION

01/04/2024 09:30



DK1 and DK2

DK1

DK2

MW up and down

MW up

















MW down

CHOOSE / DROP FILE

UPLOAD

REFRESH BIDS



09:30 - 09:45								09:45 - 10:00							
Area	MW	Price	Activated MW	Bid ID	Reason Code	Note	Geolocations	Area	MW	Price	Activated MW	Bid ID	Reason Code	Note	
DK1	-38	30.57	0	9cf5b6f5-3fdd-4369-8bca-50749b5382de		Lorem ipsum dolor sit a...	ADL_150, AHA_220	DK1	-38	30.57	0	9cf5b6f5-3fdd-4369-8bca-50749b5382de		Lorem ipsum dolor sit a...	
DK2	21 	125.24	0	42993c6a-e5e4-493b-abf0-bd0d883400d5		Lorem ipsum dolor sit a...	ALL_132, AMK_132	DK2	21 	125.24	0	42993c6a-e5e4-493b-abf0-bd0d883400d5		Lorem ipsum dolor sit a...	
DK1	-42 	10.38	0	7a6832e2-bc5a-42a4-a08f-62ef2881e9a9		Lorem ipsum dolor sit a...	ADL_150, AHA_220	DK1	-42 	10.38	0	7a6832e2-bc5a-42a4-a08f-62ef2881e9a9		Lorem ipsum dolor sit a...	
DK2	-46	2.78	0	e3c06cc1-0713-4e8b-acd7-c9ebbcafc950		Lorem ipsum dolor sit a...	ALL_132, AMK_132	DK2	-46	2.78	0	e3c06cc1-0713-4e8b-acd7-c9ebbcafc950		Lorem ipsum dolor sit a...	
DK1	24	85.98	0	dd33887e-a3ef-4452-8f44-3ede0f38b6b5		Lorem ipsum dolor sit a...	ADL_150, AHA_220	DK1	24	85.98	0	dd33887e-a3ef-4452-8f44-3ede0f38b6b5		Lorem ipsum dolor sit a...	
DK1	48	97.05	0	9321ff26-8a4a-46a9-bd3b-1fae31756623		Lorem ipsum dolor sit a...	ADL_150, AHA_220	DK1	48	97.05	0	9321ff26-8a4a-46a9-bd3b-1fae31756623		Lorem ipsum dolor sit a...	
DK1	50	42.80	0	916ed953-fc71-42f9-87df-43c679f3280d		Lorem ipsum dolor sit a...	ADL_150, AHA_220	DK1	50	42.80	0	916ed953-fc71-42f9-87df-43c679f3280d		Lorem ipsum dolor sit a...	
DK1	37	133.79	0	3ee65b5c-0747-4e1e-a8a1-75e10723c937		Lorem ipsum dolor sit a...	ADL_150, AHA_220	DK1	37	133.79	0	3ee65b5c-0747-4e1e-a8a1-75e10723c937		Lorem ipsum dolor sit a...	
DK2	-10 	168.86	0	571bd983-bc9e-44d2-8be8-dd90b0be92bf		Lorem ipsum dolor sit a...	ALL_132, AMK_132	DK2	-10 	168.86	0	571bd983-bc9e-44d2-8be8-dd90b0be92bf		Lorem ipsum dolor sit a...	
DK2	-19	42.85	0	b4414939-ec59-4e12-a033-6237114b9f2b		Lorem ipsum dolor sit a...	ALL_132, AMK_132	DK2	-19	42.85	0	b4414939-ec59-4e12-a033-6237114b9f2b		Lorem ipsum dolor sit a...	
DK2	-40	187.32	0	5a9d6e35-0982-46e1-9d54-0ee398c4a11e		Lorem ipsum dolor sit a...	ALL_132, AMK_132	DK2	-40	187.32	0	5a9d6e35-0982-46e1-9d54-0ee398c4a11e		Lorem ipsum dolor sit a...	
DK1	12 	157.17	0	88c337e9-285e-4548-9527-87f3ee018cd7		Lorem ipsum dolor sit a...	ADL_150, AHA_220	DK1	12 	157.17	0	88c337e9-285e-4548-9527-87f3ee018cd7		Lorem ipsum dolor sit a...	
DK2	9 	19.12	0	e3e78a7b-2241-419b-8b81-f0323ac33e5d		Lorem ipsum dolor sit a...	ALL_132, AMK_132	DK2	9 	19.12	0	e3e78a7b-2241-419b-8b81-f0323ac33e5d		Lorem ipsum dolor sit a...	
DK1	-9	94.26	0	c9522be6-2dce-4880-bc38-bfee658f2f38		Lorem ipsum dolor sit a...	ADL_150, AHA_220	DK1	-9	94.26	0	c9522be6-2dce-4880-bc38-bfee658f2f38		Lorem ipsum dolor sit a...	
DK1	-41	123.29	0	b336b71e-02a0-4dd0-aeaf-b31a7c02e2bb		Lorem ipsum dolor sit a...	ADL_150, AHA_220	DK1	-41	123.29	0	b336b71e-02a0-4dd0-aeaf-b31a7c02e2bb		Lorem ipsum dolor sit a...	
DK2	-16	176.26	0	379eb083-b3f1-4392-b002-3f1c939fdc06		Lorem ipsum dolor sit a...	ALL_132, AMK_132	DK2	-16	176.26	0	379eb083-b3f1-4392-b002-3f1c939fdc06		Lorem ipsum dolor sit a...	
DK1	11 	153.68	0	1d557438-f303-4e90-860b-51f50610fb2f		Lorem ipsum dolor sit a...	ADL_150, AHA_220	DK1	11 	153.68	0	1d557438-f303-4e90-860b-51f50610fb2f		Lorem ipsum dolor sit a...	
DK2	19	166.35	0	0f3818cd-c62b-4f58-b36a-31596ae5a885		Lorem ipsum dolor sit a...	ALL_132, AMK_132	DK2	19	166.35	0	0f3818cd-c62b-4f58-b36a-31596ae5a885		Lorem ipsum dolor sit a...	
DK1	20 	113.00	0	907e53fb-08f1-4d95-9904-414d517c4201		Lorem ipsum dolor sit a...	ADL_150, AHA_220	DK1	20 	113.00	0	907e53fb-08f1-4d95-9904-414d517c4201		Lorem ipsum dolor sit a...	
DK1	13	152.46	0	0a8c826c-61bf-4bcd-8f53-d8e3cd1ed15e		Lorem ipsum dolor sit a...	ADL_150, AHA_220	DK1	13	152.46	0	0a8c826c-61bf-4bcd-8f53-d8e3cd1ed15e		Lorem ipsum dolor sit a...	
DK2	-15	9.69	0	1da8d8f2-890d-4658-9390-294f8f51f7bf		Lorem ipsum dolor sit a...	ALL_132, AMK_132	DK2	-15	9.69	0	1da8d8f2-890d-4658-9390-294f8f51f7bf		Lorem ipsum dolor sit a...	
DK2	-37 	158.98	0	4ecabebc-a43c-48e2-9996-887d727cd9a9		Lorem ipsum dolor sit a...	ALL_132, AMK_132	DK2	-37 	158.98	0	4ecabebc-a43c-48e2-9996-887d727cd9a9		Lorem ipsum dolor sit a...	
DK2	7	198.32	0	c0ba17f2-a40e-42ac-b02b-ceb716923318		Lorem ipsum dolor sit a...	ALL_132, AMK_132	DK2	7	198.32	0	c0ba17f2-a40e-42ac-b02b-ceb716923318		Lorem ipsum dolor sit a...	
DK1	6	126.30	0	9ea1e7b6-c70d-4c68-886e-0a01285abdac		Lorem ipsum dolor sit a...	ADL_150, AHA_220	DK1	6	126.30	0	9ea1e7b6-c70d-4c68-886e-0a01285abdac		Lorem ipsum dolor sit a...	
DK1	-16	114.29	0	45602022-3305-4968-8b8b-f15308278ab8		Lorem ipsum dolor sit a...	ADL_150, AHA_220	DK1	-16	114.29	0	45602022-3305-4968-8b8b-f15308278ab8		Lorem ipsum dolor sit a...	
DK2	43	36.55	0	aa9358eb-782a-42c2-ac27-2bc7baca0b7e		Lorem ipsum dolor sit a...	ALL_132, AMK_132	DK2	43	36.55	0	aa9358eb-782a-42c2-ac27-2bc7baca0b7e		Lorem ipsum dolor sit a...	

TESTING, SUPPORT NEEDS AND NEXT MEETING

TESTING OF BID SUBMISSION AND COMPLEX BID ATTRIBUTES."

Please contact Charlotte Bo Nielsen,
xchbn@energinet.dk to schedule the testing
period (May 20 - September 1)

ONLINE SUPPORT MEETINGS

Option for setting up 30-minute online support
meetings (1:1) 1-2 times per week.

NEXT MEETING

Mid August:

- Parallel operation, test status
- Preparation for go-live, cut over, rollback, hypercare

INFORMATION

About mFRR EAM: [mfrr energiaktiveringsmarked
\(energinet.dk\)](https://energinet.dk/mfrr-energiaktiveringsmarked)

Implementation guide for the current setup can be
found here: [Implementeringsguide mfrr-
energiaktiveringsmarked \(energinet.dk\)](https://energinet.dk/mfrr-energiaktiveringsmarked)

Implementation guide for the upcoming Nordic mFRR
EAM, go-live December 3rd, can be found here:
[Implementation guides – nordicbalancingmodel](https://nordicbalancingmodel.com/implementation-guides)

THANK YOU FOR TODAY 😊