

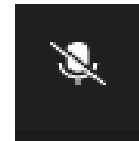
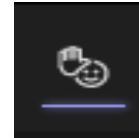
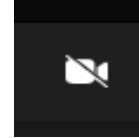
# Market Operator User Group

14<sup>th</sup> March 2024



# Housekeeping Rules

- Please keep your video switched off
- Raise your hand if you have a question
- When asked to unmute your line



*Thank you for your cooperation.*

# Welcome

# Anne Fitzgerald



Agenda Items	Presenters
Welcome	Anne Fitzgerald
Release Program	Mark Hogan
Future Markets: Scheduling and Dispatch	Seve Garanzuay
Ex-Ante Markets	Joaquin Iniguez de Gante
SEMOpX	Amy Yeung
SEMO Trading	Michael Atcheson
Settlements	Seán O'Rourke
System Operations IE & NI	Charlie McGee
Market Interface	Rosaleen Fanning



# Release Program

Mark Hogan



# Release Program Update: Releases in next 12 months

- Release M will include changes for Greenlink and is currently in test in EirGrid. The deployment date is subject to overall Greenlink deployment requirements.
- Release N will include the first tranche of changes for Schedule and Dispatch (SDP)
  - Currently in detailed design with the Vendor
  - Deployment dates to be confirmed
  - RA funding confirmed
- 3rd party software to be updated.



# Release Program Update

- Extensive market infrastructure refresh project underway
  - Replacing and updating infrastructure supporting ISEM virtual machines
  - Review of Market database architecture to reduce size of individual databases
- Microsoft has committed to supporting Microsoft Edge with IE mode until “at least 2029” ([link](#)) so we continue to recommend that approach until we have implemented native Edge and Chrome compatibility.



# Release M & N Contents

Release	Change Request ref.	Description
M	212	CSB/MI Value Import Screen Change
	301	Issuing audio alarms for any failing MMS applications
	303A	Greenlink: Registration, Market Information and Market Participant Interface changes required for Greenlink
	303B	Greenlink: Market Application changes required for Greenlink
	304	Treatment for Firm Curtailment (Part of SEM 22 009 decision - CEP Article 13.7 )
N	SDP_01	Operation of Non-Priority Dispatch of Renewables
	SDP_02	Energy Storage Power System Integration requirements



# Future Markets: Scheduling and Dispatch

Seve Garanzuay



# Scheduling & Dispatch Programme Overview

## Key Principles

For this complex programme...

1. Be **pragmatic** about solution pathways.
2. Solve the **immediate and urgent** problems at hand.
3. Don't allow perfect to be the enemy of **good**.
4. **Communicate** early and often - to all **stakeholders**.
5. Maintain **support of industry**.
6. **Actively manage** multidisciplinary delivery team.

**Achievable - Valuable - "Simple"**



## SDP Objective & Drivers

To enhance and improve the technology and capability of scheduling and dispatch in Ireland and Northern Ireland. This is driven by market participant needs, the EU Clean Energy Package mandates, and in support of the broader goals of renewables and System Non-Synchronous Penetration (SNSP) penetration targets.

- Clean Energy Package requirements - NPDR treatment
- Ireland and Northern Ireland Government renewables targets for the 80%/80% total renewable energy and 95+% system non-synchronous penetration (SNSP) on an instantaneous basis.
- Market Participant requests for certainty on treatment of renewable assets, batteries - revenue certainty.
- Market Participant requests for improvement in re-balancing and re-dispatching (prevailing weather).



## Scope of SDP



One component of the broader SOEF programme.

**Tranche 1:** - SDP-01 Operation of Non-Priority Dispatch Renewables (NPDR)

- SDP-02 Energy Storage Power Station (ESPS) integration
- SDP-04 Wind dispatchability improvements

**Tranche 2:** - SDP-03 Fast Frequency Response (FFR)

- SDP-05 Reserve services scheduling and dispatch
- SDP-06 Synchronous condenser scheduling and dispatch



## SDP Timeline



# SDP: Status Update (March 2024 MOUG)

- As planned, no issues
- Minor - moderate concern
- Significant issue / concern
- ↑ Improving
- ↔ Steady
- ↓ Worsening

Refreshed: 07 Mar 2024

This update is provided to the MOUG on 07 Mar 2024



## SDP

### Summary Status

Overall Status	<span style="color: green;">↑</span>	Overall programme status is upgraded to Green based on SEMC All-Island Programme sub-committee approving the full funding request for the S&D (phases 3-5) programme on Thursday 29th February. Strong support for SDP across stakeholder community.
Schedule	<span style="color: green;">↑</span>	SDP milestones have been shared with industry. SDP team are preparing detailed implementation plans and plan to publish additional milestones in June 2024. SDP continue to work with IT vendors on detailed design.
Resourcing	<span style="color: green;">↑</span>	TSO/MO programme teams are fully staffed and engaged to continue work at pace.
Finances	<span style="color: green;">↑</span>	SEMC All-Island Programme sub-committee approving the full funding request for the S&D (phases 3-5) programme on Thursday 29th February.

### Key Messages



#### MP Sentiment is **Amber (Improving)**

- MPs actively engaged and driving forward solutions
- Strong support for SDP



#### Key Activities For Immediate Action

- Consultation on SEM 13\_011 changes
- Tranche 2 design and engagement
- Preparation of detailed programme plan



#### Positive Developments (Since Last Report)

- Phase 3-5 Funding Approval
- Mods changes for SDP\_001 NPDR voted out of Mods Committee
- Continuing Detailed Design at pace (T1), Detailed Requirements (T2)
- Strong stakeholder engagement and alignment on f(x) approach



#### Challenges (Since Last Report)

- 



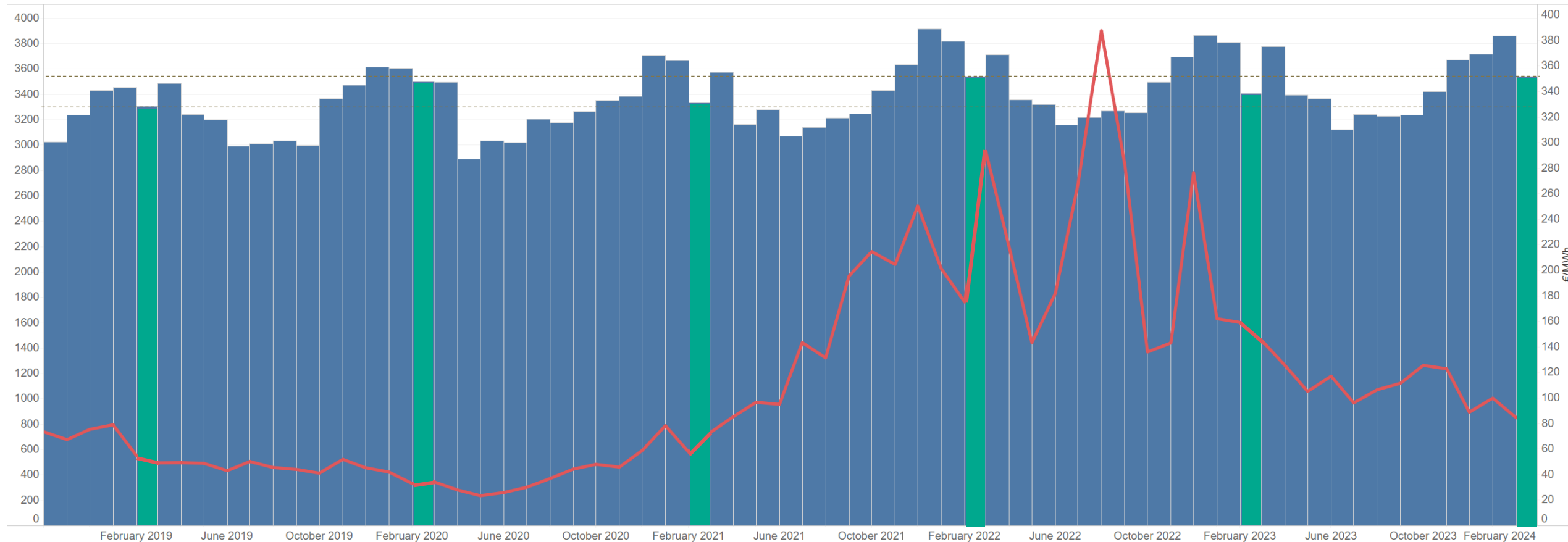
# Ex-Ante Markets

Joaquin Iniguez de Gante



# Ex-Ante Markets

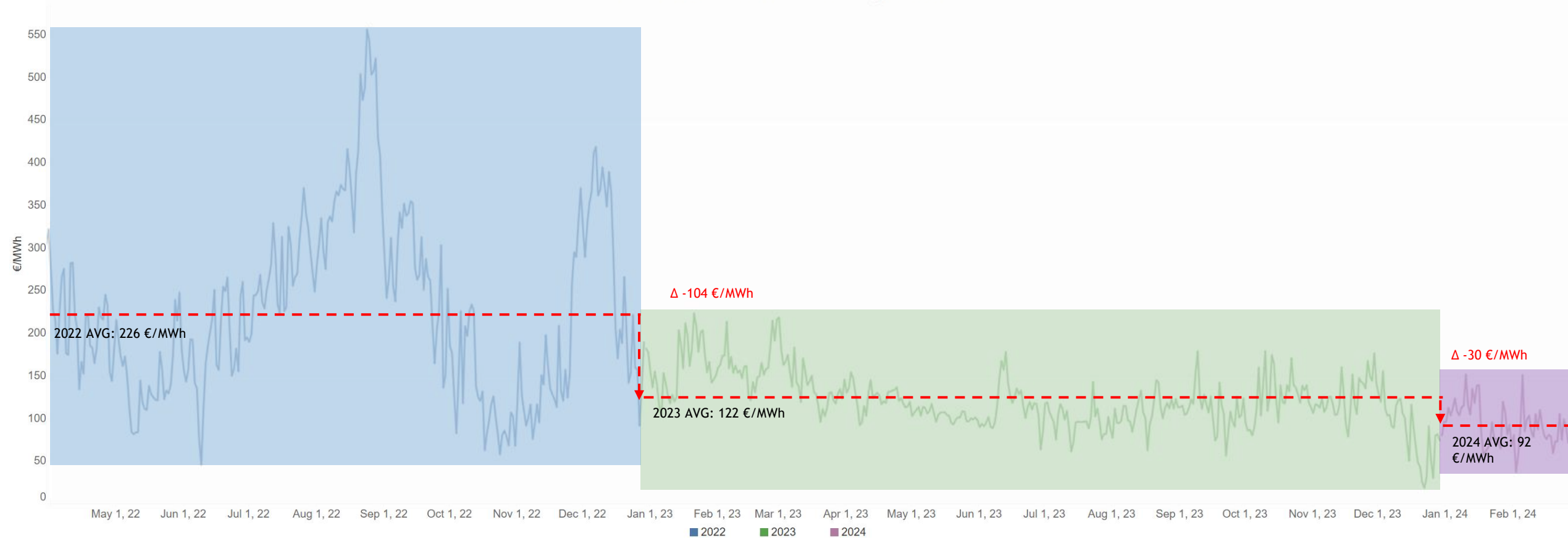
Volume Trade vs Average Price (DA)



- Traded Volumes in the DAM remain at levels like historical trends
- Continuous decrease in energy prices (20%) highly linked to gas prices and to the good generation of wind.

# Ex-Ante Markets

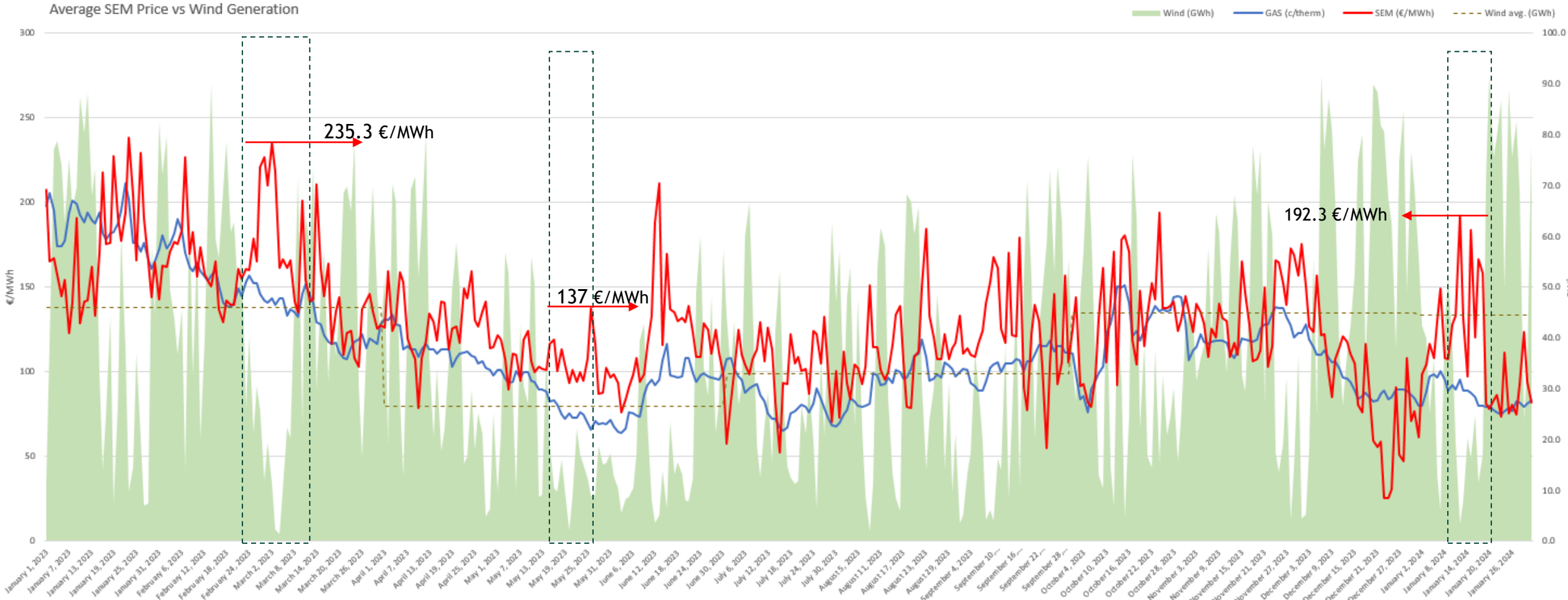
Ex-Ante Markets - DA Daily Prices



- At the beginning of 2024 DAM Prices had experienced a decrease of 60% compared to 2022 and 20% to 2023. Attributed to lower gas prices, lower demand than expected and higher wind generation.
- January 12 recorded the highest average price so far this year of 151.6 €/MWh.

# Ex-Ante Markets

Average SEM Price vs Wind Generation

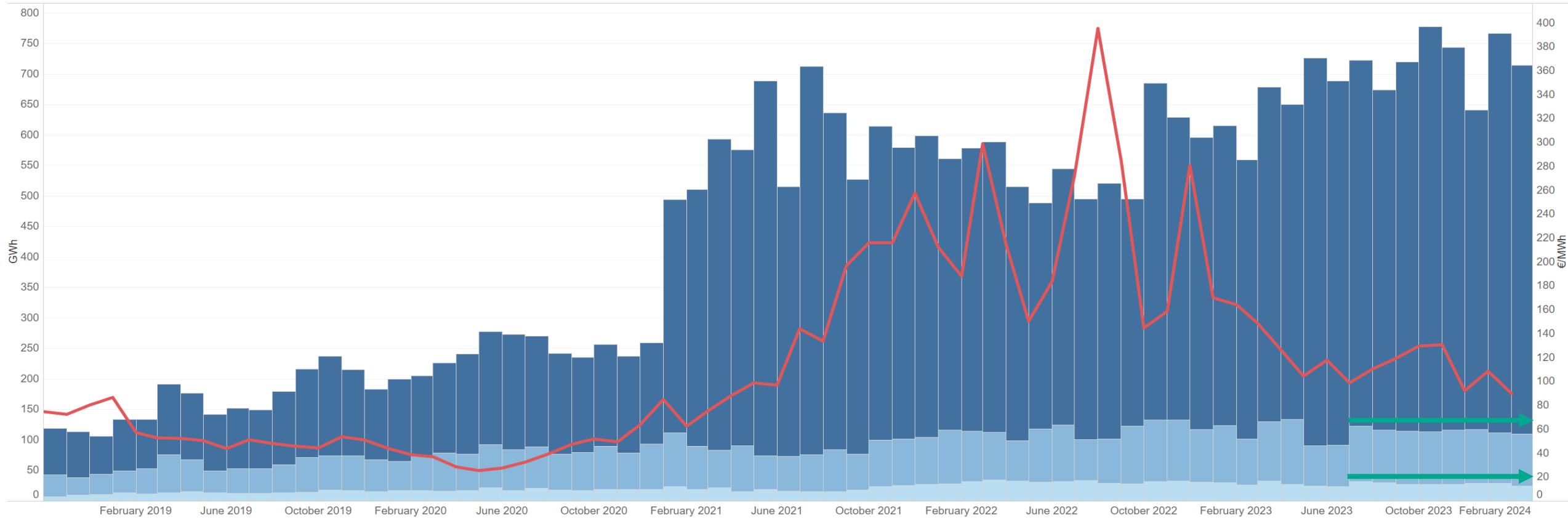


- Gas price seems to maintain a downward trend, which may be due to the "good" storage levels in Europe, low demand and good renewable generation.



# Ex-Ante Markets

Volume Trade vs Average Price (IDA1, IDA2, IDA3)



- Traded Volume on IDA1 continue to be influenced by interconnection.
- IDA2 and IDA3 have had a constant behavior where volumes have not changed considerably since the last quarter of 2023.
- There was an increase in IDA1 volume from December to January and February which is related to the 76% increase on imports.



# Ex-Ante Markets

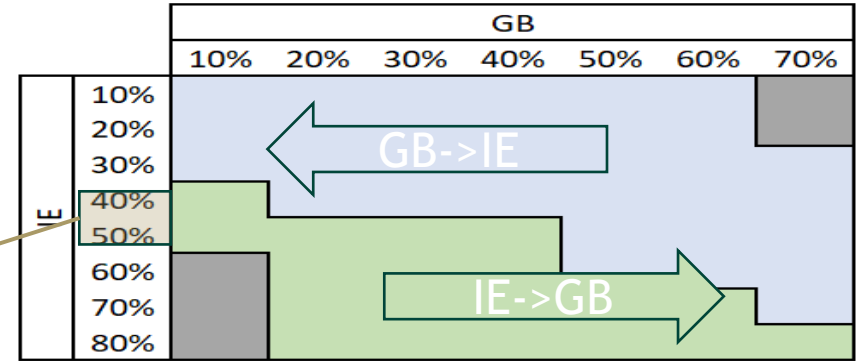
- 2024, has started with a predominant trend towards imports from GB.
- It has been observed that the penetration of renewable energy plays an important role in the behavior of the interconnector.
- SEM, by exceeding  $\approx 45\%$  penetration of renewables (wind) tends to push the flow of the interconnector to export.

## Renewables vs. Gas

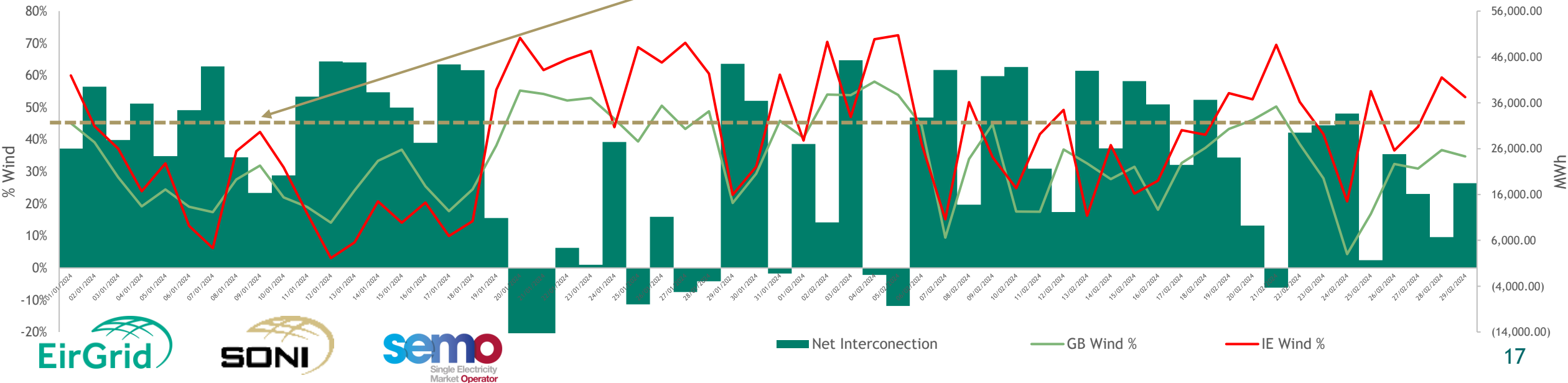
2024	Renewable GB	Gas GB	Renewable IE	Gas IE
Jan-Feb.	43%	36%	42%	$\approx 50\%$

## Interconnector Periods

2024	Import periods	Export Periods
Jan-Feb.	80%	20%



## Wind % (GB, IE) vs Net interconnection flow



# SEMOpX

## Amy Yeung



# ETS Releases

Version	Content	Client	Impact	Timeline*
V3.8	TBC	ETS Client	TBC	Mid-Late Q2 2024 (TBC)



# ETS Maintenance Windows

Date & Time	Impact	Reason	Communication
12/03/2024	Maintenance	Monthly Maintenance	OMM message (email sent a week in advance and on the same morning)
09/04/2024	Maintenance	Monthly Maintenance	OMM message (email sent a week in advance and on the same morning)
14/05/2024	Maintenance	Monthly Maintenance	OMM message (email sent a week in advance and on the same morning)
11/06/2024	Maintenance	Monthly Maintenance	OMM message (email sent a week in advance and on the same morning)



\*Regular maintenance: Between 18:40 and 21:15 GMT/IST every 2<sup>nd</sup> Tuesday of the Month.



# M7 Releases

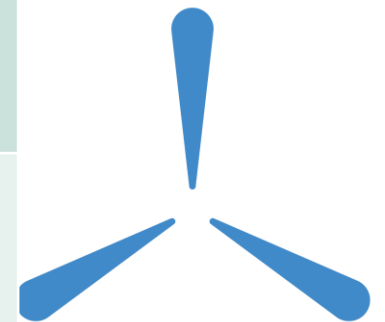
Version	Content	Impact	Timeline
V6.17	Release Go-live	<ul style="list-style-type: none"><li>• 2FA to be mandatory</li><li>• Unsubscribe from Market Data Broadcasts (option)</li><li>• Order Book Total Quantity calculation alignment (local contracts)</li></ul>	23rd April 2024

- M7 6.17 new client will need to be downloaded (not upgradable)
- Members are reminded to get their QR code or TOTP\* Key prior to Go-live
- With M7 6.17, 2FA becomes mandatory for login security enforcement. You will not be able to log in after 6.17 Go-Live without your TOTP data (QR code or TOTP Key).
- [M7 2FA User Guide](#), [M7 2FA Tutorial Video](#) and [M7 6.17 Release Comms](#)



# M7 Maintenance Windows

Date & time	Impact	Reason	Communication
12/03/2024	Maintenance	TBC	M7 chat message (1 hour before the maintenance) + OMM message (email sent a week in advance and on the same morning)
23/04/2024	Maintenance	v6.17 Go-Live	M7 chat message (1 hour before the maintenance) + OMM message (email sent a week in advance and on the same morning)
11/06/2024	Maintenance	TBC	M7 chat message (1 hour before the maintenance) + OMM message (email sent a week in advance and on the same morning)
09/07/2024	Maintenance	TBC	M7 chat message (1 hour before the maintenance) + OMM message (email sent a week in advance and on the same morning)



\*Regular maintenance: Between 18:40 and 21:15 GMT/IST every 2<sup>nd</sup> Tuesday of the Month.

# SEMOpX Update

- Daylight Saving Time 23

- Trade Date 31<sup>st</sup> March 2024
- Unexpected behaviour: ETS client becomes unresponsive when clicking on “Show Indexes” button for Auction day 30<sup>th</sup> March 2024 only.
  - API - not impacted
  - Other buttons - not affected
- Do not use this feature for Auction Day 30<sup>th</sup> March 2024. Use the Market results option instead.
- Issue is anticipated to be fixed in ETS Release 3.8
- Member Communication [here](#)

Market Global View - My view [Epex Trading System]

File View Format Settings Window Help

Day Type: AREA1

Auction Day: AREA1

From Date: 30/03/2024

Auction Status: All

Auction Group: All

Auction Name: All

Market Area: All

Delivery Day	Area	Portfolio	Auction Date Time	Order Book Status	Duration	Currency	Linear	Last Update Time	Block
31/03/2024	AREA1	Portfolio1	PWR- -D+1 2024-03-30-10:15 (cet/cest)	OBK Closed	60 min	EUR	Exists	20/02/2024 12:21:16	N/A
31/03/2024	AREA2	Portfolio2	PWR- -D+1 2024-03-30-10:15 (cet/cest)	OBK Closed	60 min	EUR	Deleted	20/02/2024 12:21:16	N/A

Show Linear Show Block Show Scalable Complex Show Market Results **Show Indexes** Show Notification

Messages:

Time	Text
------	------

# SEMOpX Useful Resources

- Documentation:

- [SEMOpX Auction Timing and Market Message document](#)
  - Relating to Auction Delays, Postponement of Orderbook Gate Closure, Partial and Full Decoupling, Second Auction, HMMCP increase/decrease
  - Unplanned system outages relating to ETS and M7
- [Trading on Behalf of fallback solution](#)

- Training Sessions:

- Upcoming IDA Member Decoupling Training Session (date TBC)
- SDAC DST Member Test (completed 12<sup>th</sup> March 2024)

- Website Materials:

- [ETS Trader Client Guide](#)
- [M7 ComTrader Client User Guide](#)
- [SEMOpX - Training Category Location \(Technical/Training etc\)](#)





# SEMOpX Update

## 30 Minute MTU Project

- Project kicked off at member meeting on 28th February 2024
- [Technical Specification](#) and [Sample Files](#) published on SEMOpX Website



## Greenlink Interconnector Project

- Project is ongoing - target of Market Coupling Go-Live in September 2024.



# SEMO Trading

## Michael Atcheson



# Repricing

- RPC11 Imbalance Pricing is applying a zero PBOA for Pump Storage units when dispatched to specific target MW levels; where no zero quantity has been submitted in the Price Quantity Pairs.
- Updated prices were published on Thursday 7<sup>th</sup> March 2024; all periods > 5% price change except 19:30 to 20:00.

Trading Day	Imbalance Settlement Period(s)	Billing Period End Date	Manifest Error ID	Materiality Assessment	Reprice Publication Date
01/07/2022	19:30 to 20:00 21:00 to 23:00	09/07/2022 (Week 28)	RPC11	29 <sup>th</sup> February 2024	7 <sup>th</sup> March 2024
02/07/2022	01:00 to 06:00	09/07/2022 (Week 28)	RPC11	29 <sup>th</sup> February 2024	7 <sup>th</sup> March 2024

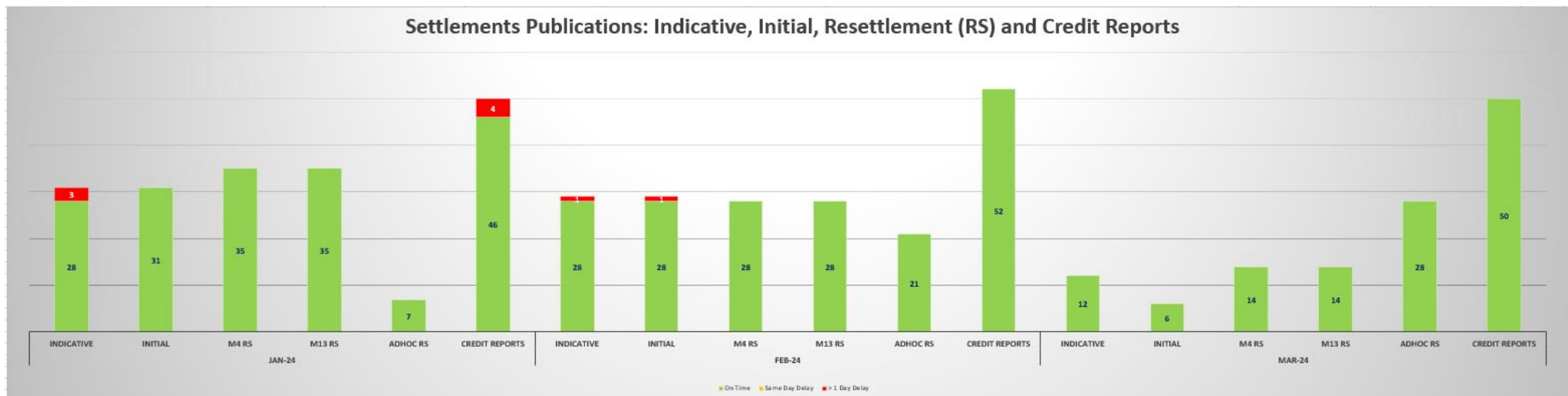
- Publication closes the backlog of existing repricing (approx. 2000 ISPs).
- Decision still pending on 5th August and 5th November 2021.

# Settlements

Seán O'Rourke



# Settlement publications & timelines: Jan - Mar 12<sup>th</sup> 2024



## Jan 2024

- **182** settlement publications on time
- 3 delayed indicatives due to delayed Settlements database issue (2) , Actual Availability data (ACTA, 1)
- 4 non-published credit reports due to Settlements database issue
- All issues now resolved

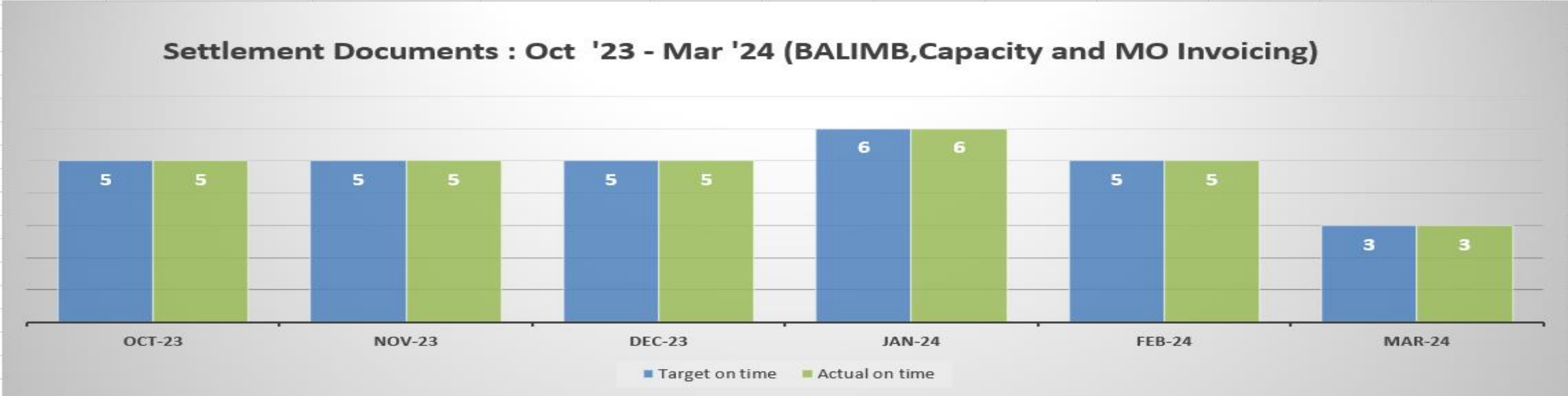
## Feb 2024

- **185** settlement publications on time
- 1 delayed Indicative & 1 delayed Initial publication (Instruction Profiler issue)
- All issues now resolved

## Mar 2024

- **124** settlement publications on time
- All publications on time

# Settlement Documents publications: Oct '23 - Mar 12<sup>th</sup>



**Settlement Document updates:**

- 29 Settlement Documents (SDs) published on time between Oct 2023 and Mar 12<sup>th</sup> 2024 (includes BALIMB, Capacity and MO Invoices)

# Ad hoc resettlement: Status update March 2024

## Ad hoc Iterations 1 & 2 - Completed and yet to process:

Year	2018												2019												2020																																																																																													
Week	39	40	41	42	43	44	45	46	47	48	49	50	51	52	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52
Adhoc1	[Green cells]																																																																																																																					
Adhoc2	[Green cells]																																																																																																																					

- Ad hoc iteration 1 is now fully complete.
  - Ad hoc iteration 2 is now fully complete.
- Cells in Red are adhoc weeks left to process

Cells in Green are settlements runs that have been issued
- There are 25 billing periods between 2020 and 2022 which require a final iteration of ad hoc resettlement. These billing periods are based on outstanding upheld formal queries which were dependent on a system fix to be deployed to fully resettle the impacted billing periods.
  - Of the 25 billing periods, 16 billing periods are scheduled to be published for Ad hoc resettlement over the months of Feb, Mar & Apr '24.
    - The remaining 9 billing periods are under review to determine the systems requirements & expected timelines for final resettlement.

Year	Ad hoc billing periods - number of weeks which can be scheduled for processing	Specific billing period weeks which can be resettled	Settlement Calendar timeline	Year	Ad hoc billing periods - number of weeks which under review	Specific billing period weeks which are under review	Settlement Calendar timeline
2020	3	1,49 &50	Feb-24	2020	2	10,26	tbc
2021	8	1,8,28,29,31,34,37,42	Mar-24	2021	5	26,33,42,44,47	tbc
2022	5	12,24,26,30,48	Apr-24	2022	2	10,45	tbc
<b>Total</b>	<b>16</b>	<i>Scheduled / Published</i>		<b>Total</b>	<b>9</b>	<i>System requirements under review pending Release M testing outcomes.</i>	

# Settlements: Oct 2022 FMOC invoice update

- FMOC Invoice published on Nov 15th included the incorrect CMOAU and CMOAV rates for ROI and NI market participants: **Ref:** [Market message](#) published on the 18/11/2022.
  - As per previous MOUG updates, SEMO Settlements had intended to publish an Oct 2022 MO Invoice which will reverse the original invoice issued, and to then re-publish the correct Oct 2022 MO invoice with the correct rates. End-to-end testing was required to complete the testing of this approach. As per TSC code, settlement systems are not designed to apply standard M4/M13 resettlement to FMOC data.

## MOUG Mar 2024 update

As per Market message updates on the 28/02/2024 and the 05/03/2024;

- SEMO Settlements issued a manual Market Operator invoice to market participants to resolve the October 2022 MO invoice rate issue.
- The invoice was in a PDF format (with the same contents and layout as a standard MO Monthly invoice) and was emailed out to impacted market participants on Tuesday, 5th March 2024.
- The PDF invoice detailed the payment due from (or to) SEMO based on the difference between the incorrect CMOAU and CMOAV FMOC rates used in the October 2022 invoice and the corrected rates.
- Settlement Reallocations (SRAs) are also dealt with for market participants who have SRA arrangements in place.
- The invoice included expected payment details due from (or to) SEMO which were in line with standard MO Operator invoice payment timelines from the date of issuance of the manual invoice.
- Payments in & out for the manual PDF invoice took place on the 12<sup>th</sup> & 13<sup>th</sup> March respectively.
- **The Oct 2022 FMOC invoice issue is now fully resolved**, thanks to all impacted market participants for their patience while working through the solution to this MO Invoice issue.



# Settlement Documents to issue Friday 15<sup>th</sup> Mar 2024

[Settlement Calendar \(sem-o.com\)](http://sem-o.com)

## Settlement Documents Friday 15<sup>th</sup> March

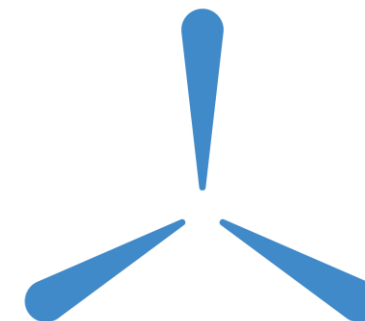
INITIAL BALIMB - (03/03/24-09/03/24) - Week 10 2024

M+4 BALIMB - (12/11/23-18/11/23)- Week 46 2023

M+13 BALIMB - (12/02/23-18/02/23) - Week 07 2023

AH BALIMB - (01/08/2021-07/08/2021) - Week 31 2021

AH BALIMB - (22/08/2021-28/08/2021) - Week 34 2021



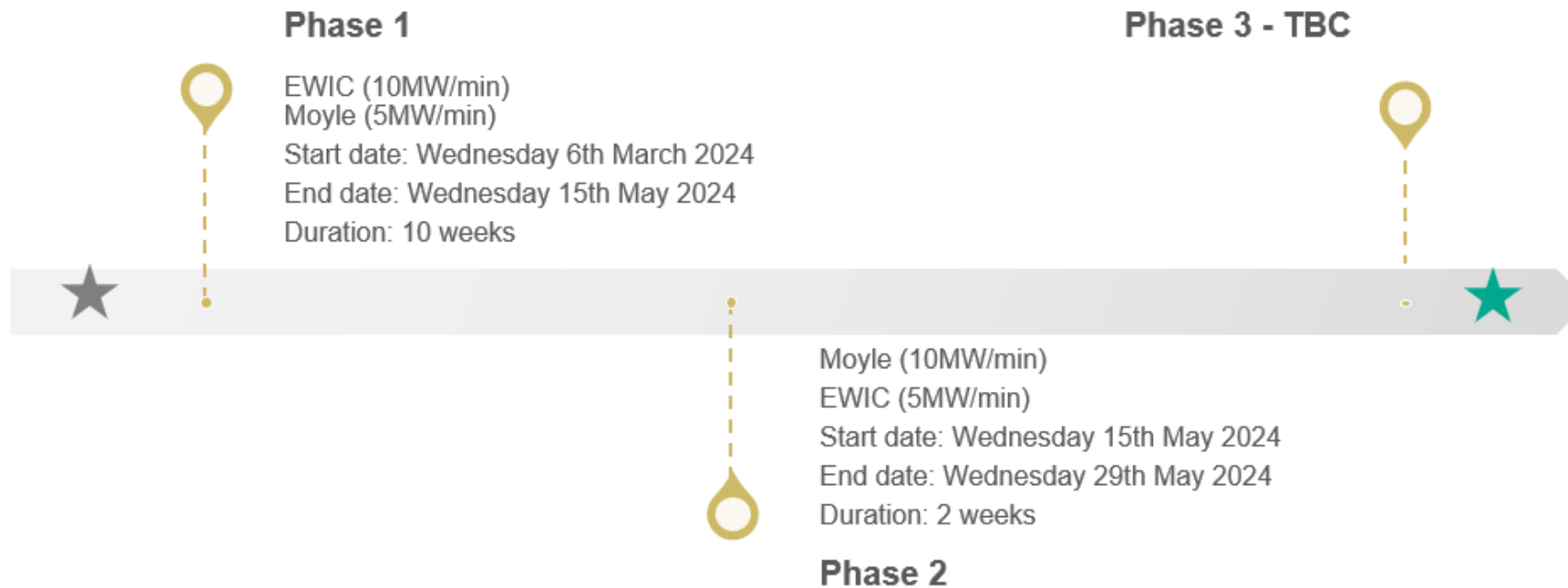
# System Operations

Charlie McGee



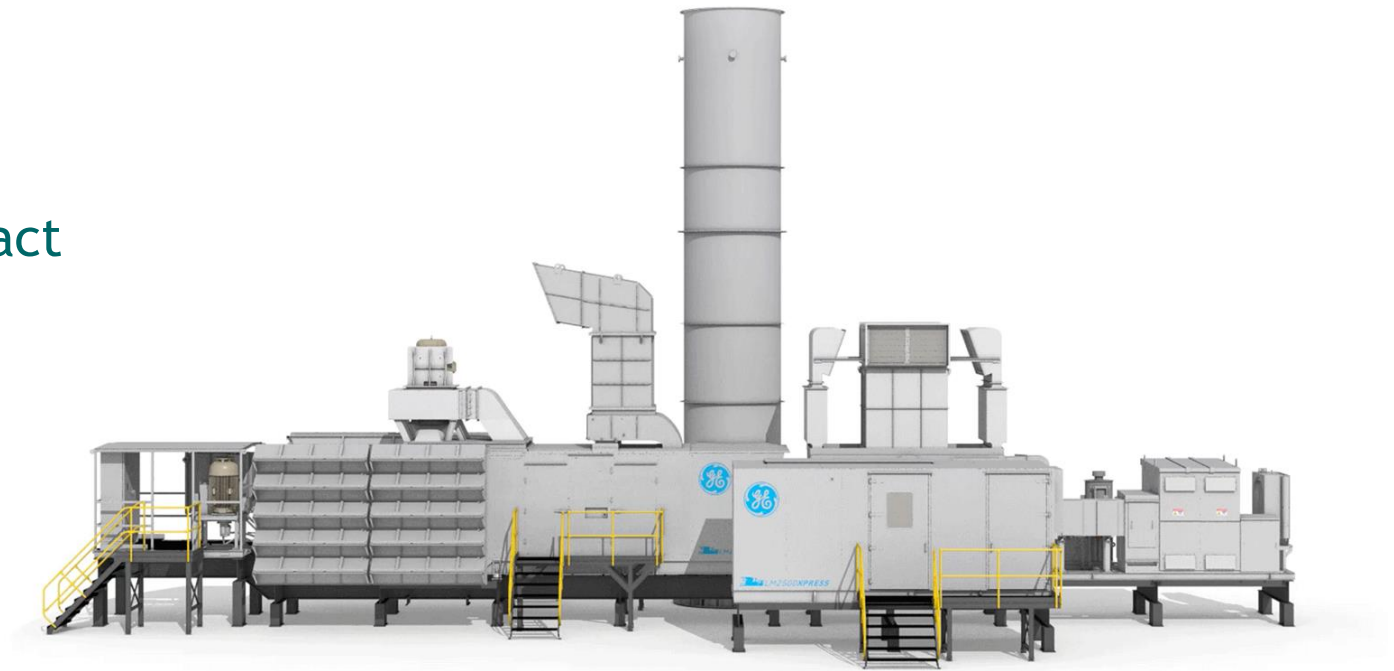
# All Island Interconnector Ramp Rate Increase Trial

- Trial to prove operational & IT systems feasibility of 15 MW/min All Island ramp rate, in anticipation of Greenlink



# Temporary Emergency Generation

- North Wall unit NW8 (199 MW) & Dunsoghly unit DG1 (50 MW) operationally available
- Shannonbridge unit SQ1 (262 MW) commissioning testing in train
- TEG operational testing policy under development:
  - Quarterly testing
  - Short notice initiation
  - Timed to minimise BM impact



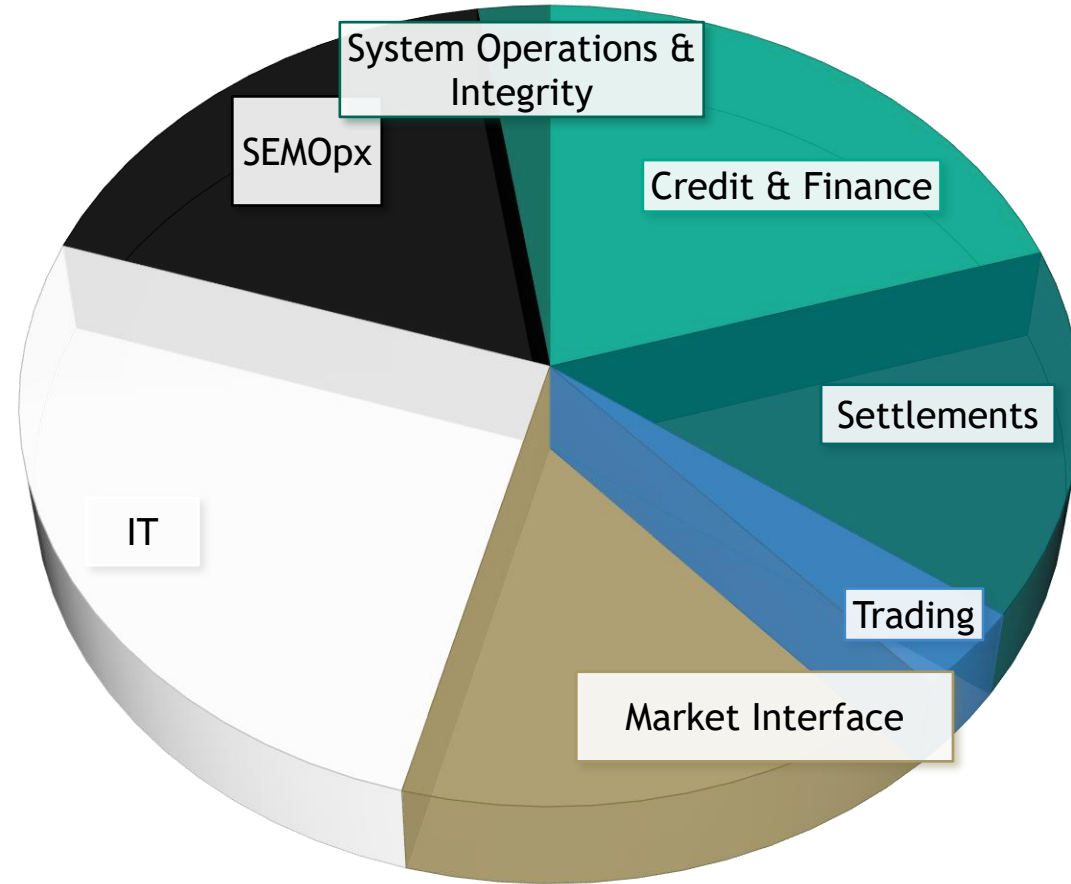
# Market Interface

# Rosaleen Fanning



# SEMO and SEMOpx General Queries: From 23rd of January - 12th of March 2024

Received - 325  
Resolved - 332



# Formal Settlement Queries & Disputes:

From 23rd of January - 12th of March 2024

## Formal Settlement Queries

- Total Received: 24
- 9 are currently ongoing
- 25 have been completed ( 15 upheld and 10 not upheld)

## Disputes

- No Disputes were raised during this period.



# SEMO & SEMOpx Helpdesk: Monday, 18<sup>th</sup> of March 2024

- The SEMO and SEMOpx Helpdesk will be unavailable on Monday, 18<sup>th</sup> of March 2024 due to the Bank Holiday. This includes [info@sem-o.com](mailto:info@sem-o.com), [info@semopx.com](mailto:info@semopx.com) and non-urgent phone lines.
- Should you have a Limited Communication Failure Issue, the SEMO [LCF Hotline](#) is available 24/7 365 days a year for any emergency operational issues relating to Limited Communication Failures.
  - Phone: +44 (0)28 90 707415
  - Email: [LCF@sem-o.com](mailto:LCF@sem-o.com)
- SEMOpx will remain available 24/7 for Urgent Operational Issues relating to the DAM/IDM, including ETS/M7 Availability, Connectivity issues, Password Resets etc.
  - **Email:** [marketops@ops.semopx.com](mailto:marketops@ops.semopx.com)
  - **ROI:** 1800 283 010 (select option 1 or 2)
  - **NI:** 0800 008 3010
  - **International:** +353 1 668 8183



# Dates for the Diary 2024

- The next Thursday Participant call @09.30am will take place on **21<sup>st</sup> of March.**
- The upcoming Market Operator User Group (MOUG) meetings are scheduled on the following dates:
  - **16th May**
  - **05th September**
  - **07th November**
  - **12th December**



# *Thank you for your attendance*

SEMO Website: <http://www.sem-o.com/>

SEMOpX Website: <http://www.semopx.com/>

Capacity Market Contact:

- [CapacityMarket@sem-o.com](mailto:CapacityMarket@sem-o.com)

SEMO & SEMOpX Contact:

- [info@sem-o.com](mailto:info@sem-o.com);

- [info@semopx.com](mailto:info@semopx.com)

