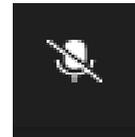
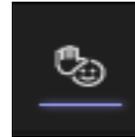
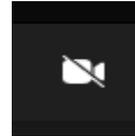


Market Operator User Group

26th January 2023

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

Item	Presenter
Welcome	Anne Fitzgerald
Release Program Update	David Reidy
Ex-Ante Markets	Nigel Thomson
Repricing Update	Dermot Campfield
ETS, M7 Update	John Rooney
Settlements Update	Sean O'Rourke
Market Interface Update	Rosaleen Fanning
System Operations Update	Emma Morris
Q&A	

Release Program Update

David Reidy

Market Release Program Update: Post Release J Issue update

Issue	Update
Availability of reports older than 31 days	As Release J was going to be the longest deployment outage since ISEM go-live, approach taken was to minimise the amount of data being transferred by only bringing last 31 days of reports. Older reports are in the process of being restored.
Multiple PNs not being submitted in one XML submission	Issue was traced to certain Oracle database index not being available after go-live.

Priority Item Delivery Plan – MMS System Delivery

	Delivery Schedule											
Title	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Hitachi Energy Rel. K May/June 23 (final dates TBC)	FAT		SIT	UAT	OAT	★		CR Scoping	CR Assess	Defect Scoping Defect Assess	SIT/UAT Scripting	
Hitachi Energy Rel. L (Sep 2023)					FAT	SIT	UAT	OAT	★	CR Scoping	CR Assess	Defect Scoping Defect Assess

Release K – May / June 2023

EirGrid CR	System	Description
CR-241b QBOA Undo scenario 3	MA	In certain conditions there have been incorrect pricing and settlement outcomes due to bid offer acceptance volumes not being correctly calculated. This change will enable the creation of pseudo dispatch instructions from validated instructions which will help alleviate this issue.
CR-279 30 min MTU	CSB	Change the Market Time Unit (MTU) such that the DAM can be processed in 30 minute increments from the current 60 minute increments as per section 8.2 of the Clean Energy Package (CEP).
CR-263 transfer of units	MI/CSB	Transfer a registered Resource ID from one Participant ID to another within the Balancing Market and/ or one Member ID to another within the SEMOpx Market.
CR-282 Automation of CSB Settlement Processing	CSB	Includes: the automation of certain manual procedures; the combination of certain, separate, daily pre-calcs into one function; and automation of daily settlement statement and reporting process.

Internet Explorer 11 (IE11) End of Life

- Microsoft support for Internet Explorer 11 (IE 11) ended for “Windows 10 semi-annual channel” June 15, 2022.
- Participants should be using Microsoft Edge with IE mode
 - 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.
 - Moving to native browser support to be agreed with Hitachi Energy
- Updates will be published to: the ISEM Technical Specification Volume B; I-SEM System Access Bulletin

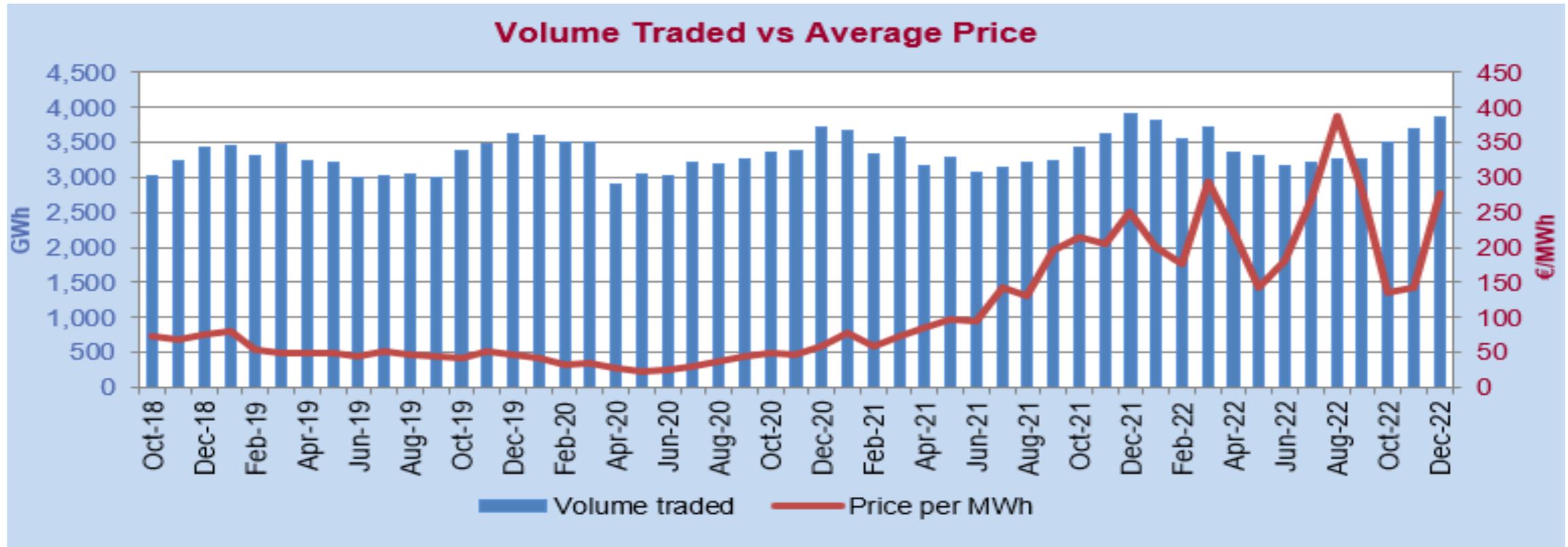
Ex-Ante Markets

Nigel Thomson

Ex-Ante Markets

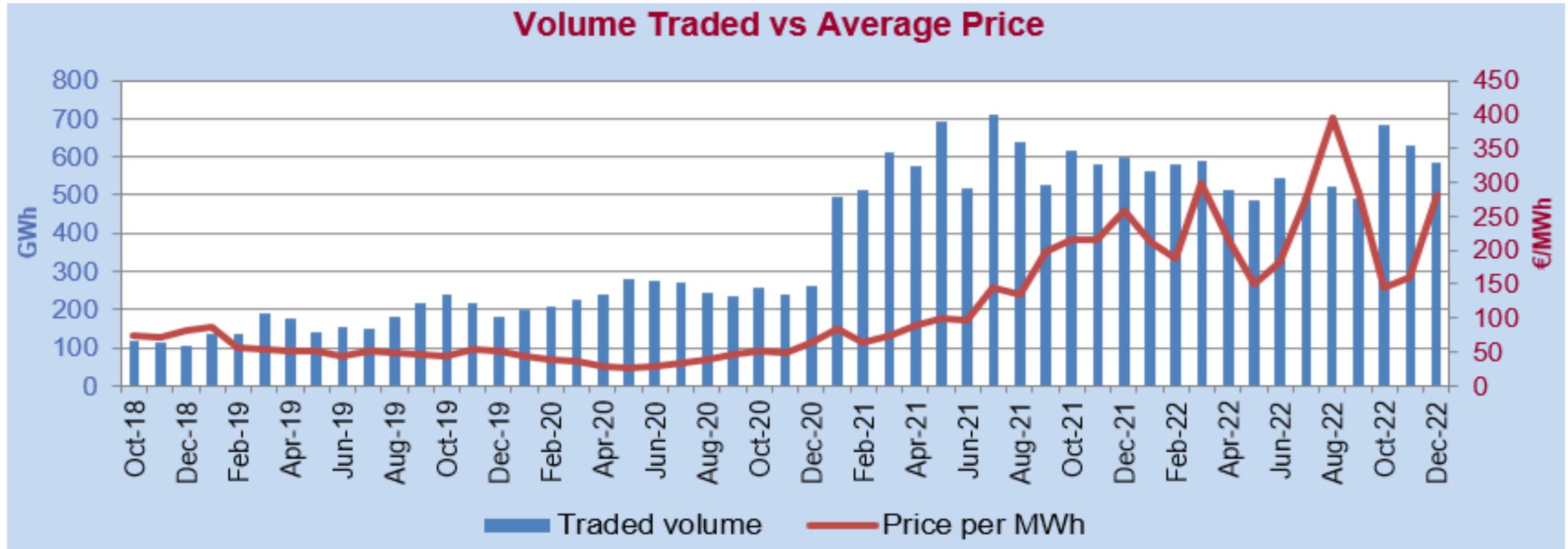
- Ex-Ante Volumes and Prices
- Wholesale Electricity Price Trends

Ex-Ante Markets – DAM Monthly Volumes and Prices



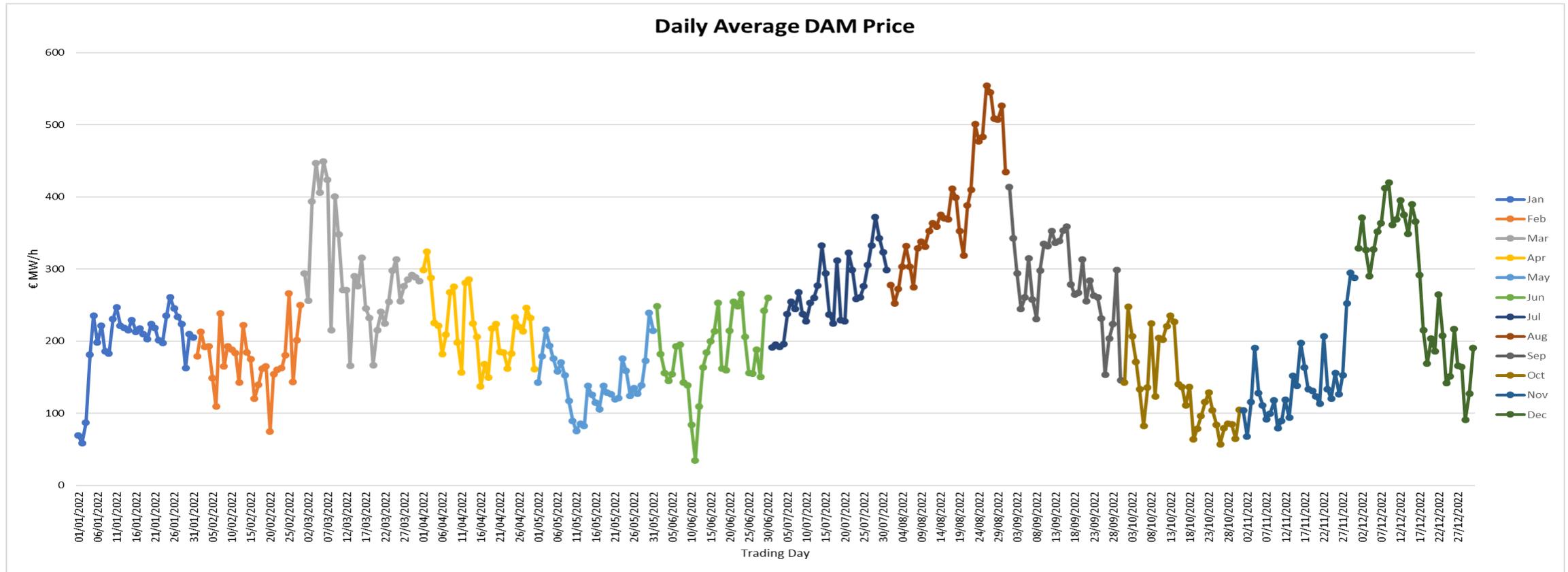
- Traded volumes in the DAM remain at similar levels to historic trends.
- Steady increase in DAM volume between October and December – in line with seasonal changes in demand.
- DAM price reflected volatility of gas prices in GB and EU throughout the year. Highest monthly average prices were March (€293), August (€387) and December (€277).

Ex-Ante Markets – IDA Monthly Volumes and Prices



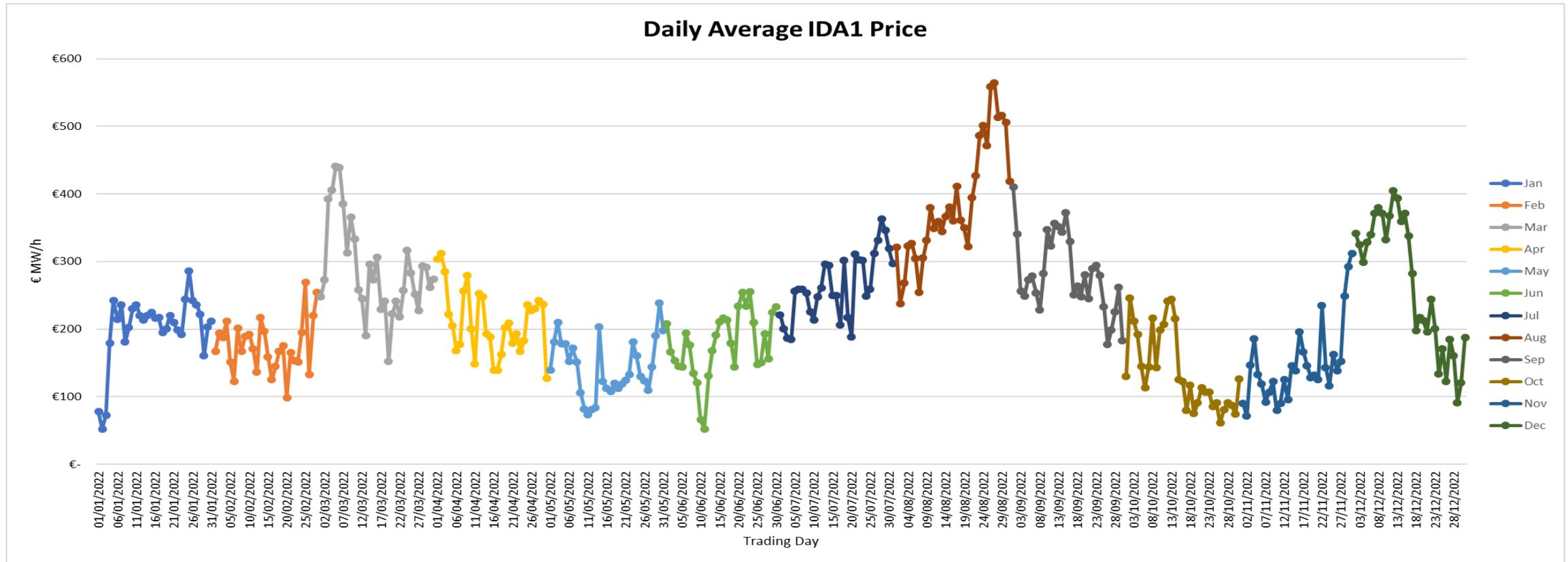
- Traded Volume continue to be influenced by interconnection.
- Prices follow similar pattern to the DAM.
- Noticeable decrease in volumes month on month between October and December may be attributable to interconnector exports reducing in line with wind generation.

Ex-Ante Markets – DAM Daily Prices



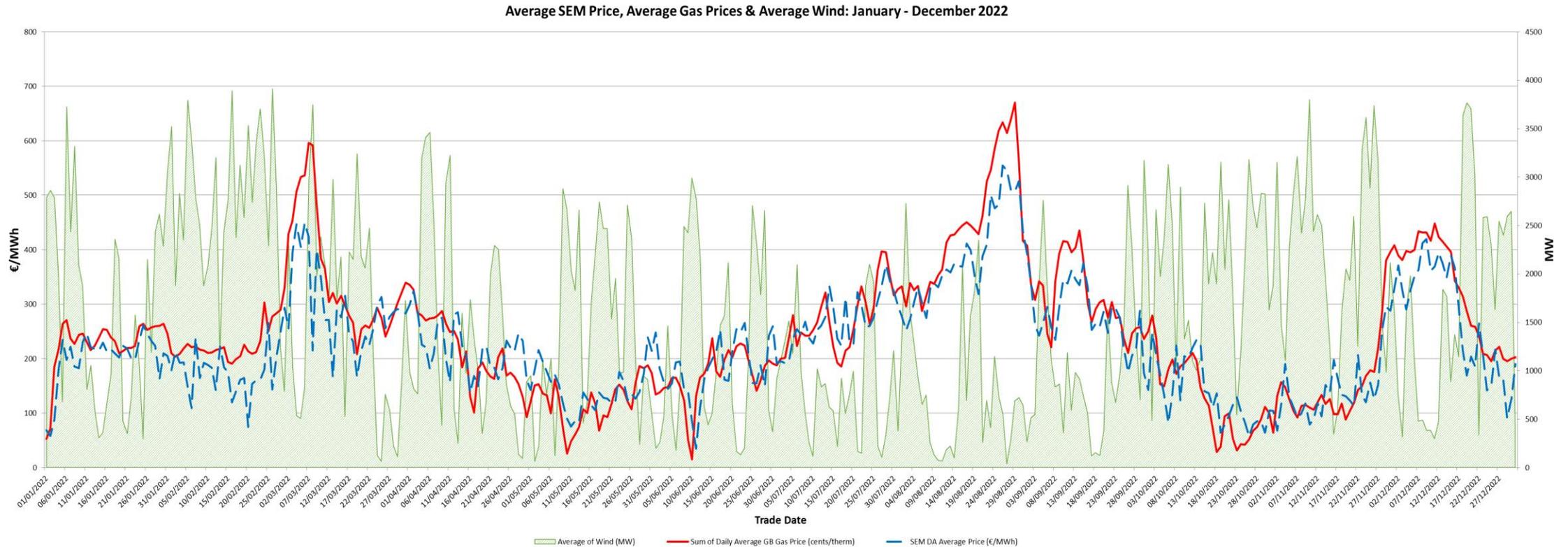
- Prices reduced significantly after August 2022.
- Influenced by a combination gas storage being full, alternate sources of gas available, wind picking up and a warmer than usual autumn.
- December was a month of 2 halves with prices increasing due a cold snap at the beginning of December with elevated gas prices and low wind. This backed off in the 2nd half of December when demand typically reduces combined with milder weather.

Ex-Ante Markets – IDA1 Daily Prices



- Similar trend to the DAM.
- Highest daily average price in Q4 was on 12th December 2022 clearing at €404.58.

Ex-Ante Markets – Average DAM Price, GB Gas Price and Wind



- High gas storage across the EU and GB and a warm autumn saw a reduction in gas prices after the peak in August 2022.
- A cold spell at the beginning of December 2022 saw an increase in demand combined with low wind speeds leading to increased demand for gas and the subsequent knock-on impact on electricity prices.
- Electricity prices reduced in the second half of December as demand and gas prices decreased, and wind increased from mid-December onwards.

Repricing Update

Dermot Campfield

Repricing Update

Repricing Calendar

Trading Day	Imbalance Settlement Period(s)	Billing Period End Date	Manifest Error ID	Materiality Assessment	Reprice Publication Date ¹
<i>e.g. 07/01/2018</i>	23:00 to 02:00	07/01/2018 (Week1)	#ID1	11/02/2020 [link]	18/02/2020
31/10/2020	12:00 to 20:00	31/10/2020 (Week 43)	RPC5	02/03/2023	09/03/2023
05/08/2021	03:30 to 04:00 08:30 to 10:00 11:00 to 11:30 12:00 to 13:30 14:30 to 15:00 15:30 to 16:00	07/08/2021 (Week 33)	RPC8	TBC	TBC
05/11/2021	08:00 to 08:30 10:00 to 11:00 15:30 to 17:00	06/11/2021 (Week 44)	RPC8	TBC	TBC
07/06/2022	16:00 to 23:00	11/06/2022 (Week 23)	RPC4	09/03/2023	16/03/2023
08/06/2022	23:00 to 14:00	11/06/2022 (Week 23)	RPC4	09/03/2023	16/03/2023
01/07/2022	19:30 to 20:00 21:00 to 23:00	09/07/2022 (Week 28)	RPC11	Post Release K	Post Release K
02/07/2022	01:00 to 06:00	09/07/2022 (Week 28)	RPC11	Post Release K	Post Release K
17/08/2022	03:30 to 23:00	20/08/2022 (Week 34)	RPC4	16/03/2023	23/03/2023
18/08/2022	23:00 to 23:00	20/08/2022 (Week 34)	RPC4	23/03/2023	30/03/2023
19/08/2022	23:00 to 11:30	20/08/2022 (Week 34)	RPC4	23/03/2023	30/03/2023
19/09/2022	08:00 to 08:30 09:30 to 10:00	24/09/2022 (Week 39)	RPC10	30/03/2023	06/04/2023

Repricing Update – Issues to be Resolved

Repricing ID	KIR ID	Issue Description	Release	Days Impacted
RPC5	NA	Incorrect calculation of QBOA for a Unit; correct initial conditions not applied.	NA	1 day
RPC4	NA	Wind Dispatch Instructions did not feed the Imbalance Pricing Calculation.	NA	5 days
RPC8	NA	Incorrect Commercial Offer Data applied within Imbalance Pricing for a Unit.	NA	2 days
RPC10	#6083262	PMEA incorrectly calculated, when there are Bid Offer Prices on both sides of Imbalance Pricing stack, where Imbalance Price Flag is equal to '1'. Related to MOD_01_20.	Release J	27 days
RPC11	#271634	Imbalance Pricing is applying a zero PBOA for Pump Storage units when dispatched from a negative PN to zero MW; where no zero quantity has been submitted in the Price Quantity Pairs.	Release K	2 days

Repricing Update – Next Steps

- New repricing calendar will be published week commencing 30th January 2023.
- This calendar will contain only open issues, completed repricing runs will be archived
 - Links containing older items, will be included in the new calendar.
- Repricing will restart on 9th March 2023, with the first materiality assessment published on 2nd March 2023.
- Estimated completion May 2023; RPC5 resolution will be deferred until post Release K deployment.
- Two older items from 2021 are still under investigation (RPC8).

ETS, M7 Update

John Rooney

ETS Releases

Version	Content	Client	Impact	Timeline*
V3.6.7	• TBD			Q1 2023
V3.7	• TBD			Q2 / 3 2023

**Planned go live is subject of successful testing of the given release*

ETS Maintenance Windows

Date & Time	Impact	Reason	Communication
14/02/2023	Maintenance	Monthly Maintenance	OMM message (email sent a week in advance and on the same morning)
28/02/2023	Maintenance	Ad Hoc Maintenance	OMM message (email sent a week in advance and on the same morning)
14/03/2023	Maintenance	Monthly Maintenance	OMM message (email sent a week in advance and on the same morning)
11/04/2023	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 2nd Tuesday of the Month.

M7 Releases

Version	Content	Impact	Timeline
V6.14	Release notes / Impact to be sent.	API Changes and New Xsim environment available	14th March 2023

M7 Maintenance Windows

Date & time	Impact	Reason	Communication
14/02/2023	Maintenance	Monthly Maintenance	M7 chat message (1 hour before the maintenance) + OMM message (email sent a week in advance and on the same morning)
14/03/2023	Maintenance	6.14 Deployment	M7 chat message (1 hour before the maintenance) + OMM message (email sent a week in advance and on the same morning)
11/04/2023	Maintenance	Monthly Maintenance	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 2nd Tuesday of the Month.

SEMOpX General Update

- Scalable Complex Order product – Go-Live (25th January 2023)
 - Update to SEMOpX Auction Timings and Market Messages document
 - Inclusion in Operating Procedures
 - ETS 3.6.5 / 3.6.5.1 release
 - DPUG document
 - Submission on Behalf of Templates
 - Website materials
- IntraDay Decoupling change – Go-Live (25th January 2023)
 - Update to SEMOpX Auction Timings and Market Messages document
 - Inclusion in Operating Procedures
 - Member Test 16th January 2023

SEMOpX General Update

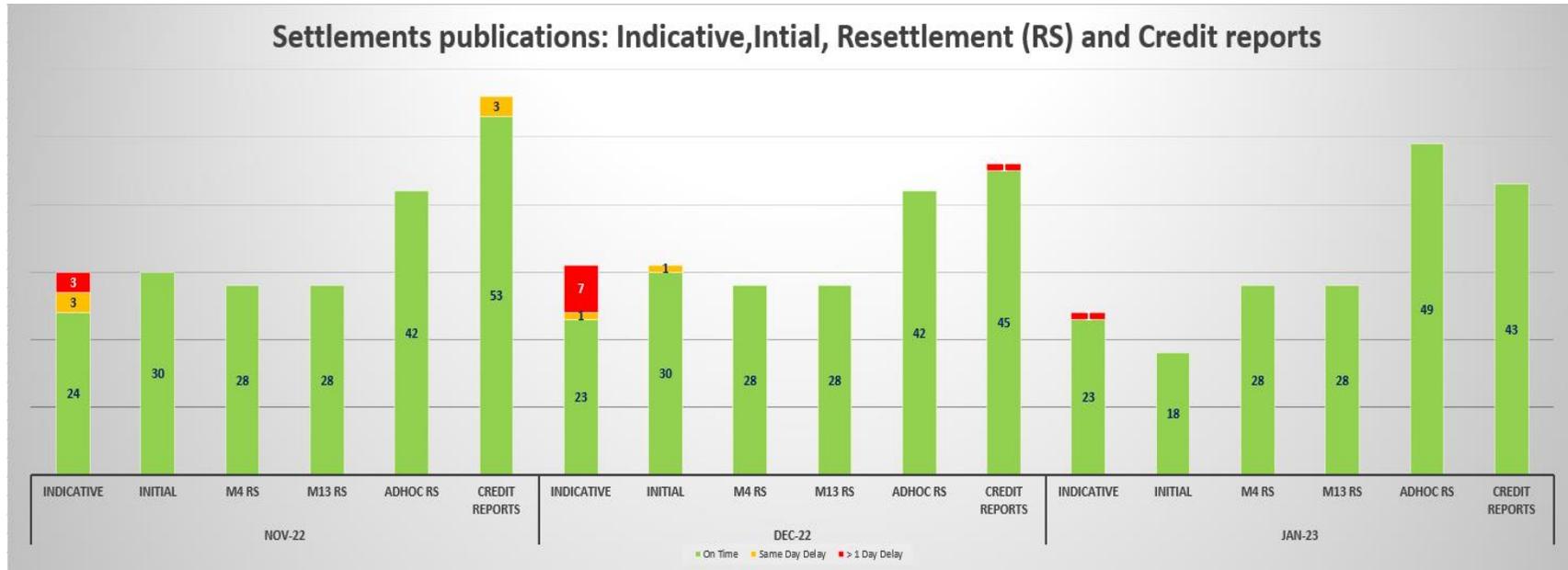
- SDAC Harmonised Minimum and Maximum Clearing Price – Implementation Date (10th January 2023)

Harmonised Maximum Clearing Price	Harmonised Minimum Clearing Price
Harmonised max. clearing price will be increased by €500 EUR/MWh if the clearing price exceeds 70% of the max. price in at least 2 market time units in at least 2 different days within 30 rolling days from the 1 st price spike	Harmonised min. clearing price will be decreased by €100 EUR/MWh if the clearing price falls below 70% of the max. price in at least 2 market time units in at least 2 different days within 30 rolling days from the 1 st low price
Transition set at 28 day	
Impacted bidding zones exclude uncoupled bidding zones	
The reference harmonized maximum clearing price for SDAC shall be +4000 EUR/MWh.	
The reference harmonized minimum clearing price for SDAC shall be -500 EUR/MWh.	

Settlements Update

Sean O'Rourke

Settlement publications & timelines: November 2022 – January 2023 (Jan 24th)



Nov 2022

- **205** settlement publications on time
- 6 delayed indicative due to MDP Data delay (2) & Instruction Profiler data flow issues (4)
- All issues now resolved

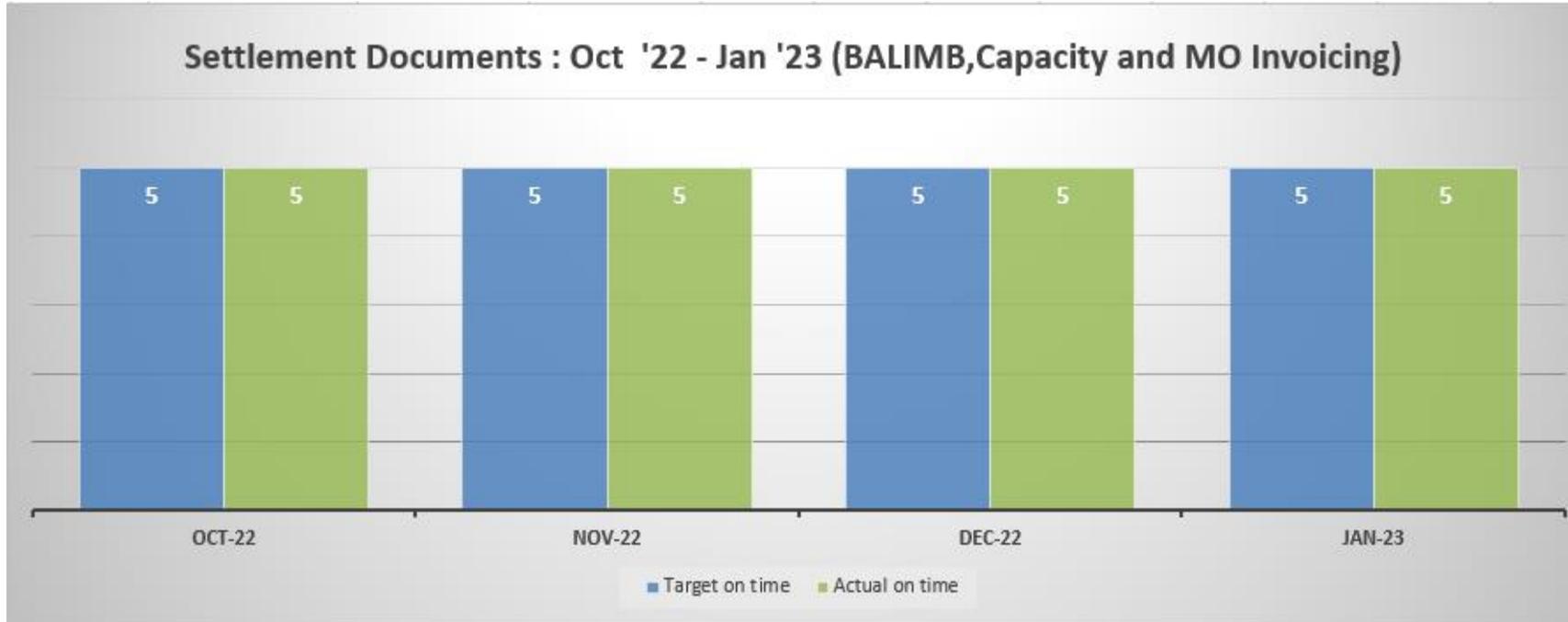
Dec 2022

- **196** settlement publications on time
- 8 delayed indicatives in early December due to Data push timeout issue (7) & MDP Data delay (1)
- All issues now resolved
- Backlog of Dec holiday period publications all published on time on Dec 29th

Jan 2023

- **189** settlement publications on time
- 1 delayed indicative due to Instruction Profiler data flow issue.
- All issues now resolved

Settlement Documents publications & timelines: Oct '2022 – Jan '2023



Settlement Document updates:

- **20** Settlement Documents (SDs) published on time between Oct 2022 and Jan 2023 (includes BALIMB, Capacity and MO Invoices)
- **FMOC rate** issue for MO invoice published on Nov 15th : [Market message published](#) on the 18/11/2022. See next slide for a further update.
- **CSU (start up costs) issue** impacting DSUs for Settlement Documents published on Dec 16th and 23rd . [Market Message published](#)
- ☐ A workaround was implemented on Jan 4th (applicable from December 29th initial settlement data onwards) for this issue to prevent it causing any further incorrect settlement calculations for DSU units.
- ☐ Permanent fix received from vendor and is due to be tested the week of Jan 30th .
- ☐ Ad hoc resettlement for the two December 2022 billing periods impacted were included with SDs published on Jan 20th 2023.

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 updates provided at the MOUG on Dec 15th , SEMO Settlements are intending 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. The application of any interest due on the corrected invoice amounts is being investigated.
 - Due to a dependency on the readiness of an end-to-end test environment required to complete the testing of this approach, this testing is now likely to be aligned with Release K UAT testing timelines (April / May) , with a definitive publication date to be confirmed with market participants once the scenario has been fully replicated and tested in the systems test environment.

Ad hoc resettlement: Status update Jan 2023

Scheduled Ad hoc resettlement completed to date – 1st iteration

Calendar Month	Mar-21	Apr-21	May-21	Jun-21	Jul-21	Aug-21	Sep-21	Oct-21	Nov-21	Dec-21	Jan-22	Feb-22	Mar-22	Apr-22	May-22	Jun-22	Jul-22	Aug-22	Sep-22	Oct-22	Nov-22	Dec-22	Jan-23
M+4 Month (s)	Nov-20	Dec-20	Jan-21	Feb-21	Mar-21	Apr-21	May-21	Jun-21	Jul-21	Aug-21	Sep-21	Oct-21	Nov-21	Dec-21	Jan-22	Feb-22	Mar-22	Apr-22	May-22	Jun-22	Jul-22	Aug-22	Sep-22
M+13 Month	Feb-20	Mar-20	Apr-20	May-20	Jun-20	Jul-20	Aug-20	Sep-20	Oct-20	Nov-20	Dec-20	Jan-21	Feb-21	Mar-21	Apr-21	May-21	Jun-21	Jul-21	Aug-21	Sep-21	Oct-21	Nov-21	Dec-21
Ad hoc Iteration 1:	Oct-18	Nov-18	Dec-18	Jan-19	Feb-19	Mar-19	Apr-19	May-19	Jun-19	Jul-19	Aug-19	Sep-19	Oct-19	Nov-19	Dec-19	Jan-20	Feb-20	Mar-20	Apr-20	May-20	Jun-20	Jul-20	Aug-20

Scheduled Ad hoc resettlement completed to date – 2nd iteration

Calendar Month	Feb-22	Mar-22	Apr-22	May-22	Jun-22	Jul-22	Aug-22	Sep-22	Oct-22	Nov-22	Dec-22	Jan-23	Feb-23	Mar-23	Apr-23	May-23	Jun-23	Jul-23	Aug-23	Sep-23	Oct-23
M+4 Month (s)	Oct-21	Nov-21	Dec-21	Jan-22	Feb-22	Mar-22	Apr-22	May-22	Jun-22	Jul-22	Aug-22	Sep-22	Oct-22	Nov-22	Dec-22	Jan-23	Feb-23	Mar-23	Apr-23	May-23	Jun-23
M+13 Month	Jan-21	Feb-21	Mar-21	Apr-21	May-21	Jun-21	Jul-21	Aug-21	Sep-21	Oct-21	Nov-21	Dec-21	Jan-22	Feb-22	Mar-22	Apr-22	May-22	Jun-22	Jul-22	Aug-22	Sep-22
Adhoc Iteration 1:	Sep-19	Oct-19	Nov-19	Dec-19	Jan-20	Feb-20	Mar-20	Apr-20	May-20	Jun-20	Jul-20	Aug-20	Sep-20	Oct-20	Nov-20	Dec-20	Jan-21	Feb-21	Mar-21	Apr-21	May-21
Adhoc Iteration 2:	Oct-18 - Jan-19		Feb-19	Mar-19	Apr-19	May-19	Jun-19 to Sep-19		N/A												

Ad hoc summary : Mar-21 to Jan-2023

- Ad hoc iteration **1** resettlement is up to the 12/09/2020 . **102** weeks / billing periods processed and published to date.
- Ad hoc iteration **2** resettlement is up to the 01/06/2019 . **23** weeks / billing periods processed and published to date
- 2018** Ad hoc resettlement is closed out
- 18 weeks** of Adhoc processed in Q1 (Oct 2022 - Dec 2022) meeting **KPI** target of 18 weeks over a 12-week period

Settlement Documents to issue Friday 27th January, 2023

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

Settlement Document 27/01/2023;
INITIAL BALIMB – (15/01/23-21/01/23) – Week 03 2023
M+4 BALIMB – (25/09/22-01/10/22) – Week 39 2022
M+4 CRM – Sept 2022
M+13 BALIMB – (26/12/21-01/01/22) – Week 52 2021
M+13 CRM – Dec 2022
AH BALIMB – (13/08/2020 – 19/09/2020) – Week 37 2020
AH BALIMB – (20/09/2020 – 26/09/2020) – Week 38 2020

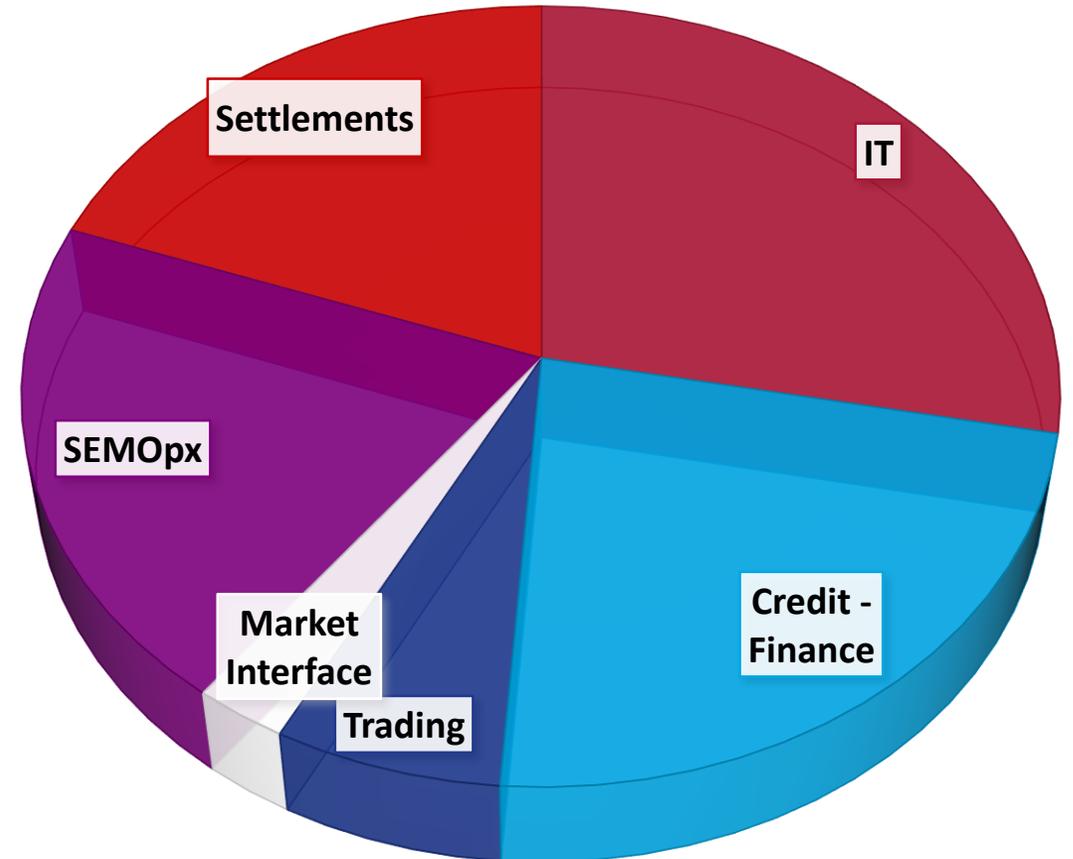
Market Interface Update

Rosaleen Fanning

General Queries: October 2022 – 20th January 2023

- Received – 501
- Resolved – 482

	October	November	December	January
Received	119	145	128	109
Resolved	99	137	127	119



Formal Queries and Disputes: October 2022 – 20th January 2023

Formal Queries:

45 Formal Queries were received, of which 32 are now completed (21 were upheld, 10 were not upheld and 1 was rejected) and 13 are ongoing.

Disputes:

There were no Disputes raised in this period.

System Operations Update

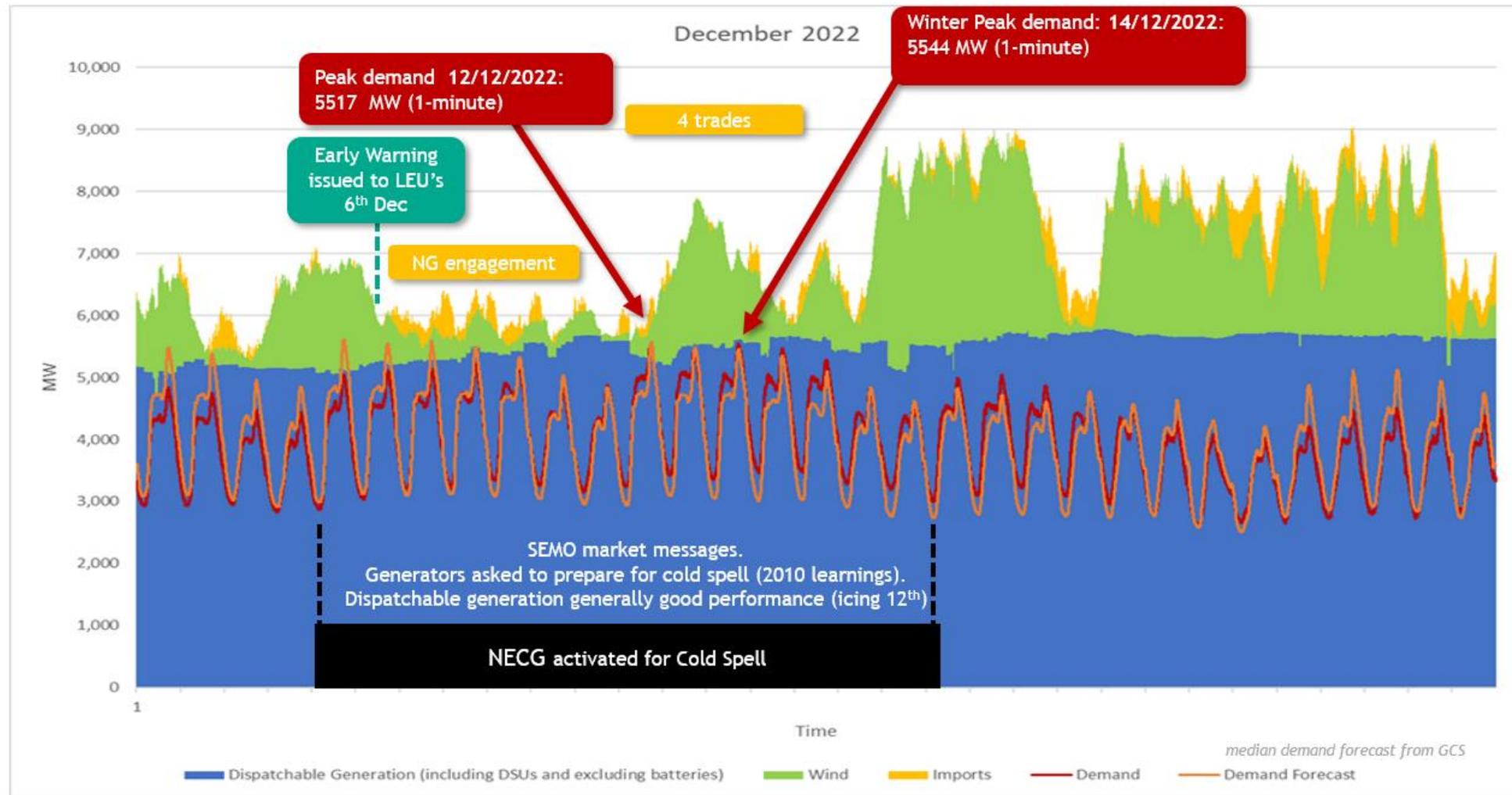
Emma Morris

System Operations Update

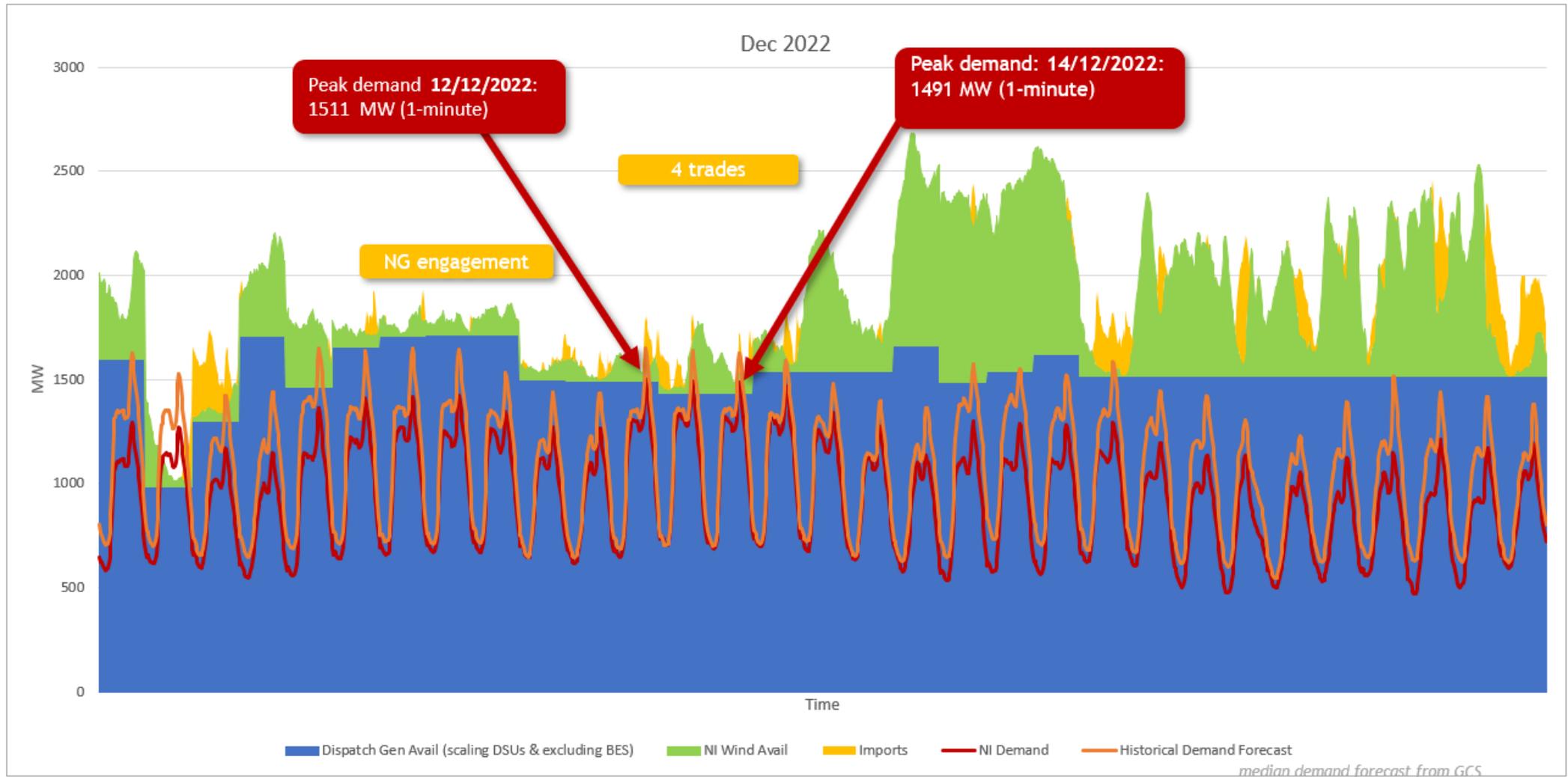
Review of power system performance over the cold snap (5- 17 December 2022)

- Overview of weather conditions during cold snap
- December 2022 generation and load profiles
 - Ireland
 - Northern Ireland
- Summary of power system performance throughout

December 2022 - Ireland



December 2022 – Northern Ireland



Cold spell – system performance summary

Key message

- **Record peak demand in Ireland:** Monday 12th Dec (5,504 MW) and then again Wednesday 14th Dec (**5,523 MW**). This beat the previous record of **5,363 MW** set in December 2021

Note: new record evening peaks in Ireland for Saturday 10th and Sunday 11th Dec of 4,900 MW and 4,862 MW respectively.

- **System Alerts: No System Alerts issued** despite low temperatures and low wind on some days

System Conditions during the cold spell

- **Wind generation:** Periods of low, but not zero, wind
- **Generation availability:** Forced outages < 20% (known issues and weather impacts) – better than March to July 2022 when forced outages were generally in the range of 20% – 25%.
- **Interconnectors:** Significant trading on both interconnectors prevented system alert in both jurisdictions

Coordination & communication

- **National Grid:** Regular (daily) meetings to manage interconnector flows
- **SEMO:** Market messages on tight margins issued on some days
- **Large Energy Users** asked a week before (on Tues 6th) to prepare for possible use of generators (MDC) given cold weather going into the week ahead.
- **Generators** asked to prepare for cold weather based on 2010 learnings
- **Regular updates** to key stakeholders

Q&A

Close

- SEMO Website: <http://www.sem-o.com/>
- SEMOpx Website: <http://www.semopx.com/>
- Queries: info@sem-o.com; info@semopx.com
- Capacity Market: CapacityMarket@sem-o.com

Thank you for your attendance.