

Market Operator User Group

Belfast, 03 April 2019

Agenda

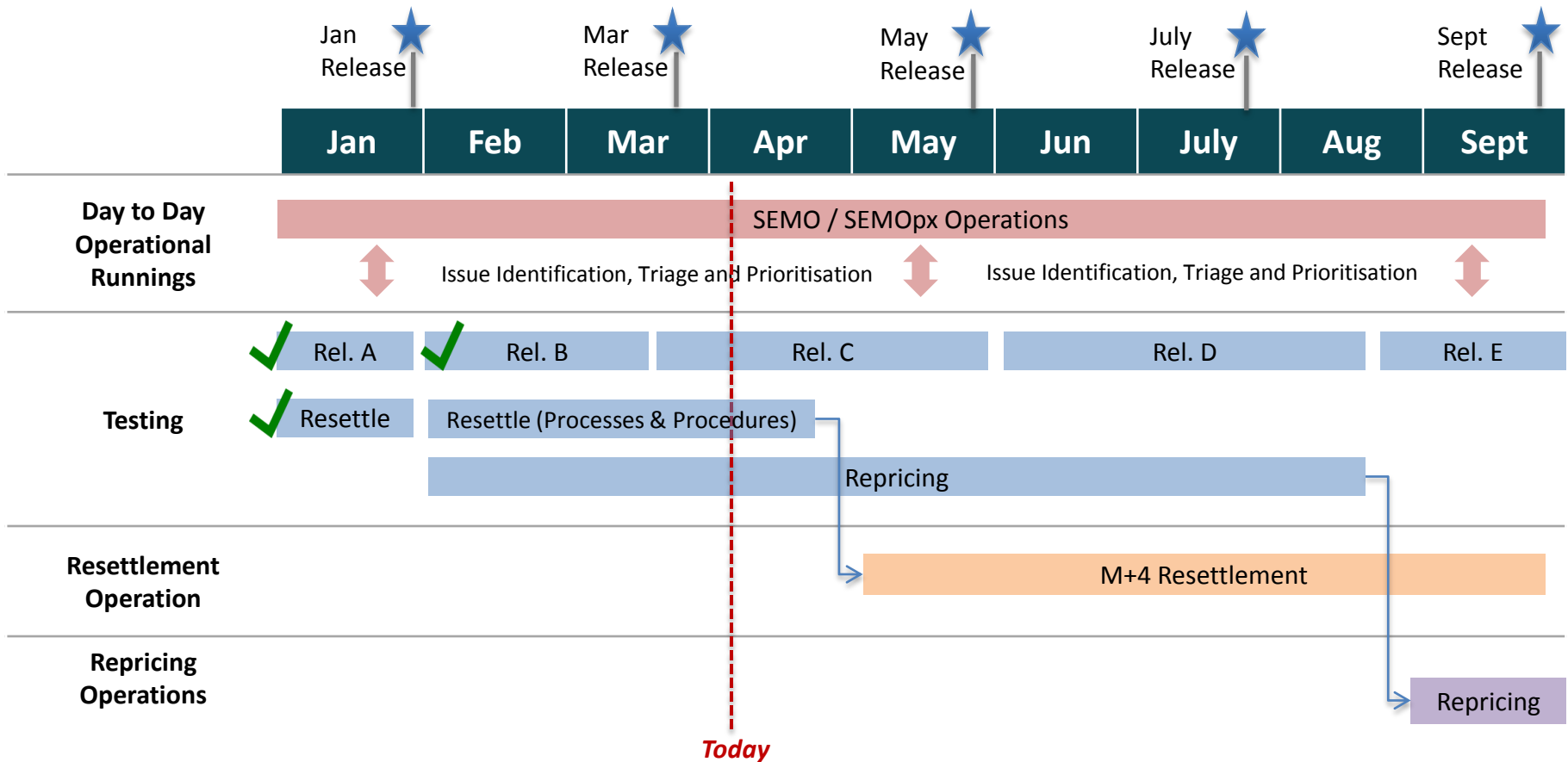
Item	Presenter
Welcome	Anne Fitzgerald
Known Issues Update	Eoin Farrell
Ex-Ante Market	Liam McAllister
Balancing Market	Brendan O'Sullivan, Martin Kerin, Sam Matthews
Disputes & Repricing Update	Dermot Campfield
Settlements & M+4 Resettlement	Sean O'Rourke, John O'Dea
Capacity Market Timetable	Anne Fitzgerald
Query Management	Claire Breslin
Q&A	

Agenda

Item	Presenter
Welcome	Anne Fitzgerald
Known Issues Update	Eoin Farrell
Ex-Ante Market	Liam McAllister
Balancing Market	Brendan O'Sullivan, Martin Kerin, Sam Matthews
Disputes & Repricing Update	Dermot Campfield
Settlements & M+4 Resettlement	Sean O'Rourke, John O'Dea
Capacity Market Timetable	Anne Fitzgerald
Query Management	Claire Breslin
Q&A	

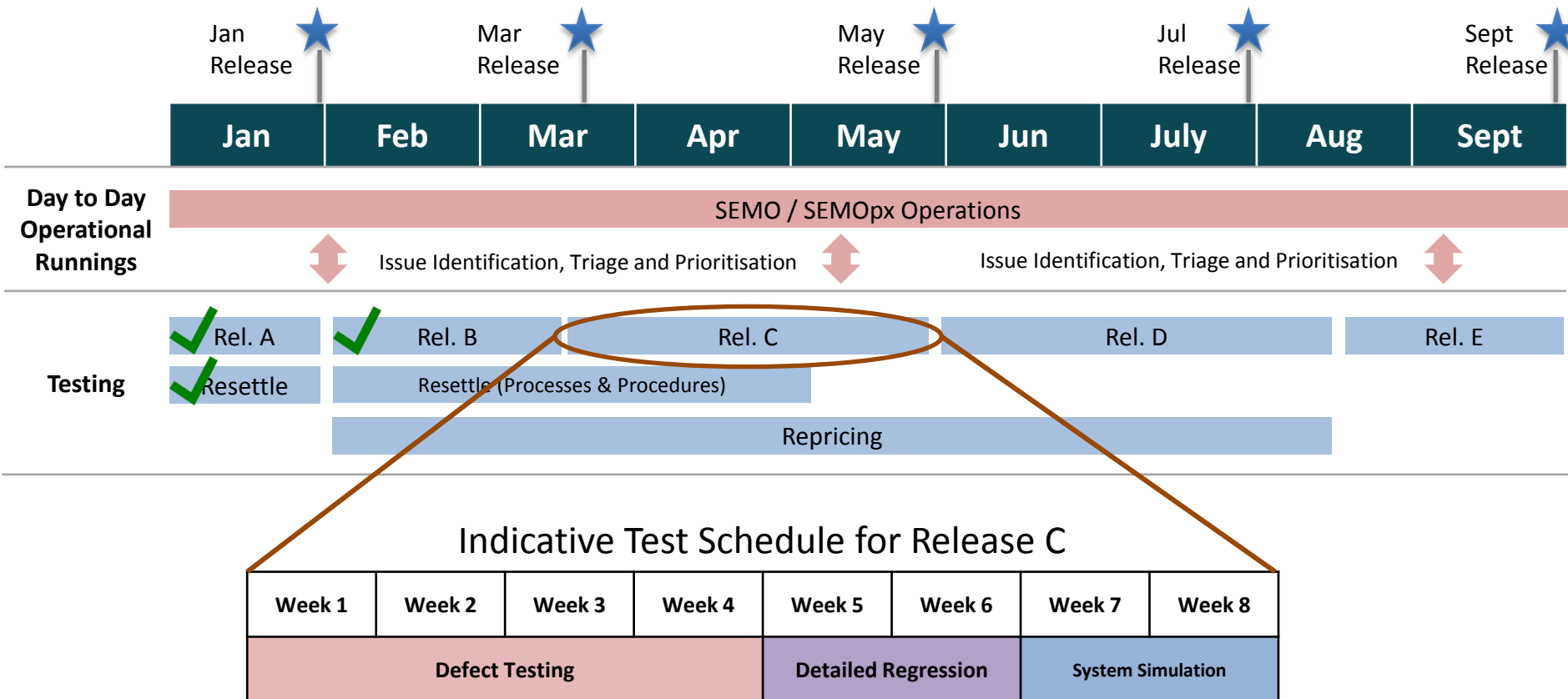
I-SEM Day 1+, High-Level Indicative Release Timeline

- ABB release A deployed to production Tuesday 29th January
- ABB release B (MA 26 / CSB 1.2.2) deployed to production on 26th of March 2019
- ABB release C is currently in test
- First M+4 Resettlement document to be published Friday 3rd of May





I-SEM Day 1+, Release C Test Plan

- ABB release C contains 21 known issues as well as a number of operational improvements.
- The below graphic illustrates the planned test cycle for ABB Release C and indicative production release timeline



Known Issues Update - Summary

- Known Issues continue to be analysed and prioritised as and when they occur.
- Once a defect has been raised, the issue will be assessed in the wider defect pool and assigned to a code drop in line with its severity and priority.
- Drop dates to test have been agreed with our vendor, with release to production plans provided based on successful test closure.
- The table below presents a breakdown of the upcoming releases, Known Issues coverage and expected benefit.

Release Bundle	Status	Known Issues Coverage	Expected Benefit
Release A 	Deployed to production on the 29 th of January 2019	14 Issues	<ul style="list-style-type: none"> • Resolution to a number of settlement issues including Fixed Cost complex bid resolution, Interconnection charges, and Autoproducers difference payments and charges fix • Report 44 incorrect values for QCOB and QCNET • Report 102 publication issue • Internal operational improvements • Improved resettlement and repricing functionality
Release B 	Deployed to Production on the 26 th of March 2019	4 Issues	<ul style="list-style-type: none"> • Improvements to QBOA function including resolution to units being skipped • Improved resettlement and repricing functionality • Hotfixes were deployed to address difference charges for Interconnectors and supplier units • Bill case optimisation
Release C	Testing in Progress	23 Issues	<ul style="list-style-type: none"> • Fixes for Reports highlighted as priorities from participants • Incorrect MW QTY values in REPT_078/079 • CFC improvements • Improvements to the QBOA function
Release D	Expected June 2019	TBC	<ul style="list-style-type: none"> • TBC

Known Issues Update – SEMOpX

ID	Name	Description	Impact to Market Participants	Status	Resolution Date
SEMOPX.001	Production of Bid/Ask Curves Report	Bid/Ask Curves report fails to generate following an auction, for a given jurisdiction, when there are no orders received for that auction.	Low impact to Members as the file would otherwise be empty.	Closed	To be removed as not planned for delivery
SEMOPX.003	REMIT Reporting	Known issues with the delay in reporting SEMOpX Member transaction to ACER REMIT platform. Testing of solution ongoing	SEMOpX Member transactions are not reported to ACER until this is resolved.	Closed	Jan 2019
92601	ETS Auction Results	Message log is not retaining the message indicating availability of the ETS Auctions	No material impact to SEMOpX Members. Members can view all auction results. Members will need to look at auction results reports/screens to determine availability of auction results, as opposed to reviewing the message log.	Unplanned	No Confirmed Delivery date

Known Issues Update – Balancing Market

ID	Name	Description	Impact to Market Participants	Status	Resolution Date
5635	REPT_102: Hourly Dispatch Instructions Report Intermittently Fails to generate in XML format.	Some instances of the PUB_HrlyDispatchInstr report (REPT_102) in XML format have failed to generate on the MPI and as a result, are also no appearing on the public website. The report is generated and available in HTML format.	The instance of the Hourly DI Report is not available in XML format until it is published as part of the Daily DI Reports, which are unaffected by this issue. The report is available in HTML.	Closed	Release A Jan 29 th 2019
5737	Units being skipped in QBOA calculations	Unit being skipped in pricing due to “Error in Slope Calculation” causing periodic drop in NIV	QBOA is missed for a Unit, resulting in impact to Imbalance Price	Closed	Release B March 26 th 2019
5831	Cancelled Dispatch Instructions are being processed in pricing	Dispatch Instructions which are cancelled with a ‘Not Accepted’ status are being processed in pricing	Incorrect QBOA values, resulting in impact to Imbalance Price.	Closed	Release B March 26 th 2019

Known Issues Update – Balancing Market

ID	Name	Description	Impact to Market Participants	Status	Resolution Date
5785	RTQBOA: PBOA COD	Intermittent switching PBOA from Simple to Complex COD	Incorrect PBOA values, resulting in impact to Imbalance Price	Closed	Release B March 26 th 2019
5844 (PNs)	REPT_042	The Forecast Imbalance Report is not calculating the some of the data within the reports correctly.	The PNS are currently being calculated incorrectly. The report presents inaccurate information.	Closed	After further investigation with the vendor, this report is working as correctly and as per the design for the TSO Demand Forecast column.
5913	REPT_042	The Forecast Imbalance Report is not calculating the some of the data within the reports correctly.	The TSO Demand Forecast value is inaccurate as it reads from the all island values and reports inaccurate figures. The report corrects itself and is accurate leading up to the gate closure	Closed	After further investigation with the vendor, this report is working as correctly and as per the design for the TSO Demand Forecast column.
108598	Imbalance Pricing workflow producing backups	The Imbalance price is using the market backup price for multiple periods at a time during the night.	Participants are receiving the market backup price for multiple periods at a time.	Closed	The performance of the Imbalance Pricing function has improved and no Market Back Up Prices have been used since the release on 26th March 2019.

Known Issues Update – Balancing Market

ID	Name	Description	Impact to Market Participants	Status	Resolution Date
5641	Incorrect MW QTY values in REPT_078/079	MW QTY values in REPT_078, _079, _080 are not being calculated correctly.	Participants cannot rely on these data until the issue is resolved. Participants should use alternate means to formulate these totals. These data are available at the individual portfolio (unit) level in the ETS Market Results files published D+1.	Planned Resolution Date	Release C, May 2019 .
5751	REPT_014: Daily Demand ControlData	REPT_014 is producing incorrect demand control values	The data in the report are incorrect and not available from other sources	Planned Resolution Date	Release C, May 2019 .
5870	REPT_081 hourly Anonymized INC and DEC Curves	REPT_081 can contain records for a full day rather than on a 30 minutes basis as per design	Report can publish inaccurate data	Planned Resolution Date	Release C, May 2019 .
5644	REPT_011 Duplicate Entries	Entries for each COD offer type (Simple/Complex) leading to the duplicate entries in Daily Technical Offer Data Report	Impacting units with both Simple and Complex COD submissions. Participants to continue to use report as normal	Planned Resolution Date	Release C, May 2019 .

Known Issues Update – Balancing Market

ID	Name	Description	Impact to Market Participants	Status	Resolution Date
5740	Annual CLAF Report not produced and available via MPI	REPT_023: Annual CLAF Report is not produced and available via the MPI.	The Annual CLAF is published to the SEMO website in XLS format. The production of the XML version (specified as REPT_023) is subject to a software update from the vendor. Market Participants and General Public audiences can download the data from the SEMO website, albeit in a different format.	Planned Resolution Date	Release C, May 2019 .
105605/ 5753	List of Registered Units' report	Report currently creates multiple records for each registered unit, each one with a different trading site. It will create these multiple records for each trading site which is assigned to the unit's participant. It is also creating multiple (duplicate) records with a N/A trading site	Report contains duplicate records	Planned Resolution Date	Release C, May 2019 .
5497	VTOD Soak Times	When retrieving VTOD from the MPI via type 2 or type 3, the SOAK WARM QUANTITY values are incorrect. The values shown are the SOAK HOT QUANTITY values. Please note: the integrity of the VTOD set is unaffected. This is simply an incorrect display in the MPI.	This leads to confusion for MPs as they cannot view the accurate Soak WARM QUANTITY values. The SO and MO approve the correct values, and those are used in the Scheduling & Dispatch process.	Planned Resolution Date	Release C, May 2019 .
5806	DESY Pumped Storage instructions are not processing correctly	DESY Pumped Storage instructions are not processing correctly	Incorrect QBOA values, resulting in impact to Imbalance Price. A workaround has been put in place for this issue.	Planned Resolution Date	Release C, May 2019 .

Known Issues Update – Balancing Market

ID	Name	Description	Impact to Market Participants	Status	Resolution Date
5756	REPT_011	Various flags incorrect in REPT_011 (Daily Technical Offer Data Report) – PUMP_STORAGE FLAG, Fuel Type for Pumped Storage Units (linked to PUMP_STORAGE FLAG issue), Firm Access Quantity defaulting to zero for all units (should be Trading Site FAQ)	Participants to continue to use report as normal	Planned Resolution Date	Release C, May 2019 .
5957	LOCL/LCLO not working across settlement day boundaries	LOCL/LCLO is not applying correctly across the calendar day boundary.	LOCL instruction is not applied resulting in the QBOA to be dropped.	Planned Resolution Date	Release C, May 2019 .
5817	Initial conditions being incorrectly reset in some circumstances	Initial conditions being incorrectly reset in some circumstances	Incorrect QBOA values, resulting in impact to Imbalance Price	Planned Resolution Date	Release C, May 2019 .
5806	DESY Pumped Storage instructions are not processing correctly	DESY Pumped Storage instructions are not processing correctly	Incorrect QBOA values, resulting in impact to Imbalance Price. A workaround has been put in place for this issue.	Planned Resolution Date	Release C, May 2019 .

Known Issues Update – Balancing Market

ID	Name	Description	Impact to Market Participants	Status	Resolution Date
5929	LCLO Instruction causing QBOAs for whole 5 minute period to drop	Issuing an LCLO within minutes 1 – 5 of a 5 minute pricing period should still result in a QBOA value being created for that period up until the LCLO instruction is issued.	QBOAs are dropped for the relevant 5 minute pricing period.	Planned Resolution Date	Release C, May 2019 .
5942	VTOD Changes Taking Effect on Approval	Approved changes to VTOD are taking effect on the operational day that the change is approved, rather than the next Trading Day for which Gate Closure 1, has not yet occurred.	VTOD changes will take effect in the market systems on the date of approval. Note – SEMO are implementing a workaround whilst this defect remains open.	In Analysis	TBC Resolution: Software update from vendor
112877	Type 3 PNs Validation Error	TSO rejection of Under Test PNs that have been submitted in the same Type 3 transaction (multiple units in the same xml) as other PNs (i.e. not Under Test) will result in the rejection of all PNs at gate closure. Rather than reverting to the previous approved submission as per the design, the system will apply a 'null value'.	This will result in PNs reverting to a 'null' value for the entire period covered by the rejected PN submission. Note – SEMO would ask Market Participants to submit Type 3 Under Test PNs in separate submissions.	In Analysis	TBC Resolution: Software update from vendor

Known Issues Update – Balancing Market

ID	Name	Description	Impact to Market Participants	Status	Resolution Date
5841	REPT_102: Hourly Dispatch Instructions Report	This report will now generate even if there is a null Dispatch Instruction. However this conflicts with the XSD schema for the report	Market Participants Market tools may fail to pull this report where a dispatch instruction contains a null dispatch instruction. Report is now available in all cases were before the report was available intermittently.	In Analysis	TBC Resolution: ITS Update
5794	REPT_030, REPT_103	The Daily and Hourly SO Interconnector Trades reports are failing to publish to the MPI and subsequently to the SEMO website	Participant unable to acquire these data until this issue is addressed	In Analysis	TBC Resolution: Software update from vendor
5796	REPT_042	The Forecast Imbalance Report is not calculating the some of the data within the reports correctly.	The Net Interconnector Schedule value is incorrectly reporting as 0 when both interconnectors are on full export. The data for the Moyle Interconnector are sometimes not contained within the calculated and reported value for the Net Interconnector Schedule attribute.	In Analysis	TBC Resolution: Software update from vendor.

Known Issues Update – Balancing Market

ID	Name	Description	Impact to Market Participants	Status	Resolution Date
SEMO_WE B.001	SEMO and SEMOpx ongoing issues	The SEMO and SEMOpx website currently has issues with the dynamic reporting, report retention and ongoing manual workaround to publish reports	This impact report availability to participants as well as use of dynamic reporting to provide an accurate representation of the static reports. All reports are available in the static section and manual workaround are carried out on a daily basis to ensure reports are not missed	In Analysis	TBC Resolution: Software update from vendor
5977	REPT_082	REPT_082 PUB_AvgOutturnAvail is publishing data for de-registered units	May cause issues for Market Participants that are validating against PUB_DailyRegisteredUnits	In Analysis	In Day 1 plus scope, Release TBC Resolution: Software update from vendor
SEMO_WE B_002	SEMO and SEMOpx website File retention	The SEMO and SEMOpx websites currently does not show historical reports.	MPS are unable to download historical reports from the SEMO and SEMOpx website. A CR has been raised with the website vendor to make these files available	In Analysis	TBC Resolution: Software update from vendor

Known Issues Update – Balancing Market

ID	Name	Description	Impact to Market Participants	Status	Resolution Date
82044	The Interconnector NTC report	Report is designed to show NTC (Net Transfer Capacity) values however is currently showing the TTC (Total Transfer Capacity) values. This is due to a configuration change requested by National Grid prior to go-live	Report is designed to show NTC (Net Transfer Capacity) values however is currently showing the TTC (Total Transfer Capacity) values. This is due to a configuration change requested by National Grid prior to go-live	In Analysis	TBC Resolution: SEMO are carrying out an impact assessment as this impacts multiple IT systems and also has a knock on impact for other processes.
5845	REPT_022: Initial Interconnector Flows and Residual Capacity	This report is appearing EMPTY in the MPI and website.	There are no data available in the report.	In Analysis	TBC Resolution: Software update from vendor CR currently in review

Known Issues Update – Balancing Market

ID	Name	Description	Impact to Market Participants	Status	Resolution Date
109895	Daily Meter Data Report (Website)	Duplicate entries are appearing in the Dynamic report for Daily meter data.	Data is currently duplicated on the following dates in the dynamic meter data report on the website. 17th + 27th Nov 7th Dec has 3 line entry per timestamp 13th Dec 11th + 19th Jan.	In Analysis	TBC Resolution: Software update from vendor
5952	REPT_008: Imbalance Price Report	Total Unit Availability field within the Imbalance Price Report is being calculated incorrectly.	The report may display incorrect Total Unit Availability values. The report presents inaccurate information.	In Analysis	TBC Resolution: Software update from vendor
5317	REPT_088 Net Imbalance Forecast	The report is published every hour instead of every half hour , as specified by the ITS, Volume C.	Information is available less frequently. Market Participants continue to use the information as available.	In Analysis	TBC Resolution: Software update from vendor
110321	Incremental & Decremental Price quantity pairs	When a participant submits 9 Price Quantity Pairs for Incremental and Decremental costs curves the sequences do not see the prices as monotonically increasing and then defaults them to zero. This is a defect and has knock on impacts on the scheduling of LTS, RTC and RTD	As a workaround participants are requested to not submit 9 PQ pairs when submitting Commercial Offer Data.	In Analysis	TBC Resolution: Software update from vendor

Known Issues Update – Balancing Market

ID	Name	Description	Impact to Market Participants	Status	Resolution Date
5329	Reports missing 1st ISP of Trade Day	<p>Reports not showing first ISP interval for trade date in report.</p> <p>REPT_078: Aggregated Contract Quantities for Generation REPT_079: Aggregated Contract Quantities for Demand REPT_080: Aggregated Contract Quantities for Wind</p>	<p>The MPs will not be able to source data for the first ISP of a trade date from this report until the issue is remedied. These data can be sourced elsewhere. They are available in the ETS Market Results published on the SEMOpx website, D+1.</p>	<p>In the process of submission to the RA's for approval</p>	<p>TBC Resolution: Software update from vendor</p>
5587	Missing Reports on the new SEMO Website	<p>2 Reports are currently not publishing to the new SEMO website. REPT_027 (Four Day Rolling Wind Forecast) and REPT_013 (Daily Commercial Offer Data)</p>	<p>No material impact to Market Participants or General Public as these reports are now being uploaded manually to the SEMO website.</p>	<p>In the process of submission to the RA's for approval</p>	<p>TBC Resolution: Software update from vendor</p>
5603	REPT_081 hourly Anonymized INC and DEC Curves	<p>Currently the report cumulatively adds each MW quantity to the last MW quantity rather than the difference. This results in erroneous MW values in the report.</p>	<p>The PQ pairs reported in REPT_081 erroneously report values that exceed the generation capacity in Ireland. The report is inaccurate and the commercial bidding behaviour of the aggregated generation on the Island is not accurately represented.</p>	<p>In the process of submission to the RA's for approval</p>	<p>TBC Resolution: Software update from vendor</p>

Known Issues Update – Balancing Market

ID	Name	Description	Impact to Market Participants	Status	Resolution Date
5845	REPT_022 Showing Empty	The Initial Interconnector Flows and Residual Capacity Report (REPT_022) is produced EMPTY on the MPI, and subsequently to the SEMO website. This is an error with the vendor design that causes the report to fail when no SO Trades are available in the system.	Report unavailable to Market Participants and General Public.	Unplanned	No Confirmed Delivery date
5812	REPT_068 UOM error	The Dispatch Quantity report (REPT_068) erroneously calculates the “Dispatch Quantity” field as MW for P/S units when in pumping mode. These values should be calculated and reported as MWh.	MPs will observe incorrect values for pumping mode MWh values in this report until remedied. Settlement is unaffected as those calculations use metered generation.	Unplanned	No Confirmed Delivery date
102081	REPT_006: Daily DI Report	For P/S Units, intermittent representation of duplicate values (MWOFF) instructions appearing. This is due to internal processing of records and does not affect the Instruction Profiling process, only the outbound report.	For P/S units, the Market Participant will need to ignore the duplicate entry until resolved.	Unplanned	No Confirmed Delivery date
5195	Report display	HTML report is displayed in UTC rather than always in local time.	This issue affects 39 reports. This is a display issue only, as the values and corresponding time interval are correct.	Unplanned	No Confirmed Delivery date

Known Issues Update – Settlement

ID	Name	Description	Impact to Market Participants	Status	Resolution Date
5654	Incorrect result for CDISCOUNT and CPREMIUM for the IRCU unit in REPT_043	In REPT_043, the CPREMIUM & CDISCOUNT charge calculations for the IRCU unit are incorrect due to missing data.	The REPT_043 will be incorrect for these charge types until the issue is resolved within the software.	Closed	Release A Jan 29 th 2019
5658	REPT_044, incorrect values for QCOB, QCNET	Settlement Report is reporting QCOB and QCNET as daily values instead of 30 minute values, the calculation is working as designed using each ISP values in the Settlement calculations.	Minimal Impact the report only represents a single value for both QCOB and QCNET in REPT_033, the settlement calculation is unaffected.	Closed	Release A Jan 29 th 2019
5741	FPN / Controllable Wind (DQ)	PN and Availability are not being profiled correctly i.e. the start and end of trading period effective values.	DQ values not correct, leading to incorrect settlement charge calculations in all settlement artefacts	Closed	Release A Jan 29 th 2019

Known Issues Update – Settlement

ID	Name	Description	Impact to Market Participants	Status	Resolution Date
5757	The FPN value in IP is different from CSB	QFPN being calculated in MMS based on values of FPN profile on each half hour boundary point only and not considering changes in profile within the half hour.	FPN within period leading to incorrect Instruction Profiling outcomes, affecting quality of data used for settlements determinants and charge type calculations.	Closed	Release A Jan 29 th 2019
5761	Fixed Costs	Current logic needs to be modified so that CSB gets the correct complex offer data for when a complex bid has been used for a BOA. Fixes required on both Settlements System (CSB) and upstream Market Systems (MA/MI).	Some Fixed Cost calculations are incorrect.	Closed	Release A Jan 29 th 2019
5766	Actual Availability	IP Time Weighted Average calculation of qAA only referencing beginning and end of trading period	In some cases, qAA not correct.	Closed	Release A Jan 29 th 2019

Known Issues Update – Settlement

ID	Name	Description	Impact to Market Participants	Status	Resolution Date
5652	Interconnectors	CIMB, Premium & Discount for IRCU and IEU not using QAO and QAB.	Interconnector settlements for CIMB, CPREMIUM, CDISCOUNT not correct.	Closed	Release A Jan 29 th 2019
5646	Autoproducers	Traded positions of TU units are not being considered for difference payments and charges.	Difference Charges and Payments for autoproducer units not correct when traded positions exist.	Closed	Release A Jan 29 th 2019
5710	Currency adjustment charge defect	CCA is not being calculated for Supplier lite windfarms registered as suppliers. CCA should be calculated for all supply units (currently only being charged if QMLF < 0)	Settlement Reports/Documents/Statements incorrect	Closed	Release A Jan 29 th 2019

Known Issues Update – Settlement

ID	Name	Description	Impact to Market Participants	Status	Resolution Date
103722	CFC not available in Settlement artefacts	Due to internal data transfer issues, the CFC costs are not available in the settlement artefacts	CFC not available in Settlement artefacts	Closed	Release A Jan 29 th 2019
5799	Incorrect CFC and Premium Payments	Caused by incorrect QBOA calculation in particular circumstances	CFC and Premium data incorrect	Partially Closed	Release A Jan 29 th 2019
5743	CRM Sttl, W/in Day Difference Charges	CRM Within Day Difference Charges will not make use of a BOA where there is both a QAO and a QAB.	Calculation incorrect at the time.	Closed	Release A Jan 29 th 2019

Known Issues Update – Settlement

ID	Name	Description	Impact to Market Participants	Status	Resolution Date
5804	No Load Cost calculation in CFC	Recoverable No Load Costs in CFC double what they should be	Incorrect value in CFC for these cases	Closed	Release A Jan 29 th 2019
5881	Settlement Document	Settlement Document incorrect amount for New gross amount and Net amount when Settlement Calendar is configured with 2 AH runs for a Billing Period	Incorrect amounts reported in Settlement document when settlement calendar is configured with 2 AH runs for a Billing Period	Closed	Release A Jan 29 th 2019
5881	Settlement Document	Settlement Document incorrect amount for New gross amount and Net amount when Settlement Calendar is configured with 2 AH runs for a Billing Period	Incorrect amounts reported in Settlement document when settlement calendar is configured with 2 AH runs for a Billing Period	Closed	Release A Jan 29 th 2019

Known Issues Update – Settlement

ID	Name	Description	Impact to Market Participants	Status	Resolution Date
5883	Difference Payment Calculation sets final QDIFFTRACK to zero if there are no intraday trades - Supplier Unit	Difference Payment Calculation sets final QDIFFTRACK to zero if there are no intraday trades - Supplier Unit	Difference payment Calculations are incorrect when a supplier unit has no intraday trades	Closed	Feb 19th 2019 Closed as hotfix
5931	ISEM_OUI and CSB_CIMB incorrectly been charged to interconnectors	CSB is not calculating the interconnectors CIMB incorrectly	No impact to market participants manual workaround is in place.	Closed	Feb 18th 2019 Closed as hotfix
5884	QDIFFTRACK Error for CAU units	QDIFFTRACK was calculated incorrectly where a capacity market unit only has day ahead trades.	Settlement reports/documents/Statements were delayed in publication to participants	Closed	Feb 2nd 2019 Closed as hotfix
5657	Biased Quantities for Generator Units registered as part of an Autoproducer site	Biased Quantities are currently being calculated for all generator units which is registered as part of an Autoproducer site	The SEMO settlements team has developed a work around for this issue. We will retain the item on this list, but it has no impact on the Market Participants.	Closed	Release B March 26 th 2019
5688	Bills case performance	Bill cases taking over two hours to run and process	Affects Settlement operations meeting agreed upon publication time lines	Closed	Release B March 26 th 2019

Known Issues Update – Settlement

ID	Name	Description	Impact to Market Participants	Status	Resolution Date
5936	Multiple instances of QAO and QAB being inconsistent i.e. large positive QAO and a large negative QAB when FPN and QD are similar.	Multiple instances of QAO and QAB being inconsistent i.e. large positive QAO and a large negative QAB when FPN and QD are similar.	Multiple instances of QAO and QAB being inconsistent	Planned Resolution Date	Release C, May 2019 .
5893	Incorrect IPQBOA values	BOAs were intermittently calculated incorrectly when QD was equal to the FPN with a BOA generated. Also where QD is similar to FPN yet large variances in QAO and QAB.	FPN yet large variances in QAO and QAB. IPQBOA values were not correct. Temporary workaround is in place. Permanent solution to be provided by ABB	Planned Resolution Date	Release C, May 2019 .
5888	Settlement reports are only being kept for 2 months	All Settlement reports produced in MMS currently only have a retention of 2 months in the MPI. They are then archived and not available through the front end	Settlement reports/documents/Statements unavailable to participants after 2 months through the MPI. Temporary workaround applied on the 21/01/2019 ensures that no further report will be removed from the MPI. Vendor is working on solution to republish all Settlement reports/documents/Statement to MPI	Planned Resolution Date	Release C, May 2019 .

Known Issues Update – Settlement

ID	Name	Description	Impact to Market Participants	Status	Resolution Date
5886	Settlement reports are only being kept for 2 months	All Settlement reports produced in MMS currently only have a retention of 2 months in the MPI. They are then archived and not available through the front end	Settlement reports/documents/Statements unavailable to participants after 2 months through the MPI. Temporary workaround applied on the 21/01/2019 ensures that no further report will be removed from the MPI. Vendor is working on solution to republish all Settlement reports/documents/Statement to MPI	Planned Resolution Date	Release C, May 2019 .
5940	MPOP FPN Misalignment with MMS	Period of Market Operation Trading Period Starting points in CSB not aligned with the MM, including incorrect application of minute resolution. Should be 30 min resolution.	Not applying the correct starting points for FPNs in relation to the calculation of fixed costs for the Period of Market Operation	Planned Resolution Date	Release C, May 2019 .
5943	Simple/Complex COD	Simple/Complex COD: Flags and Tags are not being applied in the half hours they should. Prices are being applied only to the period where the DI is effective then persisting for all associate BOAs.	Prices are being applied only to the period where the DI is effective then persisting for all associate BOAs.	Planned Resolution Date	Release C, May 2019 .

Known Issues Update – Settlement

ID	Name	Description	Impact to Market Participants	Status	Resolution Date
5950	Difference & NP Charges for DSUs	<p>DSUs Day Ahead, Within Day Difference Quantities & Charges are being incorrectly applied to DSUs as per F.18.4 & F18.5 of the TSC.</p> <p>Calculation of QDIFFTRACK for DSUs being incorrectly applied to DSUs Day Ahead, Within Day Difference Quantities & Charges and Non-Performance Charges</p>	<p>DSUs specific – The calculation of QDIFFTRACK should be zero as per F.18.5 exclusion clause within the TSC including F2.1.2.</p> <p>Ex-Ante quantities are tracked via the FNDDS calculation.</p>	Planned Resolution Date	Release C, May 2019 .
5909	BOA and Start up / no load cost not being calculated when first BOA = 0	System changes between Simple and Complex COD use when the Order of the first BOA does not equal 1.	This affects CFC calculation	Planned Resolution Date	Release C, May 2019 .
5972	Incorrect CNLR to Generators	<p>There are two problems:</p> <p>a) The Fixed Cost calculation of CNLR will for (most) periods of MPOP include the interval prior to MPOP start in the summation.</p> <p>b) The Fixed Cost calculation of CNLR will for (most) periods of MPOP not do correct check on Dispatch Quantity for the last interval.</p>	Incorrect CNLR to Generators	Planned Resolution Date	Release C, May 2019 .
5799	Incorrect CFC and Premium Payments	Caused by incorrect QBOA calculation in particular circumstances	CFC and Premium data incorrect. Improvement in QBOA Calculation	Planned Resolution Date	Release C, May 2019 .

Known Issues Update – Settlement

ID	Name	Description	Impact to Market Participants	Status	Resolution Date
5808	FMOC FX rate applied not aligned with the Trade and settlement code 1.3.9.	FMOC is applying the trading day exchange rate of the last day of the month.	FMOC is applying the trading day exchange rate of the last day of the month.	In Analysis	In Day 1 plus scope, drop TBC Resolution: Software update from vendor
5772	Capacity Charges/Payments	CCC, CCP and CSOCDIFFP settlement for NI units not applying the Annual Capacity Exchange rate as per G.1.3.5 & G.1.3.6. Balancing market FX rate incorrect being applied.	CCC, CCP and CSOCDIFFP settlement for NI units not correct.	In Analysis	In Day 1 plus scope, drop TBC Resolution: Software update from vendor
5988	NI units CNL & CSU in REPT_44 being displayed in EUR. Report should be in GBP	The CNL & CSU are being displayed in REPT_044 for NI units in EUR. These costs are to be reported in GBP as per the report registered currency.	Issue with shadow settling CNL & CSU as report determinants are in EUR.	In Analysis	In Day 1 plus scope, drop TBC Resolution: Software update from vendor
5944	FPN Curve not applying Heat State to CFC inputs correctly	CSB not receiving correct FPN curve from Balancing Market resulting in incorrect Start-Up status.	Incorrect or No Heat State being applied within CSB, therefore Start-Up costs not being included within the CFC calculation	In Analysis	In Day 1 plus scope, drop TBC Resolution: Software update from vendor

Known Issues Update – Settlement

ID	Name	Description	Impact to Market Participants	Status	Resolution Date
5910	Startup flag for CSUR with Warmth State	MA is currently providing Startup Flag and Warmth State for Synchronize Dispatch Instructions that relates to CSU calculation	This affects CFC calculation	In Analysis	In Day 1 plus scope, drop TBC Resolution: Software update from vendor
5923	Metered Volumes by Jurisdiction (REPT_066) - Zero Metered Demand	Aggregated Metered Demand not being published on RET_066. Currently only reporting Aggregated Metered Generation	Unable to view the Aggregated Metered Demand within the Report	In Analysis	TBC Resolution: Software update from vendor
5922	Stop Loss Limits (CSLLA/CSLLB) is not being calculated for IU and CAU	The Stop Loss Limits (CSLLA/CSLLB) calculation is looping over units with Reliability Options that are associated with a Trading Site. The settlement calculation should also include units with Reliability Options that are not associated with a Trading Site like CAU and IU units.	Stop Loss limits are not being calculated for IU and CAUs for the application of the a calculated % applied to the Non-performance	In Analysis	TBC Resolution: Software update from vendor
5890	QD and QM not matching on long day (28/10/18)	Long Day Trading periods not aligned between MAMI and CSB.	Trading Periods misalignment has resulted in the Long day trading periods being incorrectly settled within Initial Settlement.	In Analysis	TBC Resolution: Software update from vendor

Known Issues Update – Settlement

ID	Name	Description	Impact to Market Participants	Status	Resolution Date
105608	Dropdown filters not available on the SEMO website Settlement Calendar	SEMO Website Settlement Calendar > Publication > “Settlement Documents” is not present for users to filter.	11/03/2019 operational day is not available and possibly additional trade dates. We will confirm these dates once available	In Analysis	TBC Resolution: Software update from vendor
113784	ISEM_OUI_ExPost_Instruction_Profiler_M+4_Generator Operational Characteristics _changes required for 01/10/2018 and going forward	The Controllable flag status in registration details contained within Generator Operational Characteristics that also has Technical Offer Data don't match what's in the Resource Balancing screen. This is an issue while trying to rerun IP for M+4. The registration details within Initial Ex-Post \ Initial Instruction Profile \ Instruction Profile Input \ Generator Operational Characteristics screen are incorrect compared to what's in Market Information \ Registration\ Interface Views\ Resource Balancing this is affecting controllable flag status	M+ 4 Resettlement will move back into a regression test phase for a short period and re-planned for production. An update will be provided by the settlement team with the appropriate changes made to the settlement calendar.	In Analysis	TBC Resolution: Software update from vendor

Known Issues Update – Settlement

ID	Name	Description	Impact to Market Participants	Status	Resolution Date
113353	QBOA defect for Error in Slope messages resulting in no QBOAs	There are no IP QBOAs created for GU_X at the end of the day error message appears: Error in Slope calculation for unit GU_X	No BOA volumes are generated for the units in question for certain trading periods. This results in missing BALIMB payments and charges in the billing runs. To date this has only affect thermal generator units and DSUs.	In Analysis	TBC Resolution: Software update from vendor
5953	Report 044 missing Accept time for QAO and QAB determinants	Settlement Report not showing Accept Times for QAO & QAB	Market Participants unable to view the accept time of QBOAs used within Settlement	In Analysis	TBC Resolution: Software update from vendor
5314	REPT_043, _044	The timestamp attribute in the Value element contains +1 second, which it should not	Market participants and any third-party system providers should ignore the additional 1-second on the timestamp and consider the time to be exactly on the ISP interval.	Unplanned	No Confirmed Delivery date

Known Issues Update – Settlement

ID	Name	Description	Impact to Market Participants	Status	Resolution Date
5322	REPT_048 Collateral Report	PUBLICATION_TIMESTAMP attribute is incorrectly assigned the start time of the credit assessment, rather than the finish time.	The difference in time is very brief and has no material effect on the report quality	Unplanned	No Confirmed Delivery date
5339	REPT_043	Incorrect rounding applied to detail records. Summary and Detail records do not sum correctly.	Inconsistency between detailed and summary records within the same REPT_043. Research indicates this to be small amount relative to document totals.	Unplanned	No Confirmed Delivery date
5722	Capacity Charges/Payments	CCC, CCP and CSOCDIFFP settlement for NI units not applying the Annual Capacity Exchange rate as per G.1.3.5 & G.1.3.6. Balancing market FX rate incorrect being applied.	CCC, CCP and CSOCDIFFP settlement for NI units not correct	Unplanned	No Confirmed Delivery date

Agenda

Item	Presenter
Welcome	Anne Fitzgerald
Known Issues Update	Eoin Farrell
Ex-Ante Market	Liam McAllister
Balancing Market	Brendan O'Sullivan, Martin Kerin, Sam Matthews
Disputes & Repricing Update	Dermot Campfield
Settlements & M+4 Resettlement	Sean O'Rourke, John O'Dea
Capacity Market Timetable	Anne Fitzgerald
Query Management	Claire Breslin
Q&A	

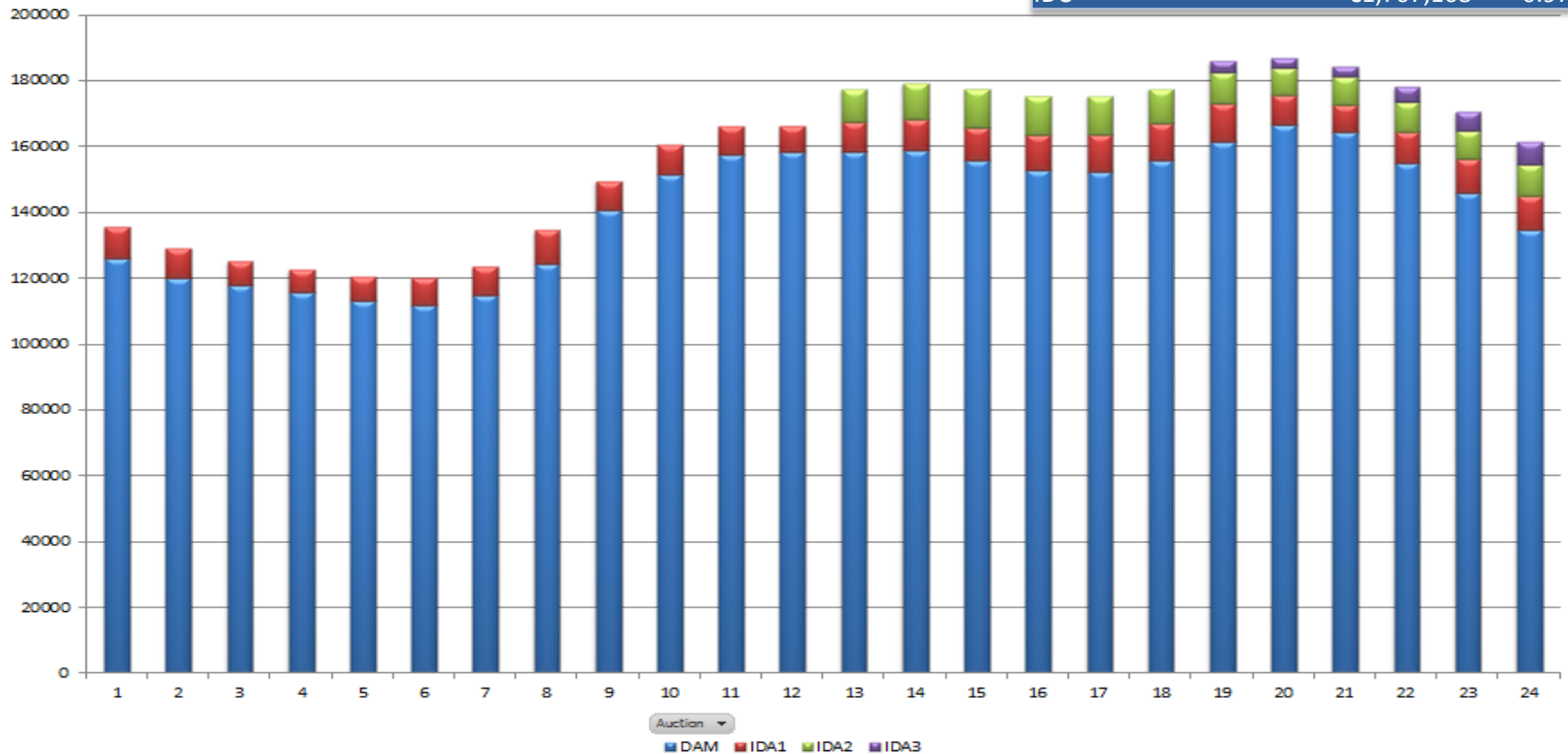
Ex-Ante Markets

- Volumes from ex-ante (25th Feb – 27th Mar)

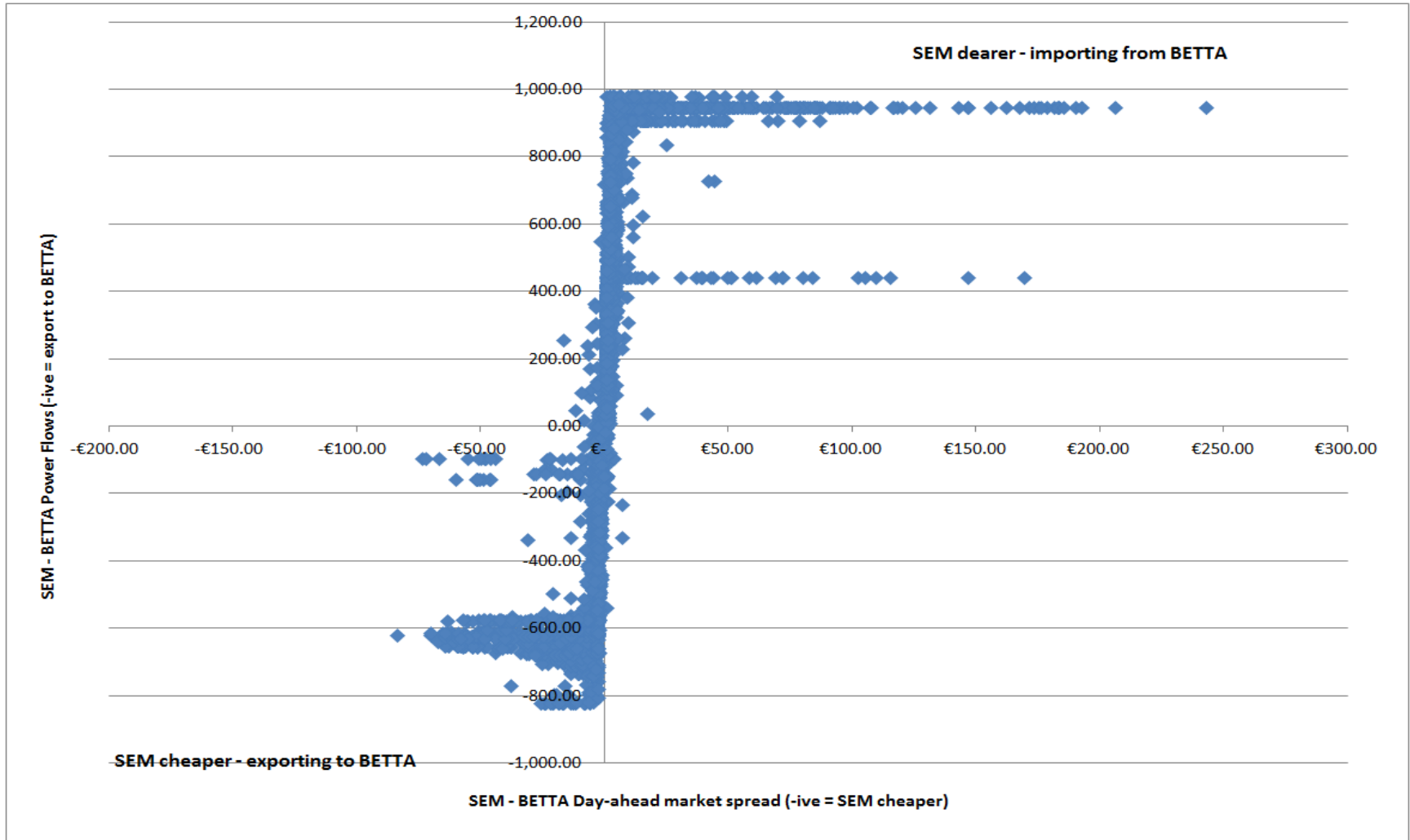
- **DAM** Auction still dominant

**Using approx. prices*

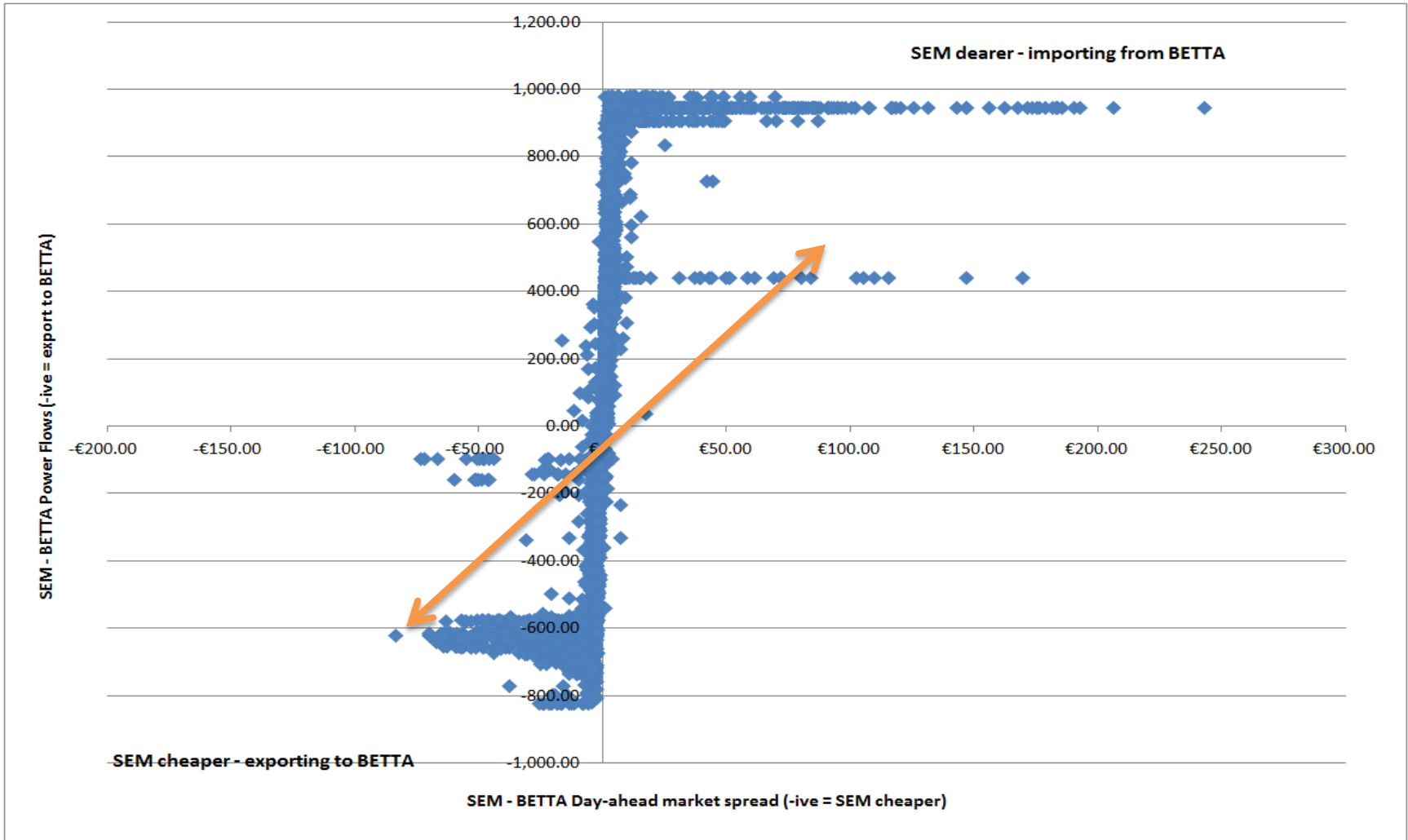
Market	Value	% of DAM
DAM	€176,360,511	
IDA1	€10,952,645	6.21%
IDA2	€6,686,259	3.79%
IDA3	€1,645,832	0.93%
IDC	€1,707,168	0.97%



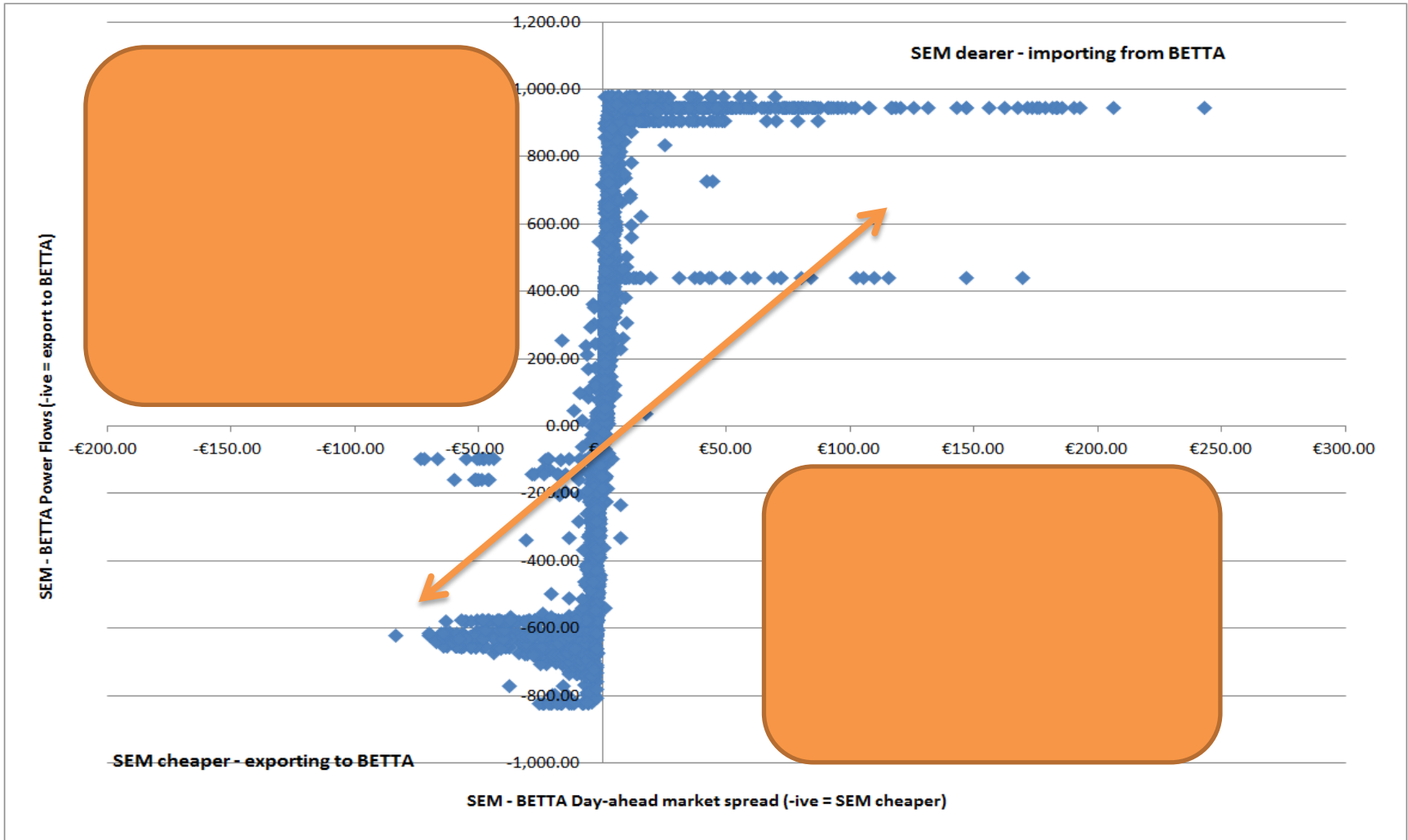
Ex-Ante Market Flows – 6 Months



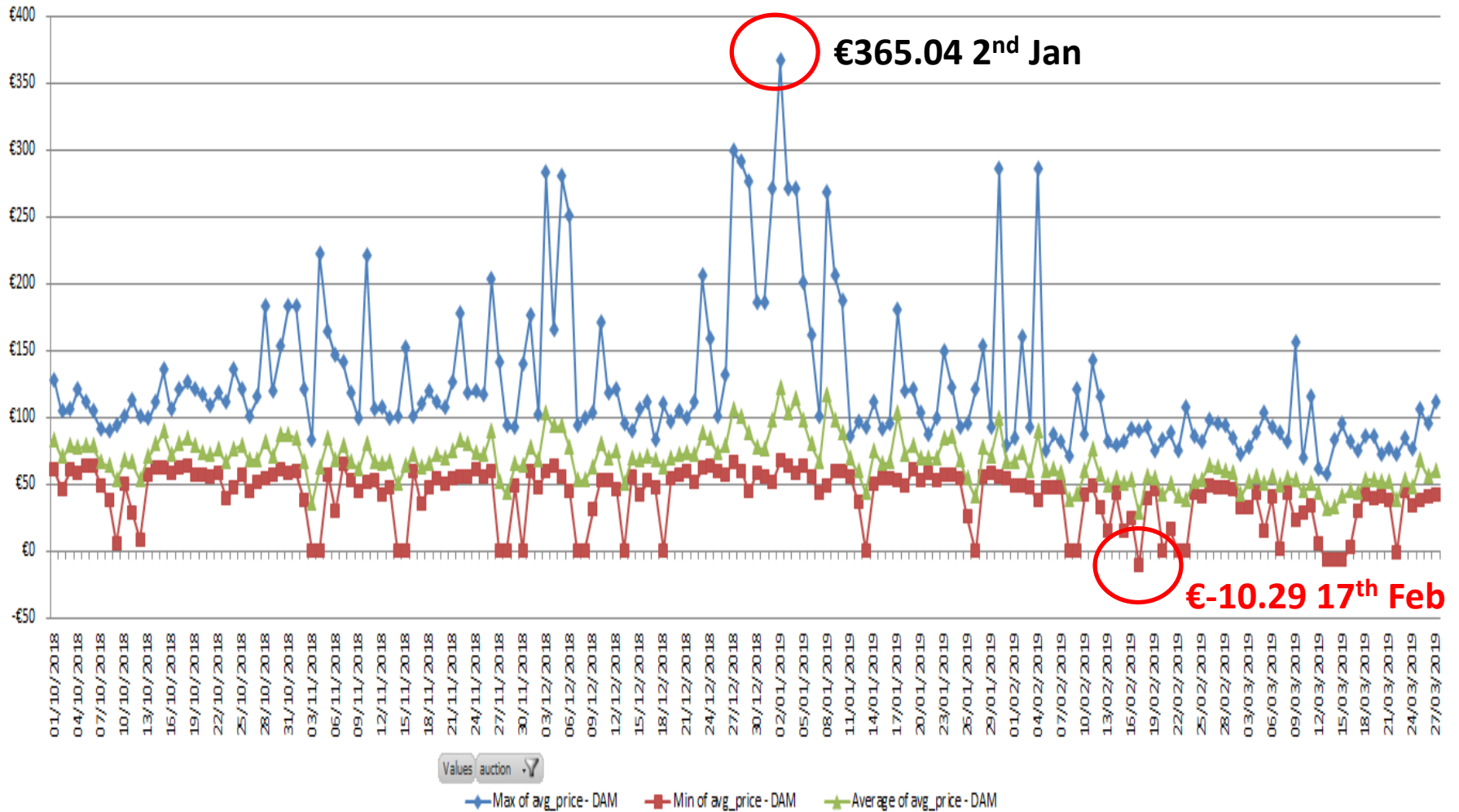
Ex-Ante Market Flows – 6 Months



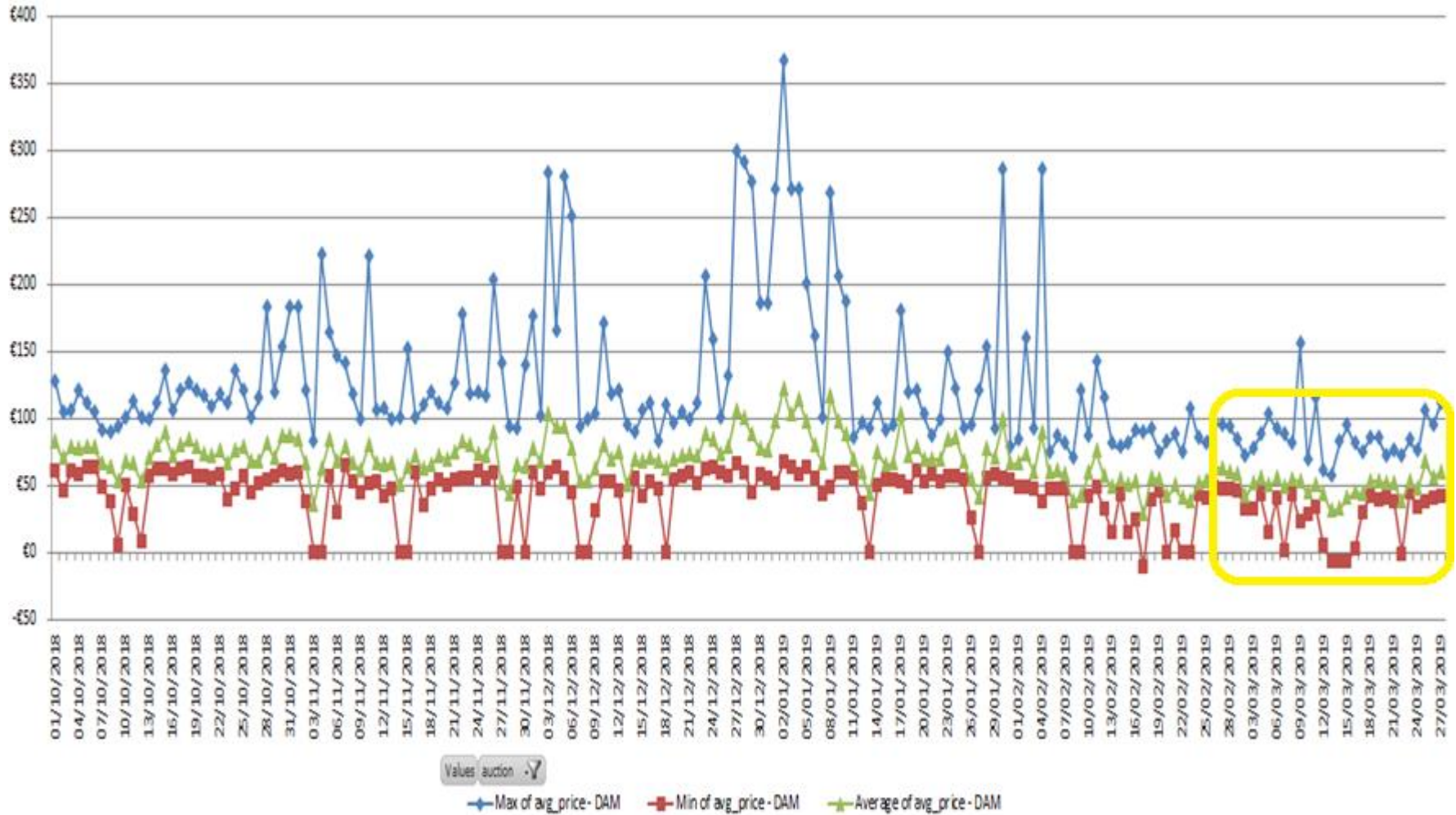
Ex-Ante Market Flows – 6 Months



Ex-Ante Auction Price – 6 Month DAM Look Back

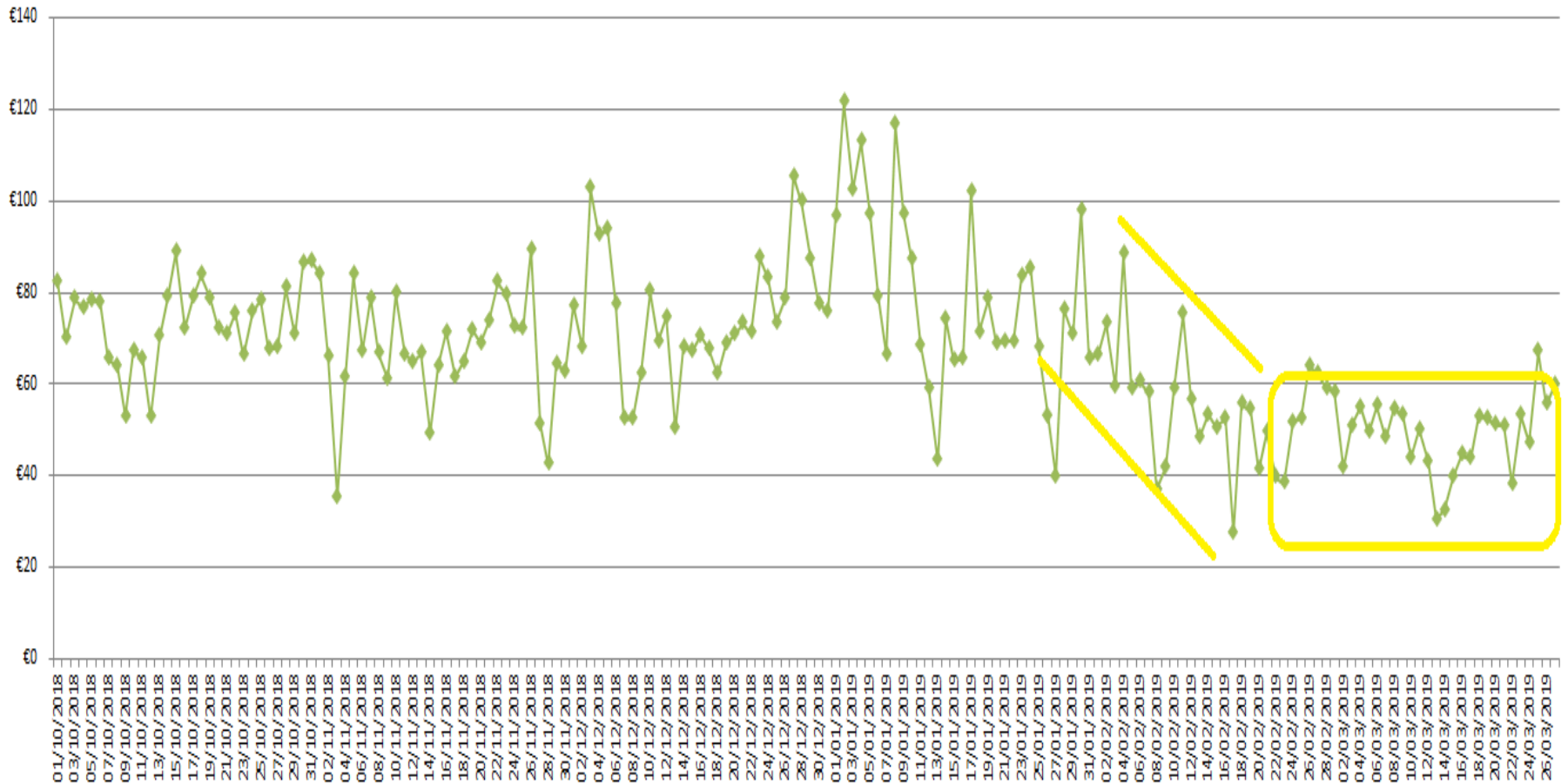


Ex-Ante Auction Price – 6 Month DAM Look Back



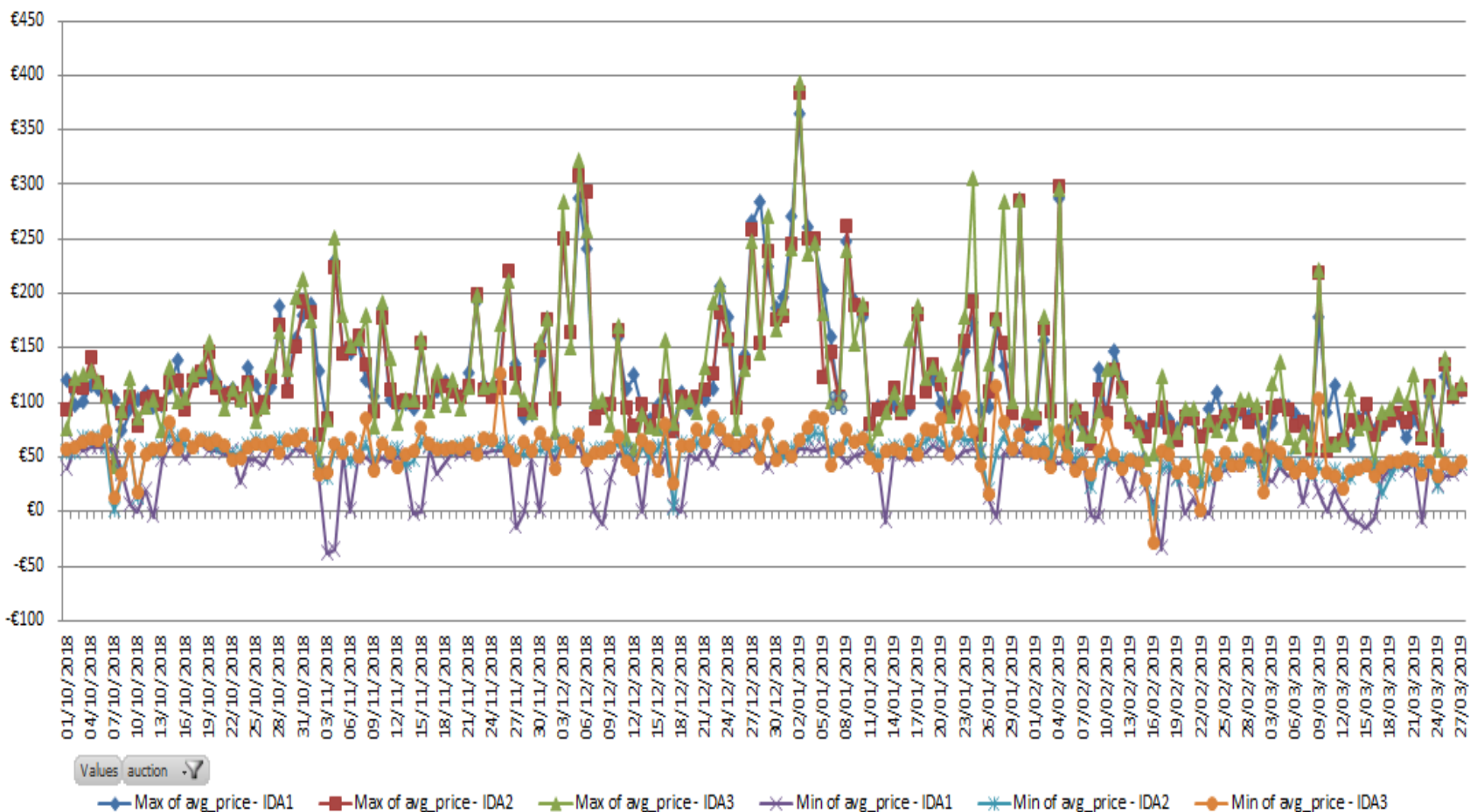
Ex-Ante Auction Price – 6 Month DAM Look Back

- Coming out of winter months... Price Volatility Declining ?



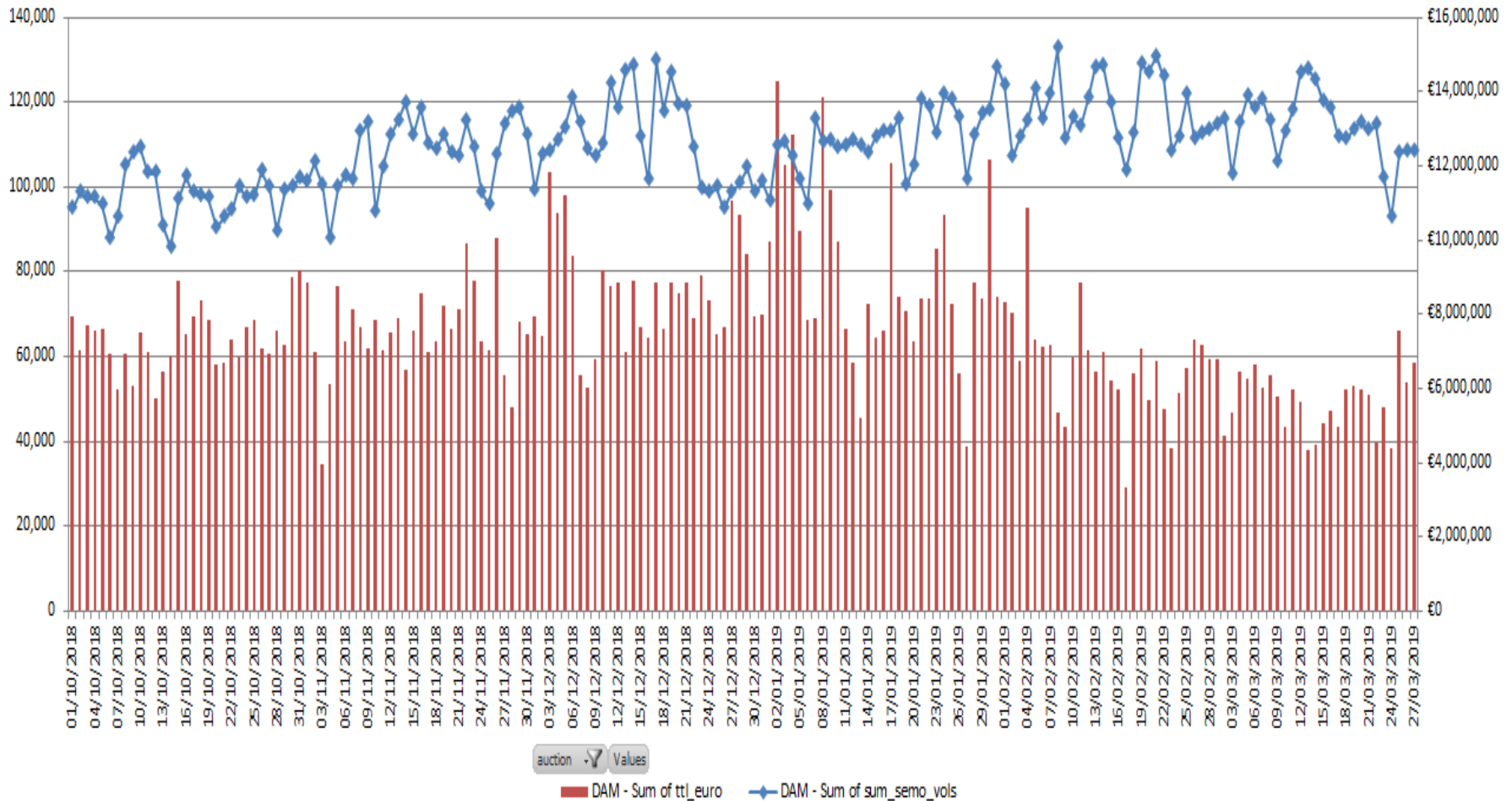
Ex-Ante Auction Price – 6 Month IDA's Look Back

- Prices generally higher in later auctions – though uniform to DAM



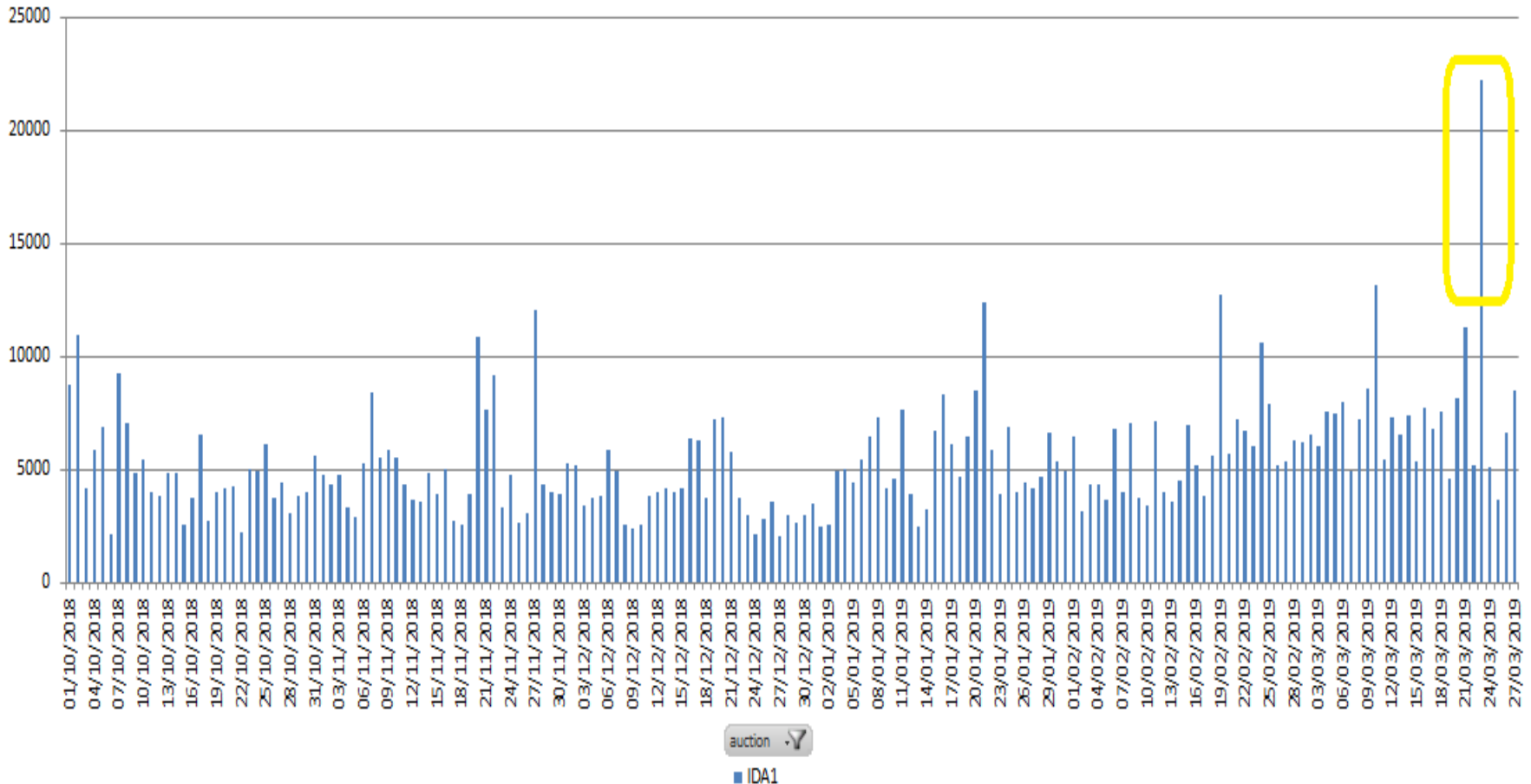
Ex-Ante Auction Volume – 6 Month DAM Look Back

- Coming out of winter months... Volume Steady at 100-120K



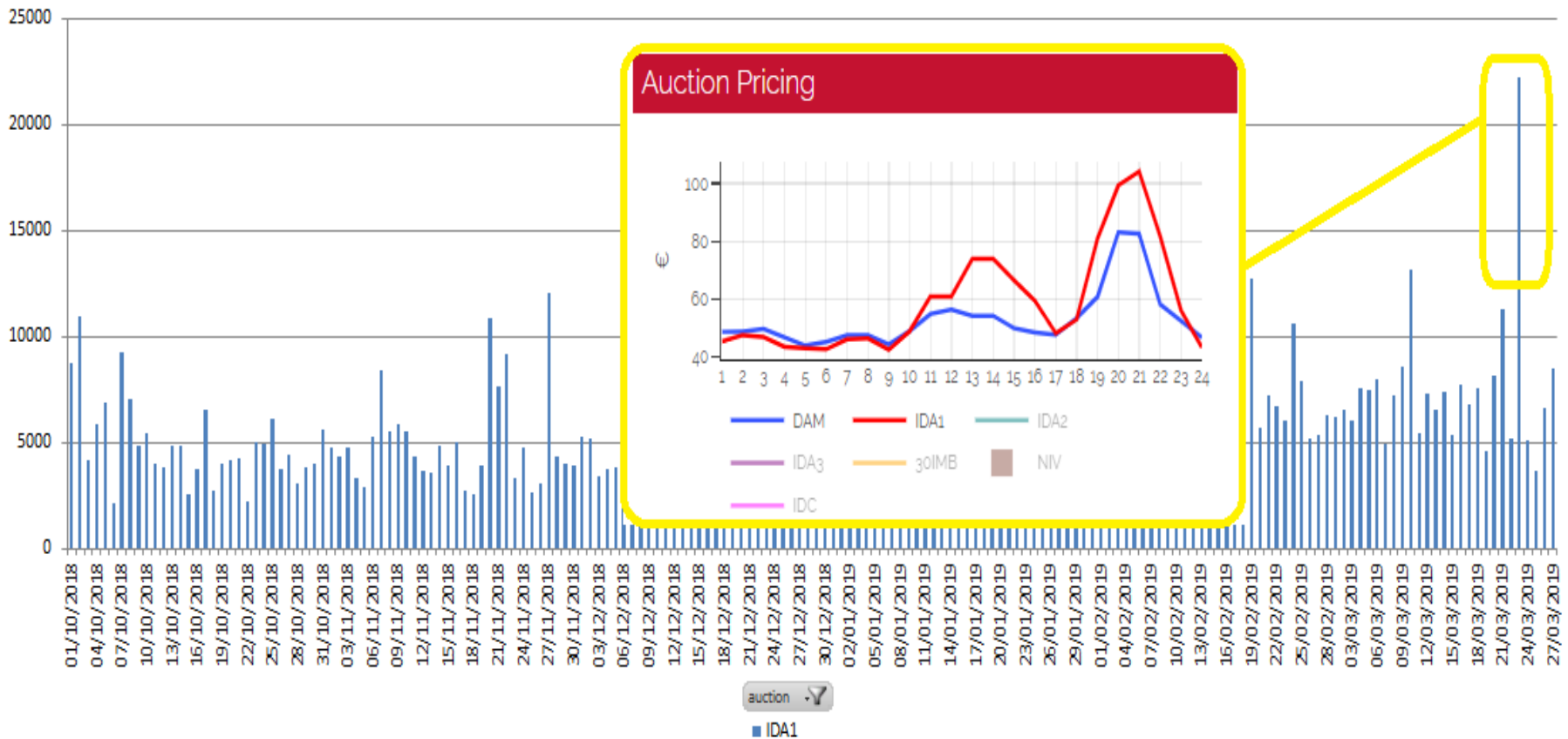
Ex-Ante Auction Volume – 6 Month IDA's Look Back

- MP's using later auctions to do business, more frequently... **IDA1 - Outliers**



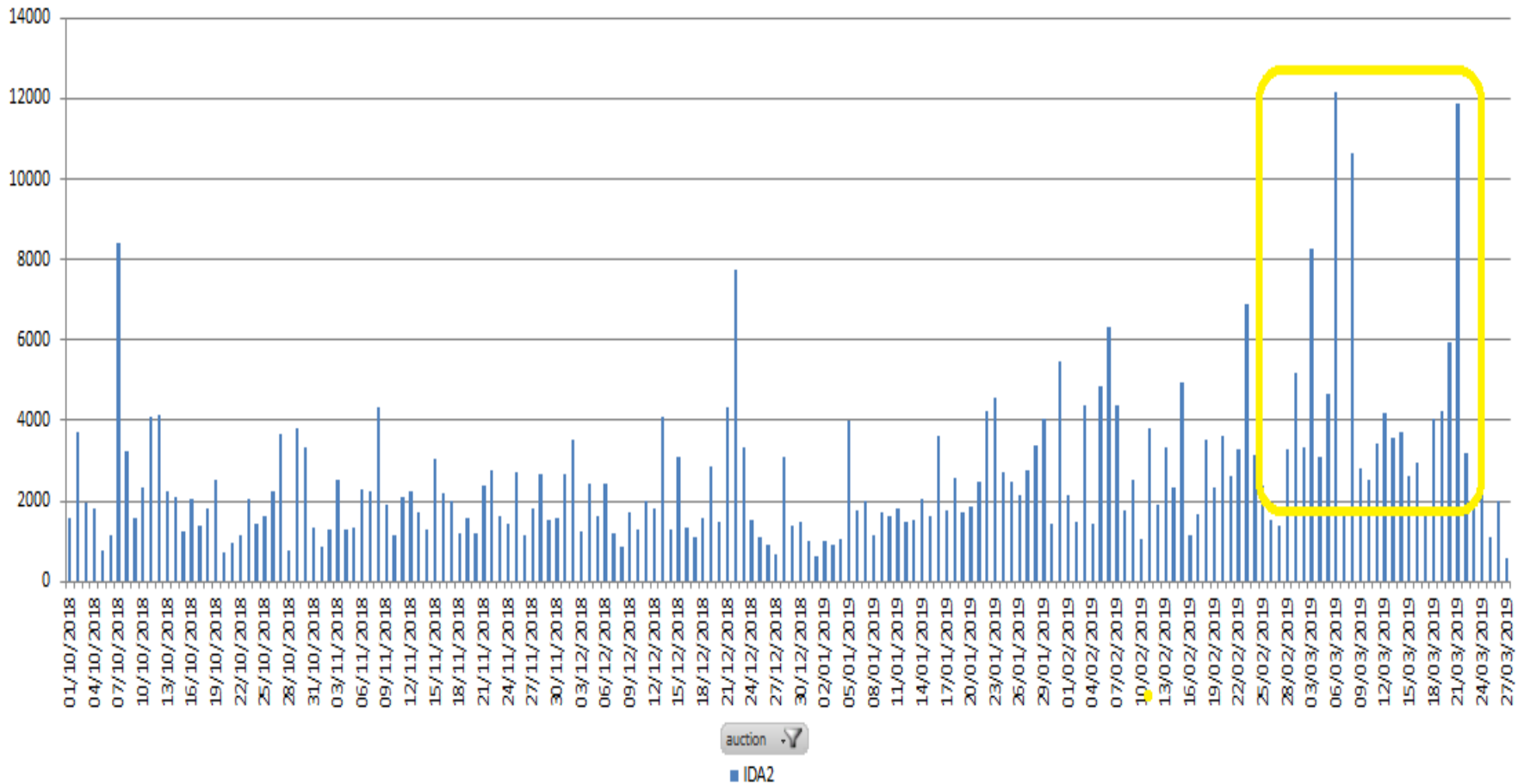
Ex-Ante Auction Volume – 6 Month IDA's Look Back

- MP's using later auctions to do business, more frequently... **IDA1 - Outliers**



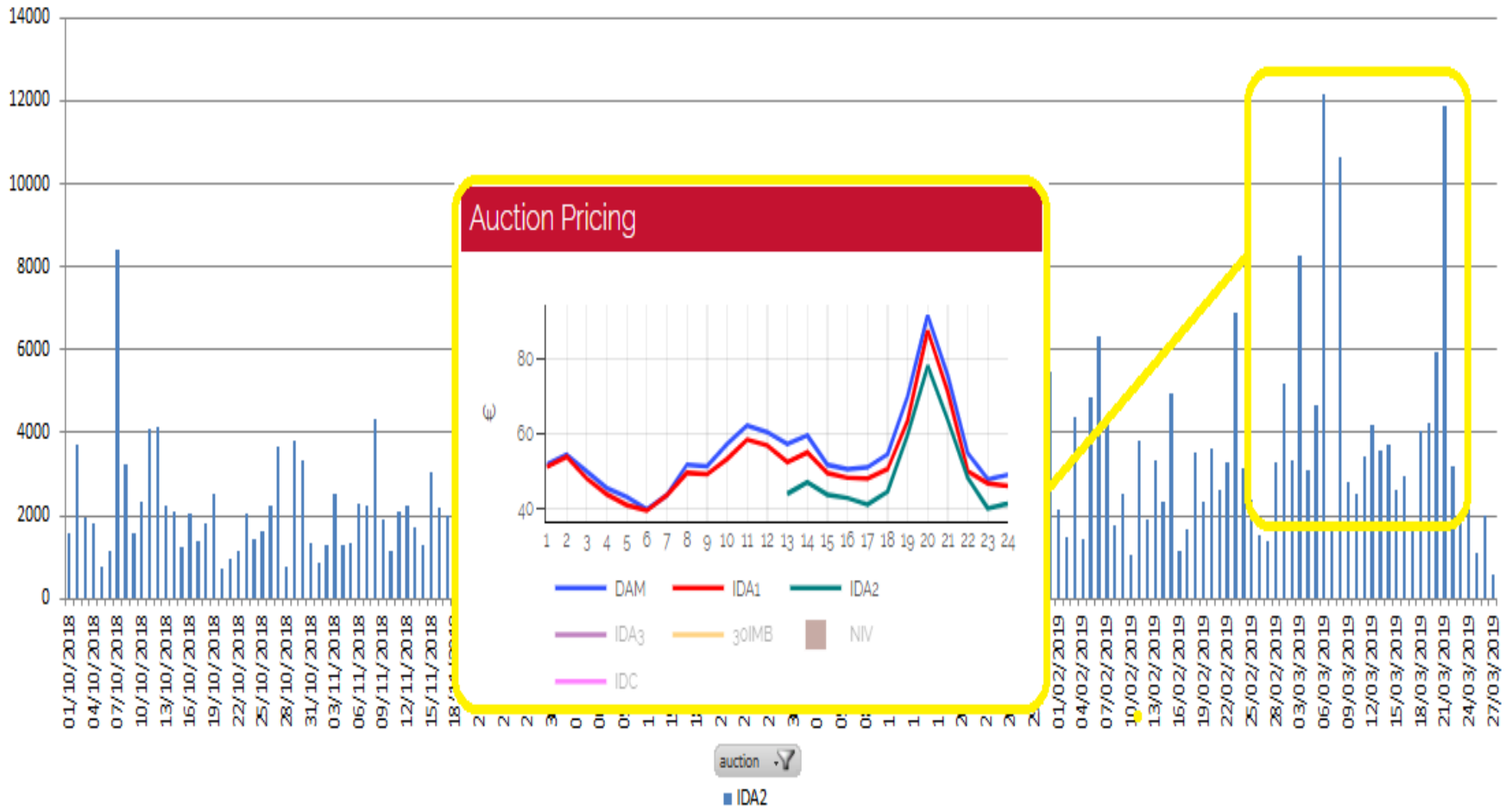
Ex-Ante Auction Volume – 6 Month IDA's Look Back

- MP's using later auctions to do business, more frequently... **IDA2 - Outliers**



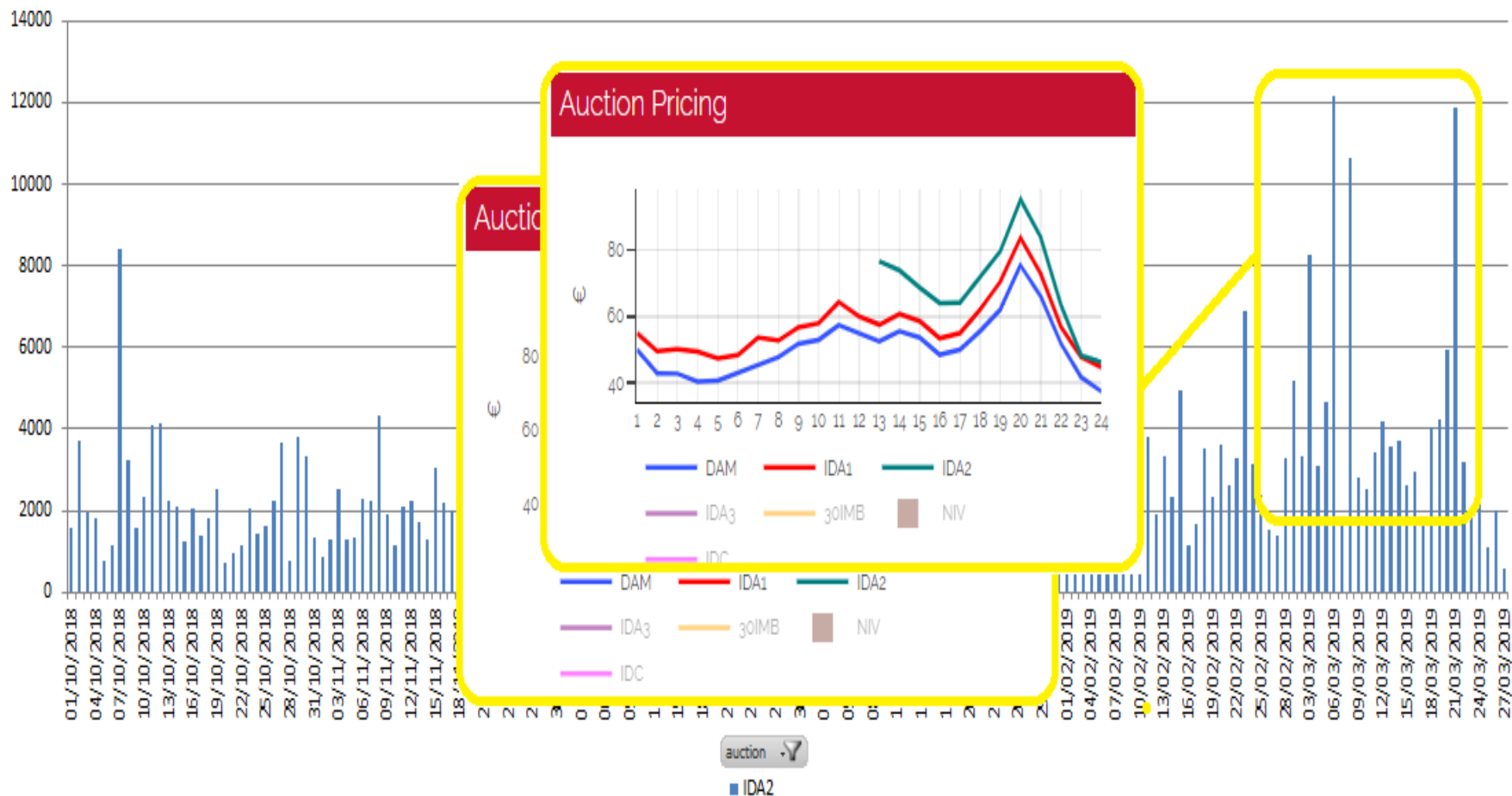
Ex-Ante Auction Volume – 6 Month IDA's Look Back

- MP's using later auctions to do business, more frequently... **IDA2 - Outliers**



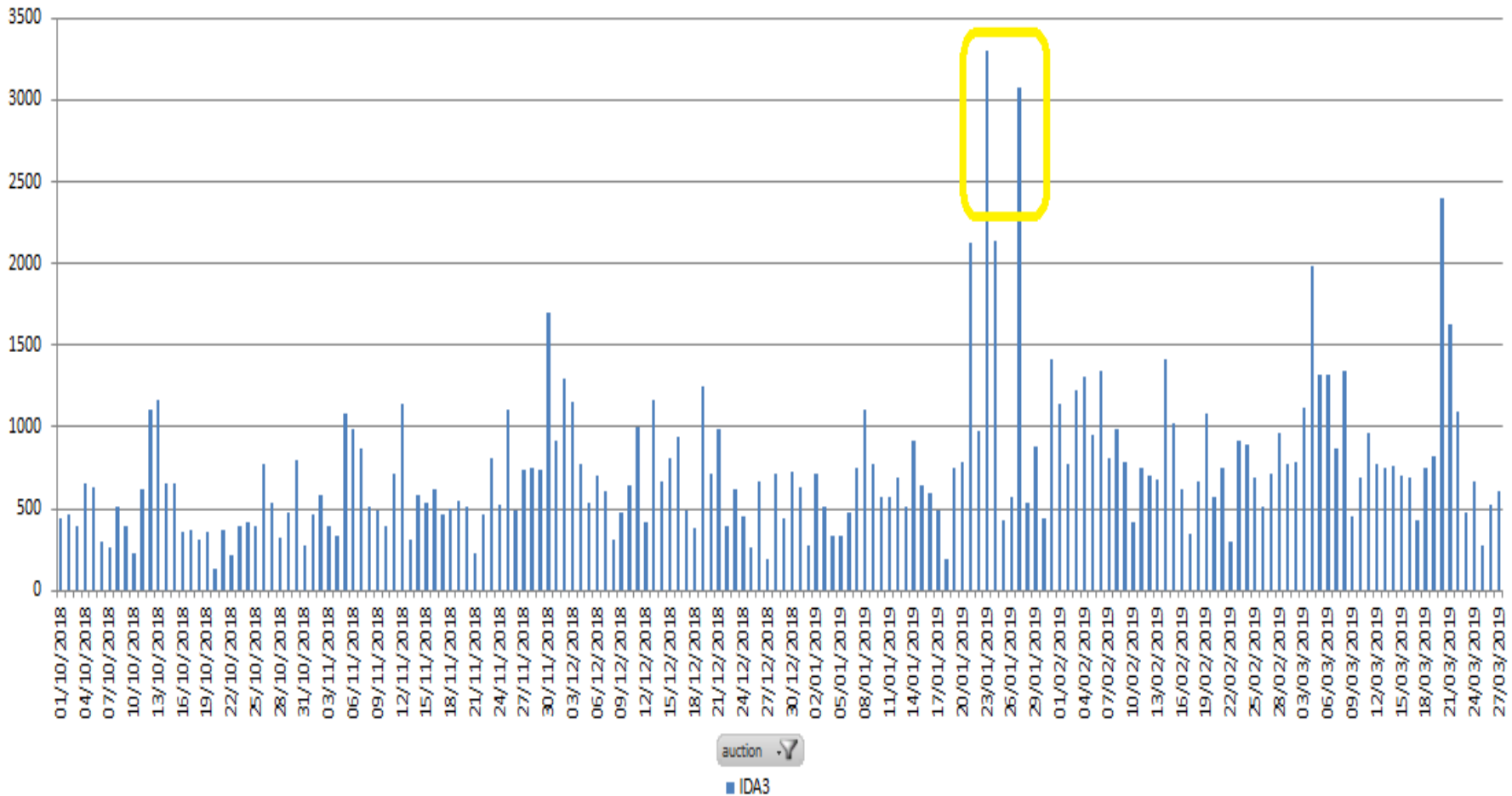
Ex-Ante Auction Volume – 6 Month IDA's Look Back

- MP's using later auctions to do business, more frequently... **IDA2 - Outliers**



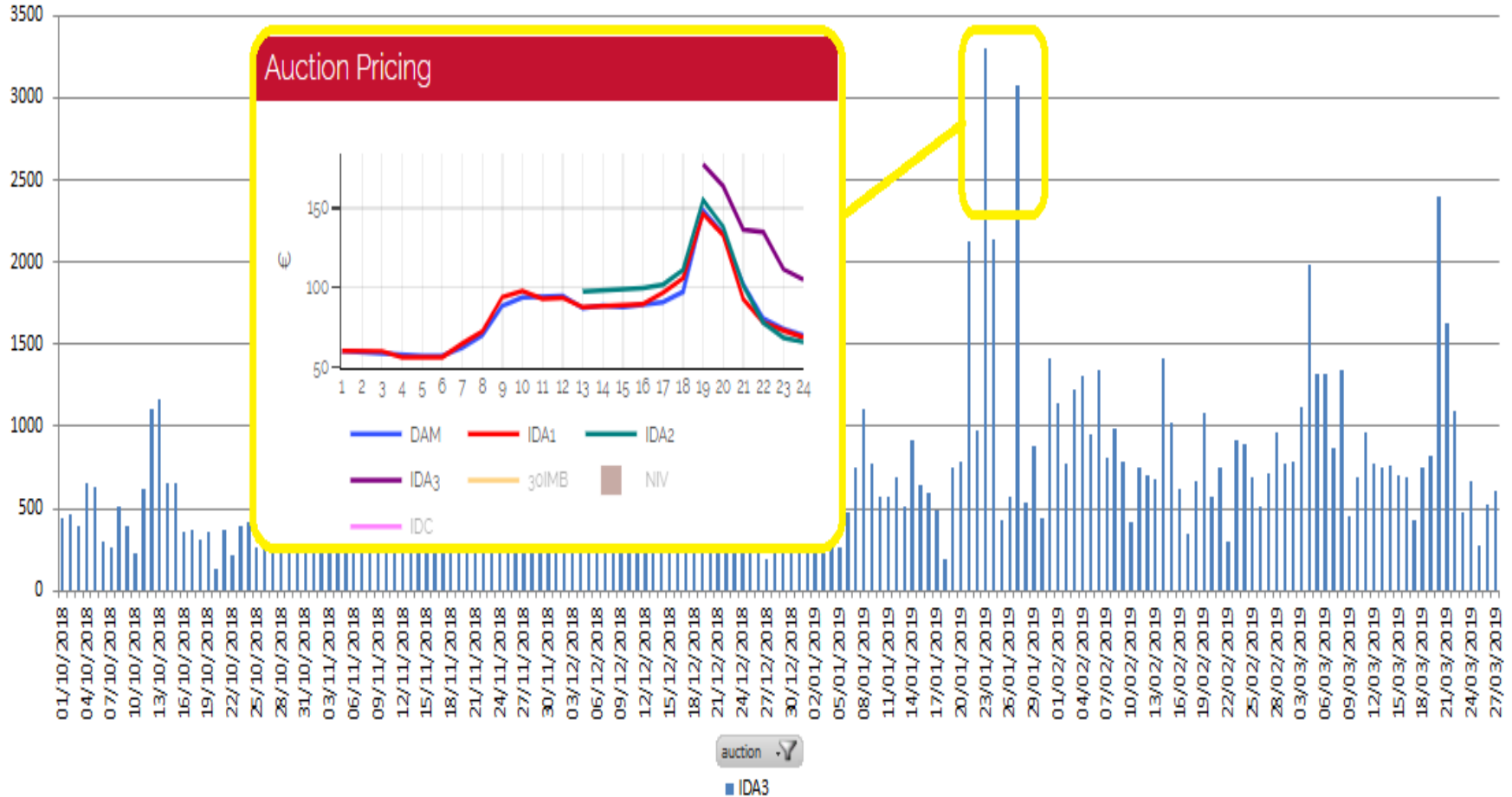
Ex-Ante Auction Volume – 6 Month IDA's Look Back

- MP's using later auctions to do business, more frequently... **IDA3 - Outliers**



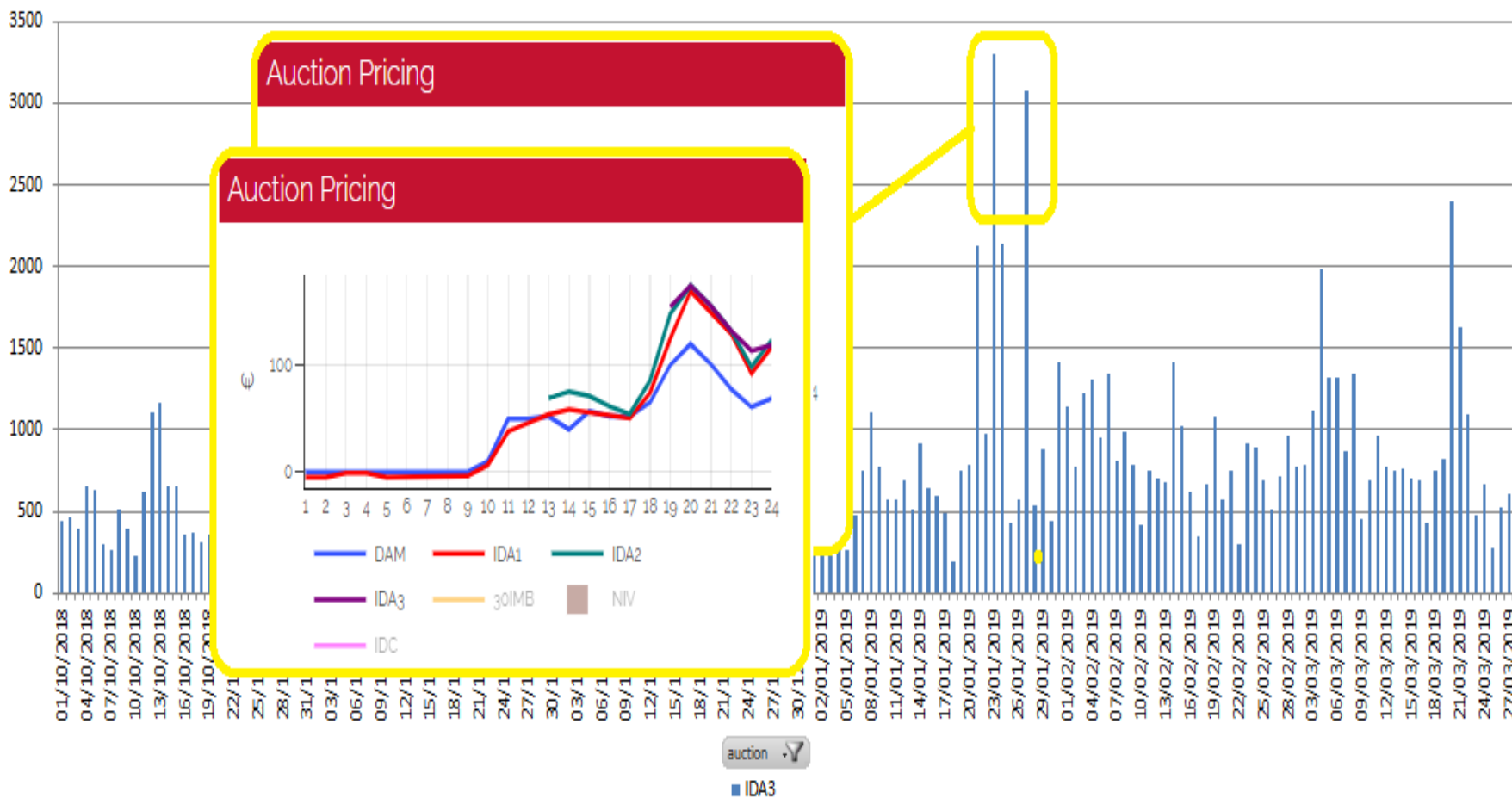
Ex-Ante Auction Volume – 6 Month IDA's Look Back

- MP's using later auctions to do business, more frequently... **IDA3 - Outliers**

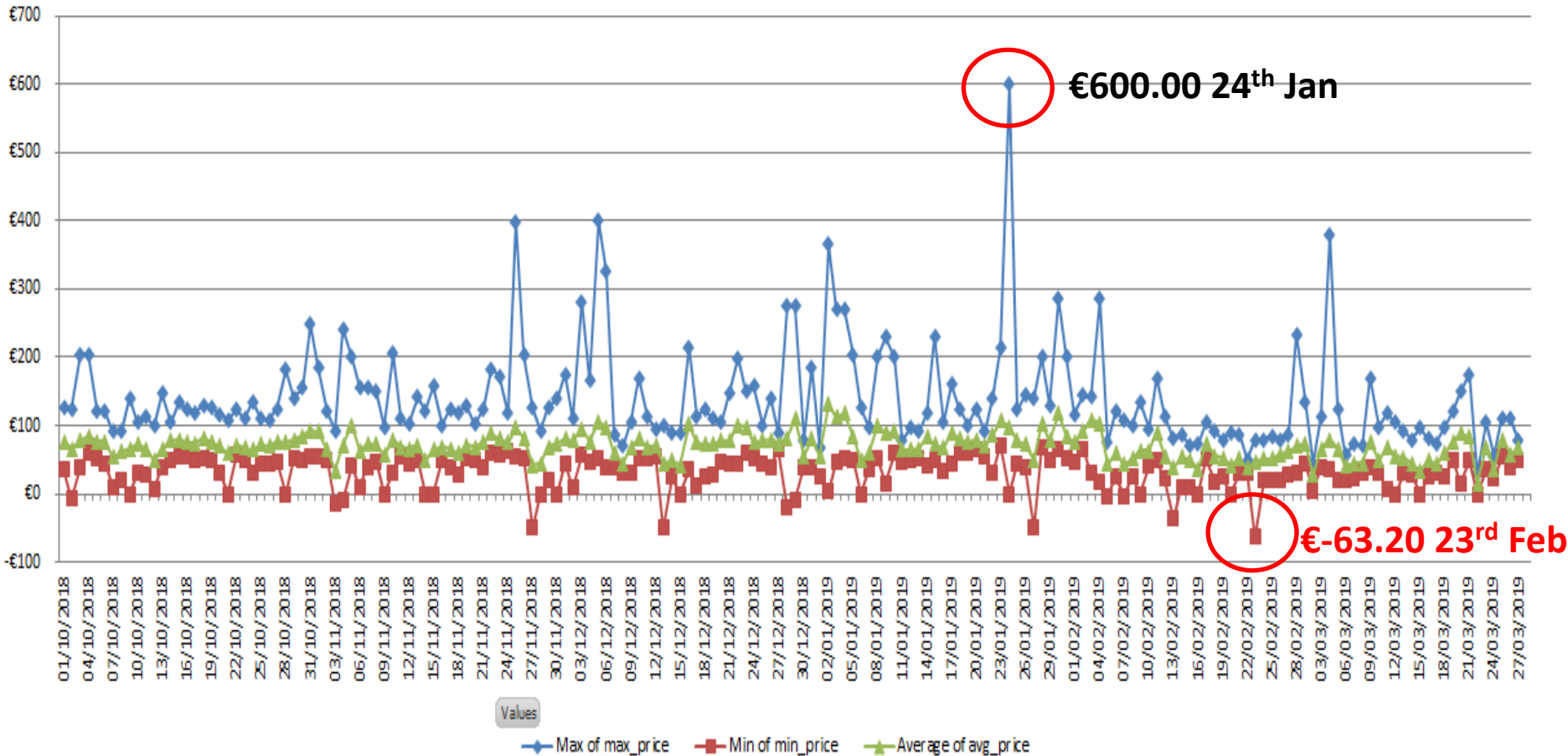


Ex-Ante Auction Volume – 6 Month IDA's Look Back

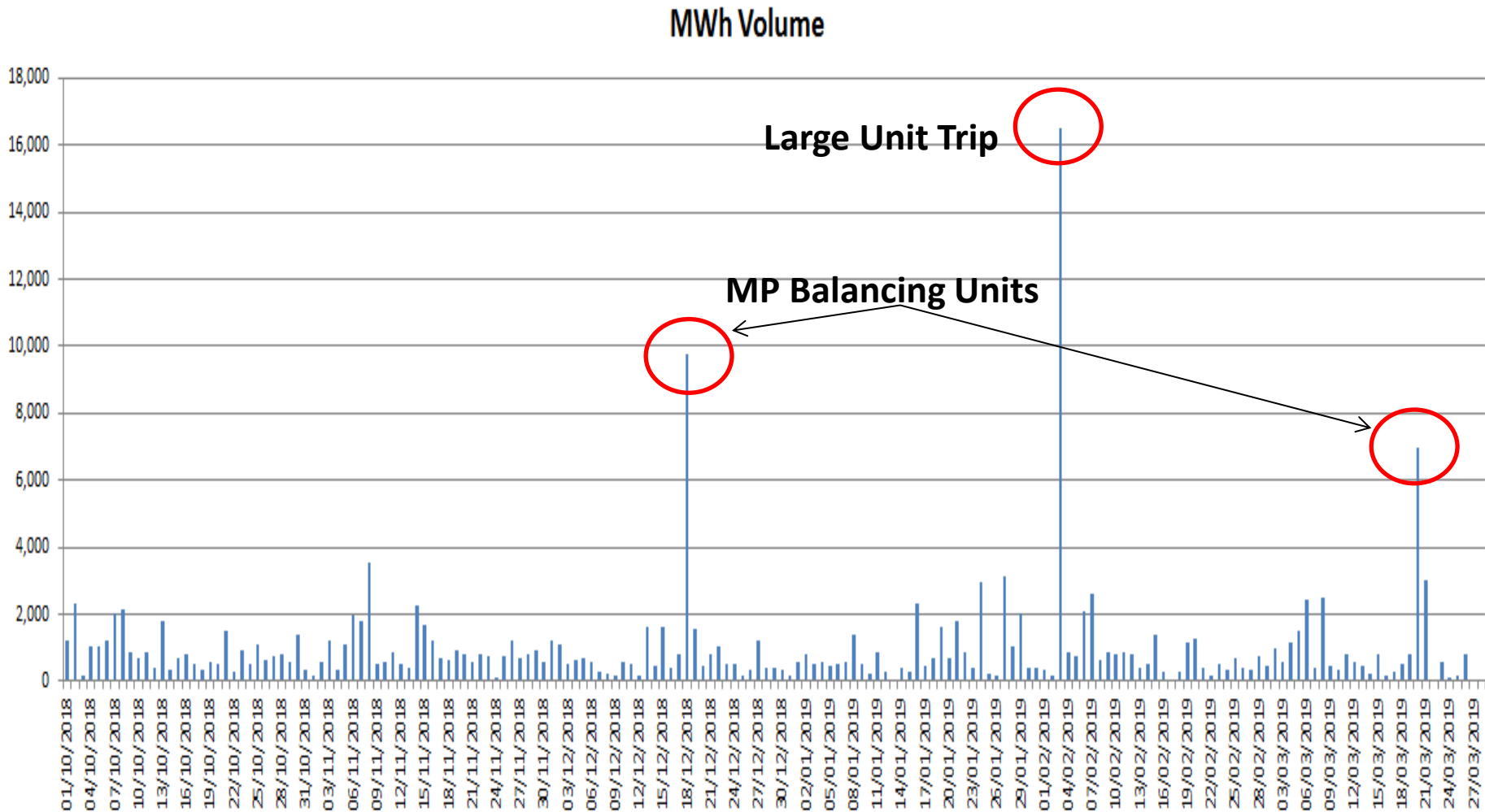
- MP's using later auctions to do business, more frequently... **IDA3 - Outliers**



Ex-Ante IDC Market Price – 6 Month Look Back

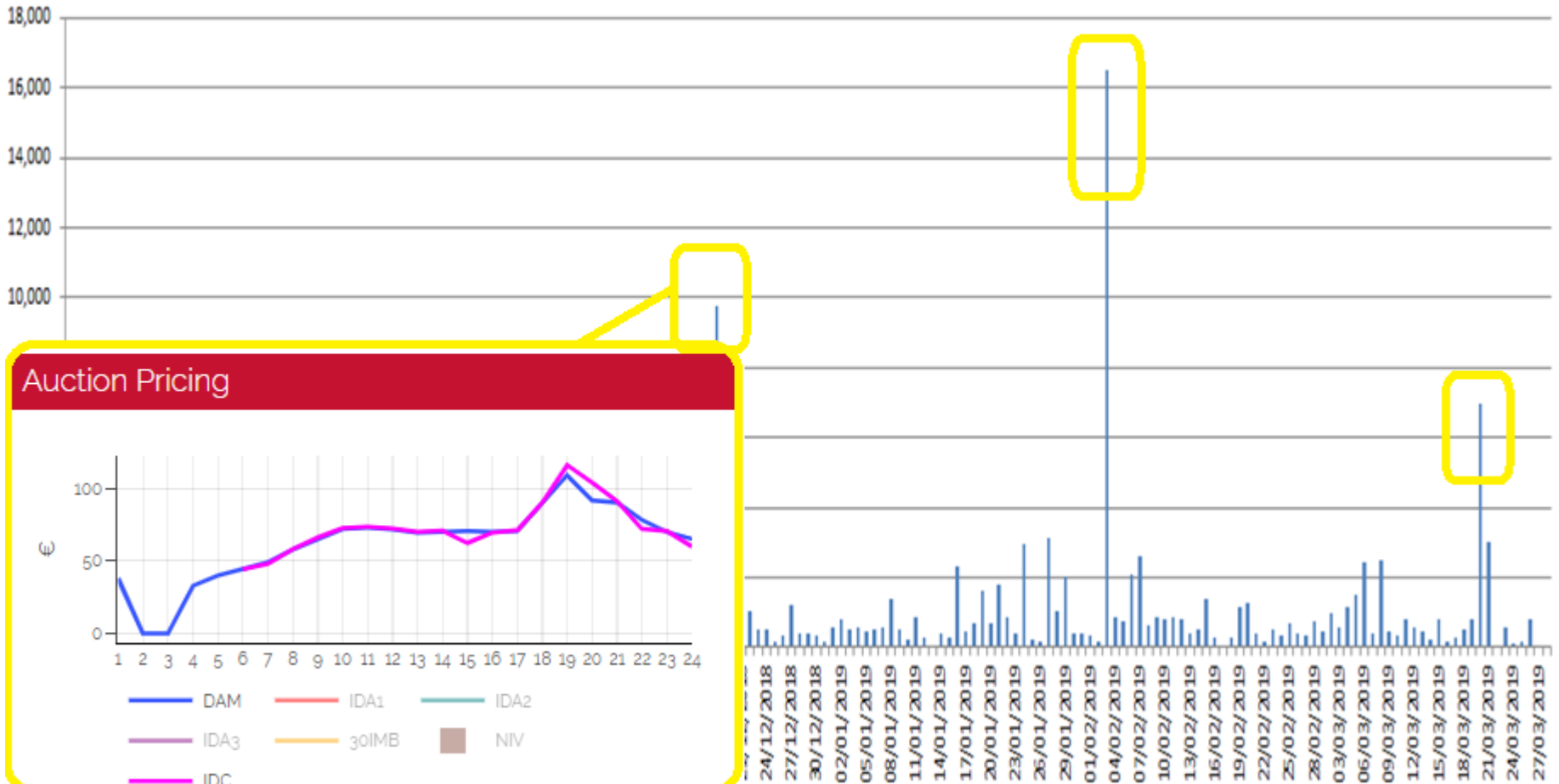


Ex-Ante IDC Market Volume – 6th Month Look Back



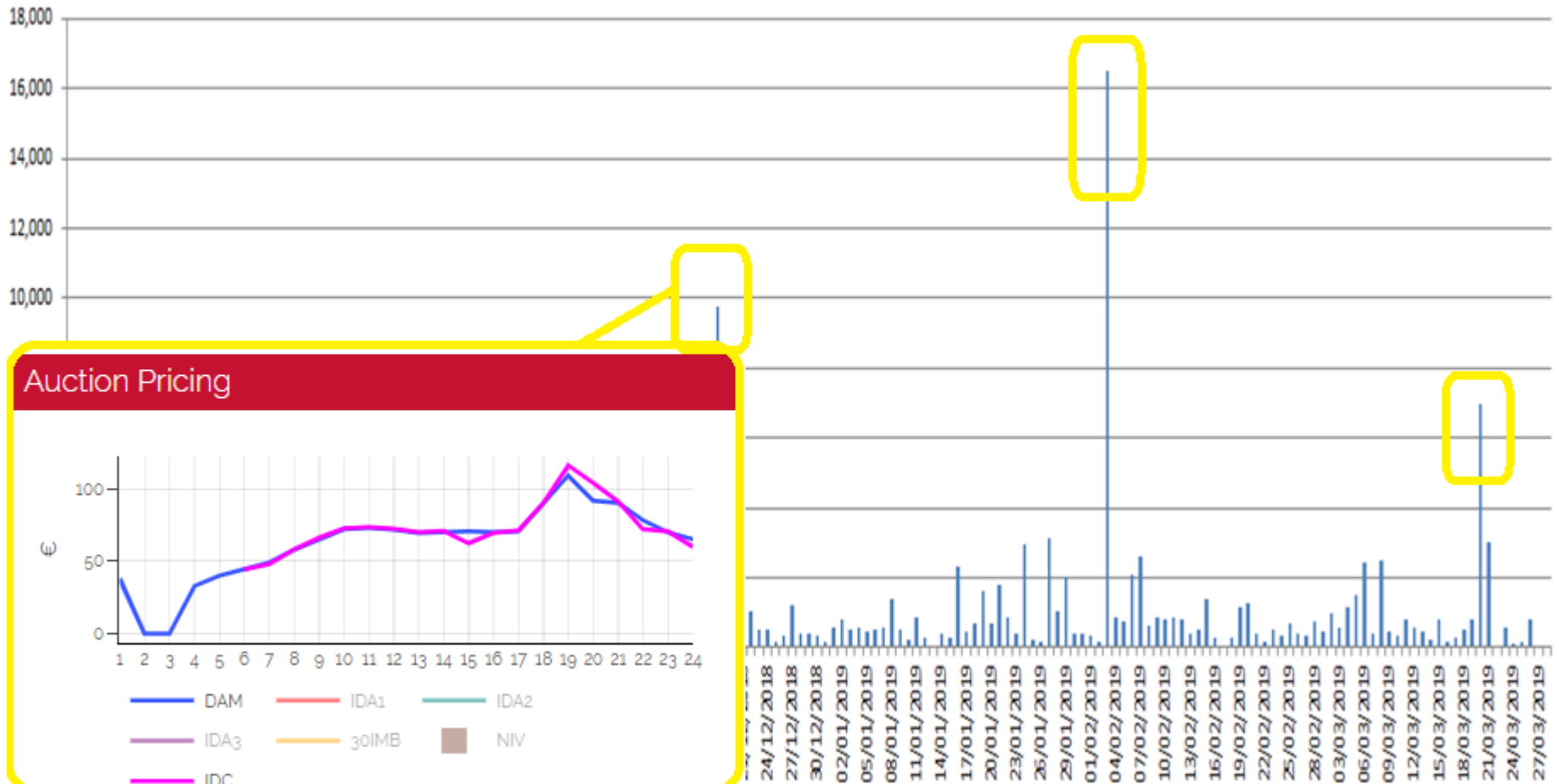
Ex-Ante IDC Market Volume – 6th Month Look Back

MWh Volume



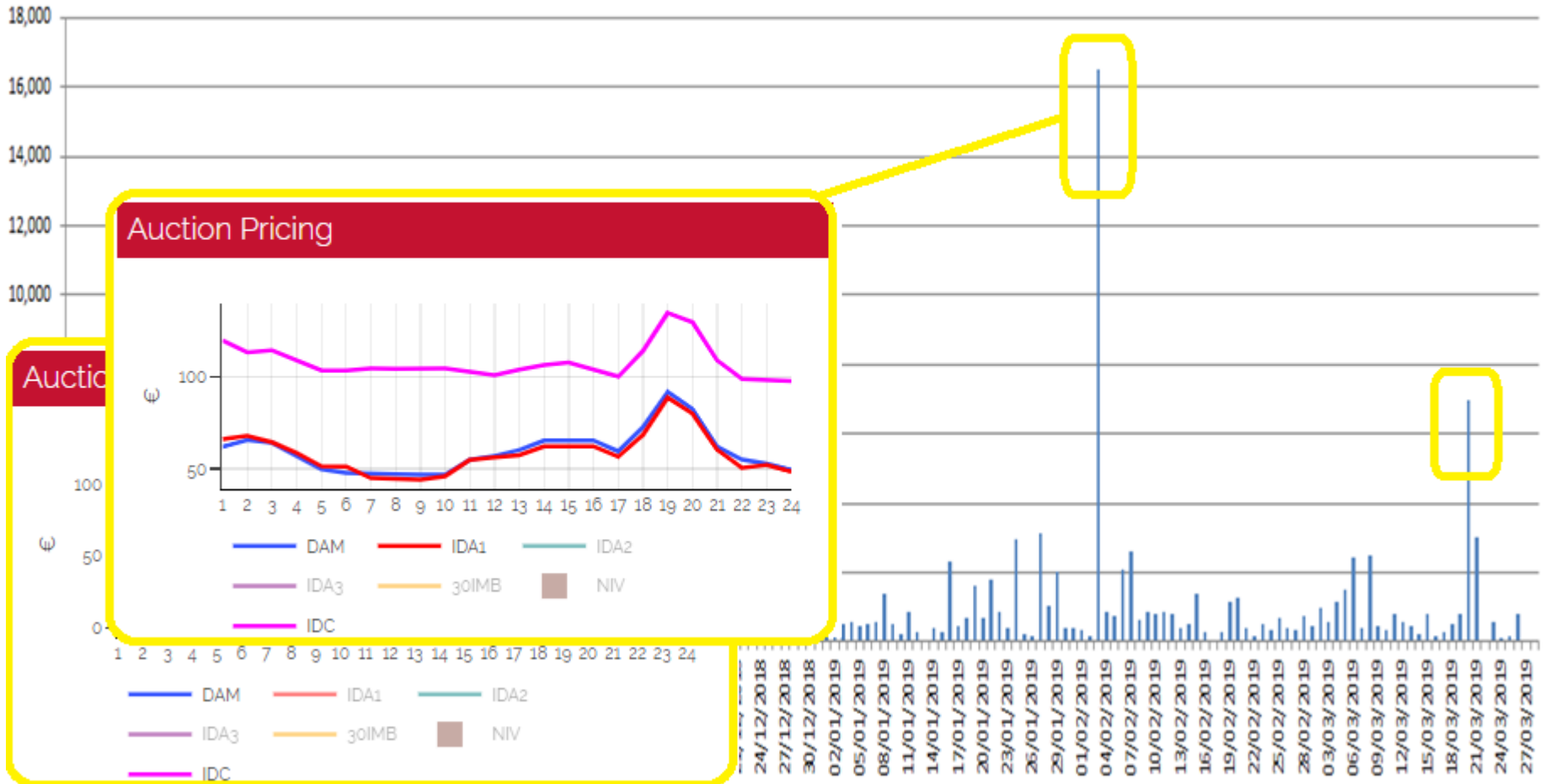
Ex-Ante IDC Market Volume – 6th Month Look Back

MWh Volume



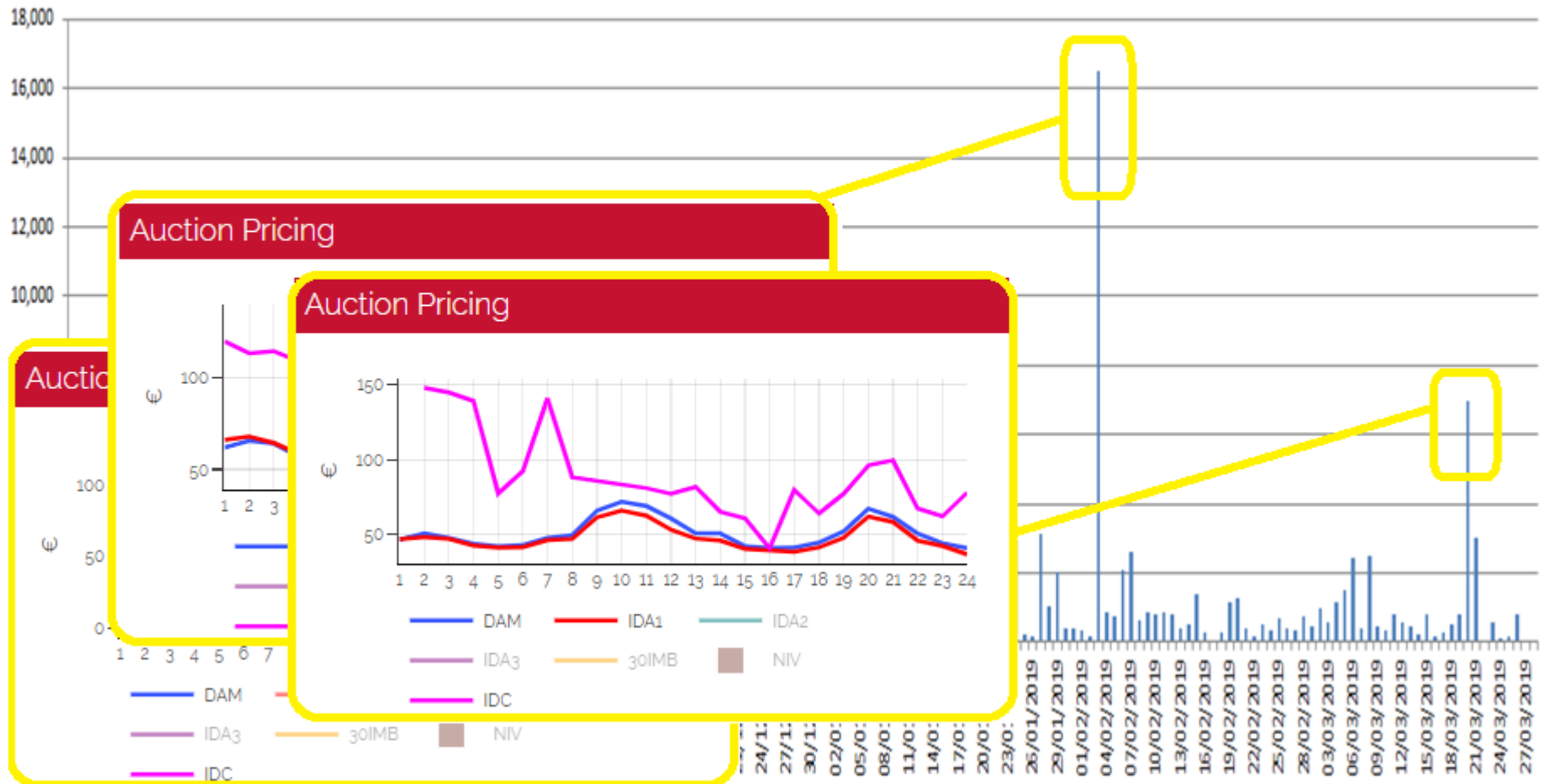
Ex-Ante IDC Market Volume – 6th Month Look Back

MWh Volume



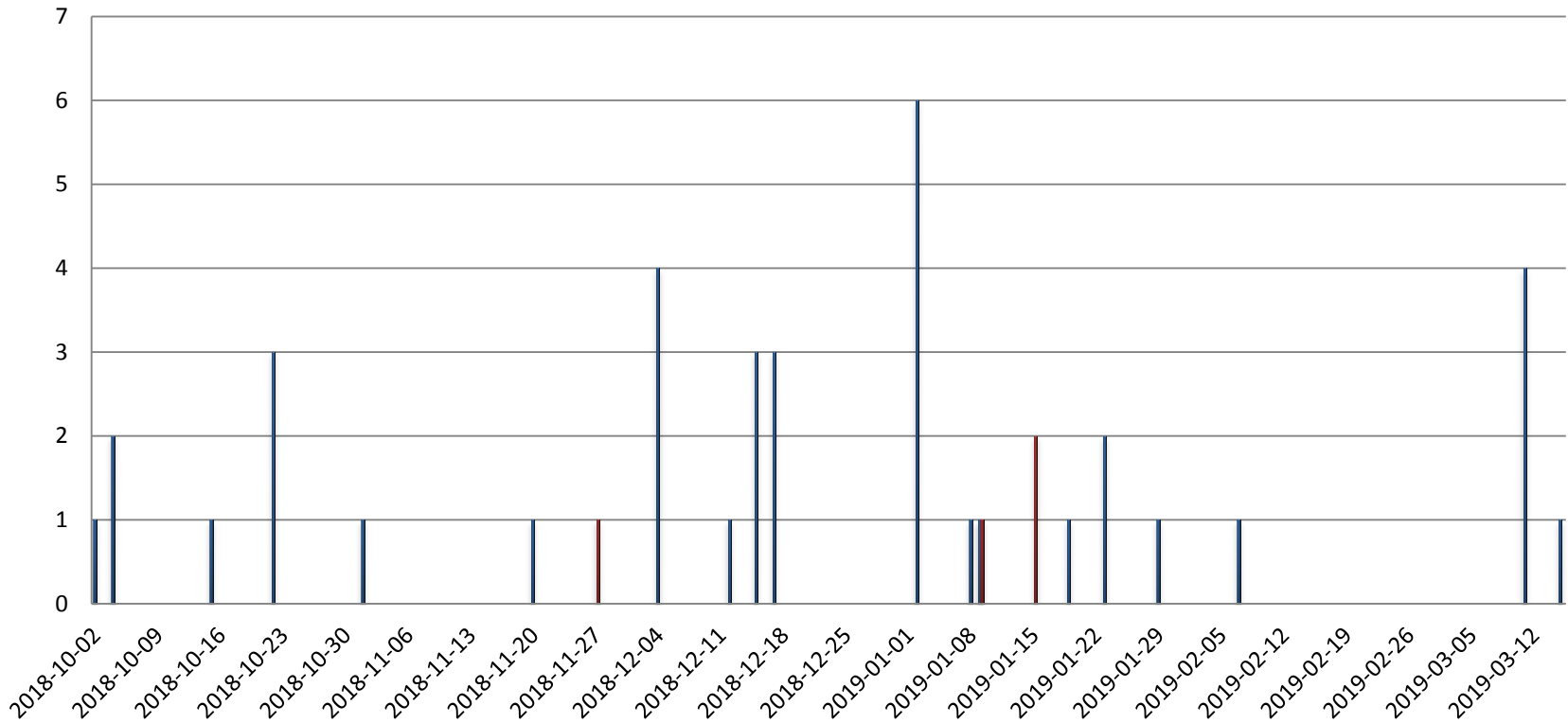
Ex-Ante IDC Market Volume – 6th Month Look Back

MWh Volume



Ex-Ante IDC Recalls & Cancels – 6th Month Look Back

IDC Orders Recalled, Cancelled



	2018-10-02	2018-10-04	2018-10-15	2018-10-22	2018-11-01	2018-11-20	2018-11-27	2018-12-04	2018-12-12	2018-12-15	2018-12-17	2019-01-02	2019-01-08	2019-01-09	2019-01-15	2019-01-19	2019-01-23	2019-01-29	2019-02-07	2019-03-11	2019-03-15
Recalled	1	2	1	3	1	1	0	4	1	3	3	6	1	1	0	1	2	1	1	4	1
Cancelled							1							1	2						

Ex-Ante Market Analysis

- **In Summary**
 - ✓ Successful 6 months of SEMOpx in the books
 - ✓ Healthy and consistent volumes observed in DAM
 - ✓ Participants increasingly making use of later auctions to do business
 - ✓ Liquidity is available across our markets
 - ✓ Processes are working!

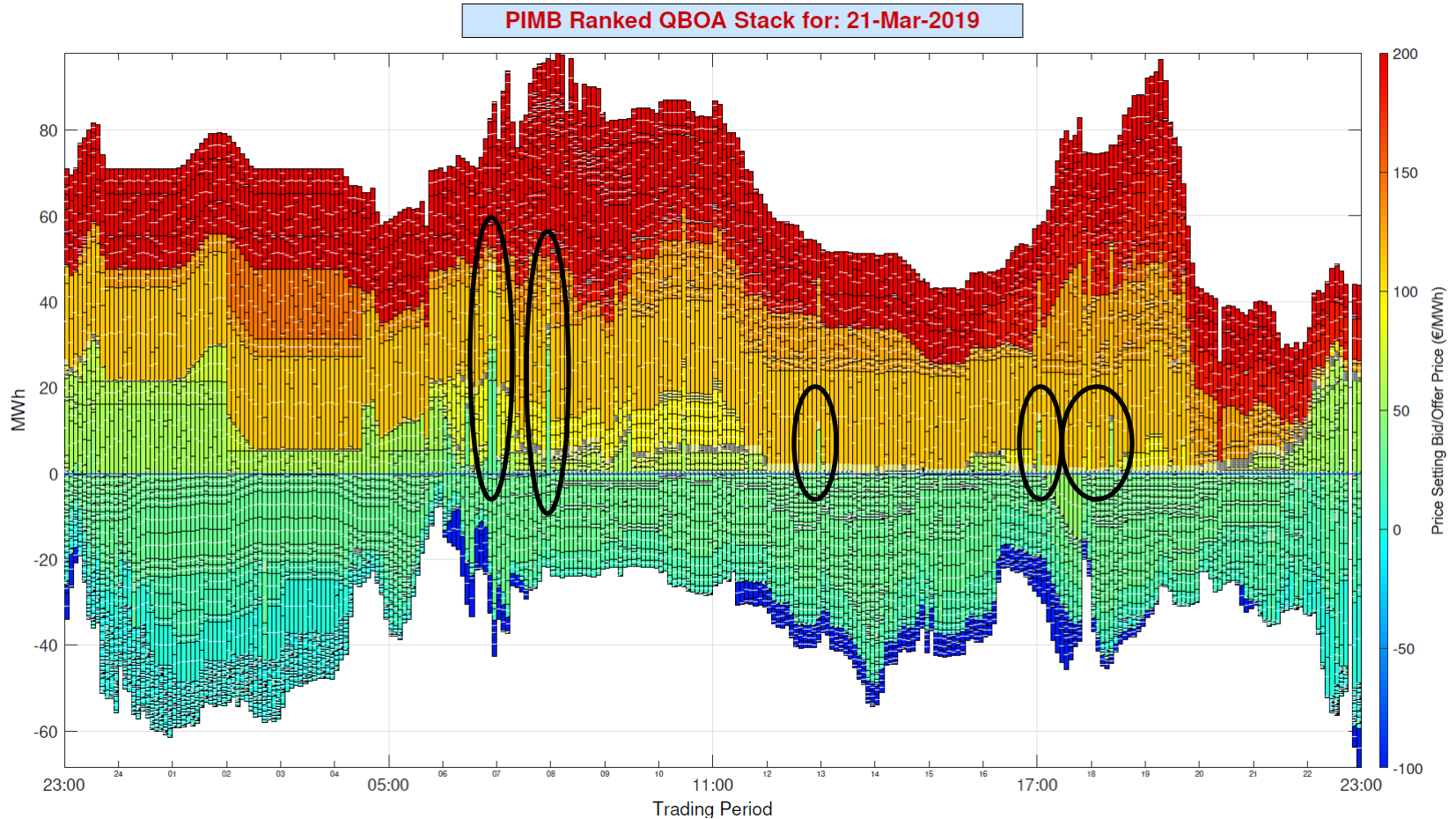
Agenda

Item	Presenter
Welcome	Anne Fitzgerald
Known Issues Update	Eoin Farrell
Ex-Ante Market	Liam McAllister
Balancing Market	Brendan O'Sullivan, Martin Kerin, Sam Matthews
Disputes & Repricing Update	Dermot Campfield
Settlements & M+4 Resettlement	Sean O'Rourke, John O'Dea
Capacity Market Timetable	Anne Fitzgerald
Query Management	Claire Breslin
Q&A	

Imbalance Pricing

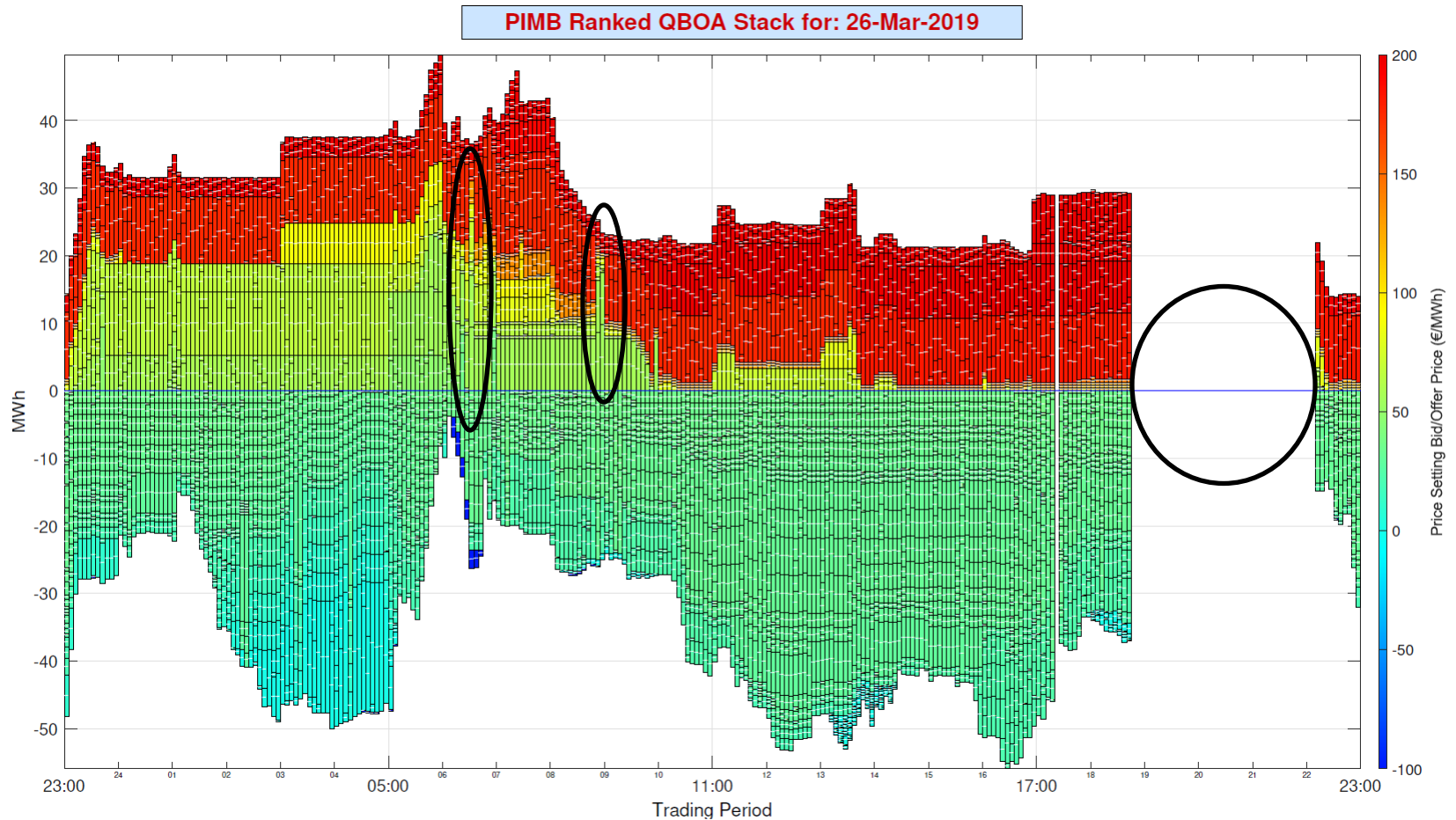
- Important defect fixes:
 - Included a fix for the issue where the COD was switching from Simple to Complex and back, was one of the defects causing a large number of disputes;
 - No 5-minute price drops since fix for performance improvements on – pricing becoming more stable.
- The Imbalance Settlement Price is following the NIV and it's relationship to the Ex-ante Market prices is also relative to the NIV:
 - Generally Imbalance Price is above the ex-ante prices for larger positive NIV, below the ex-ante prices for larger negative NIV:
 - Factors which impact the price: level of imbalance, time of day (and therefore demand / margin / units available), level of constraints on the system, curtailment of priority dispatch plant, these may lead to unintuitive results where price does not directly follow NIV.
- Volatility seems to have reduced slightly:
 - Fewer missing prices, e.g. the half hour price won't be jumping from levels typical of large positive or negative NIVs to the level of the Backup Price;
 - Less negative prices mean that the average is becoming larger, and the negative prices tend to be larger jumps, meaning that the volatility reduces as the number of negative prices reduce;
 - Average NIV has reduced, as have the max and min NIV and standard deviation on the NIV.

Imbalance Pricing



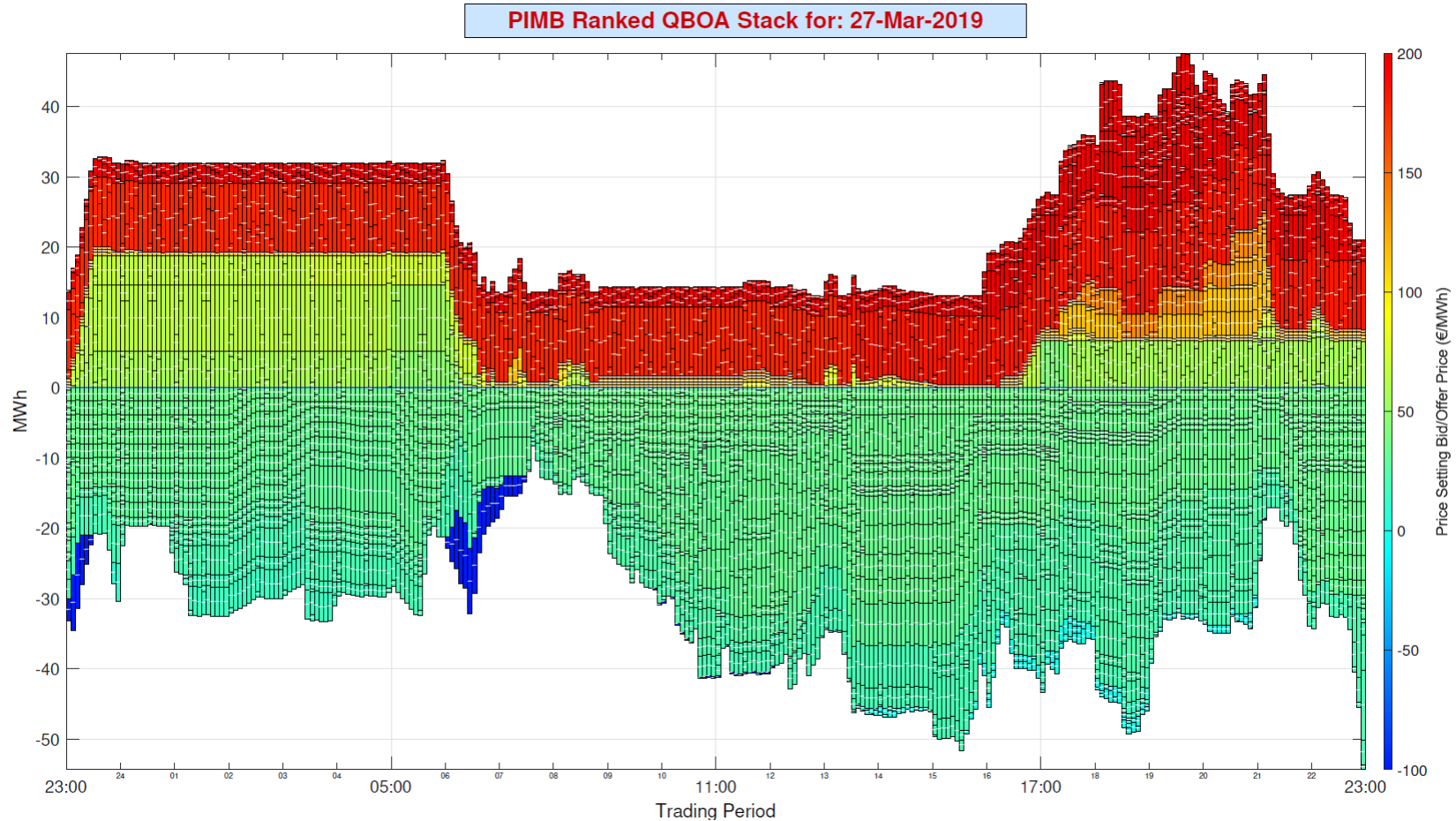
Examples of defect where prices jump from Simple to Complex.

Imbalance Pricing



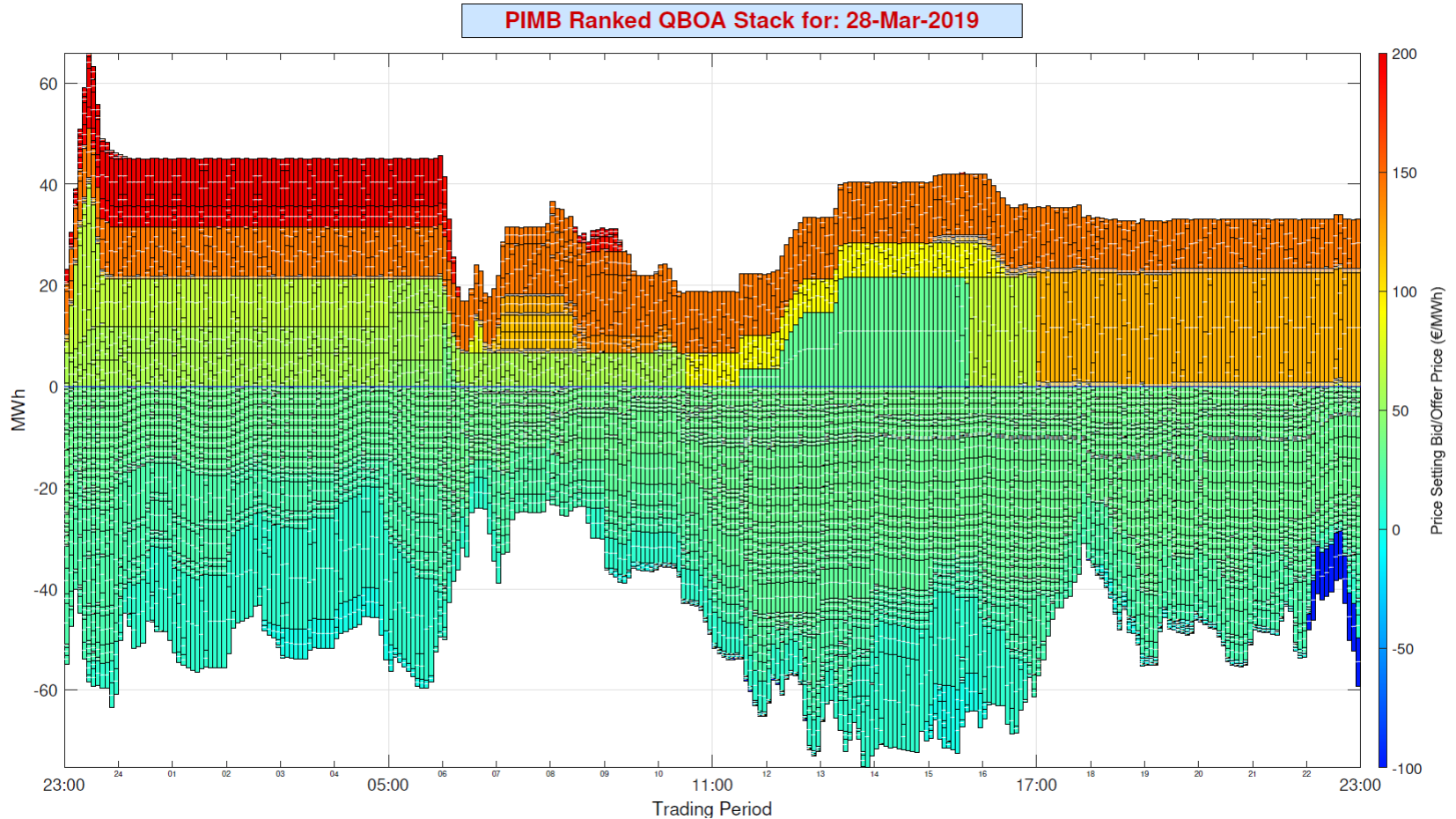
Day of the fix being delivered, a few examples of the defect earlier in the day, then the blank space is when the outage to provide the fix was taken.

Imbalance Pricing



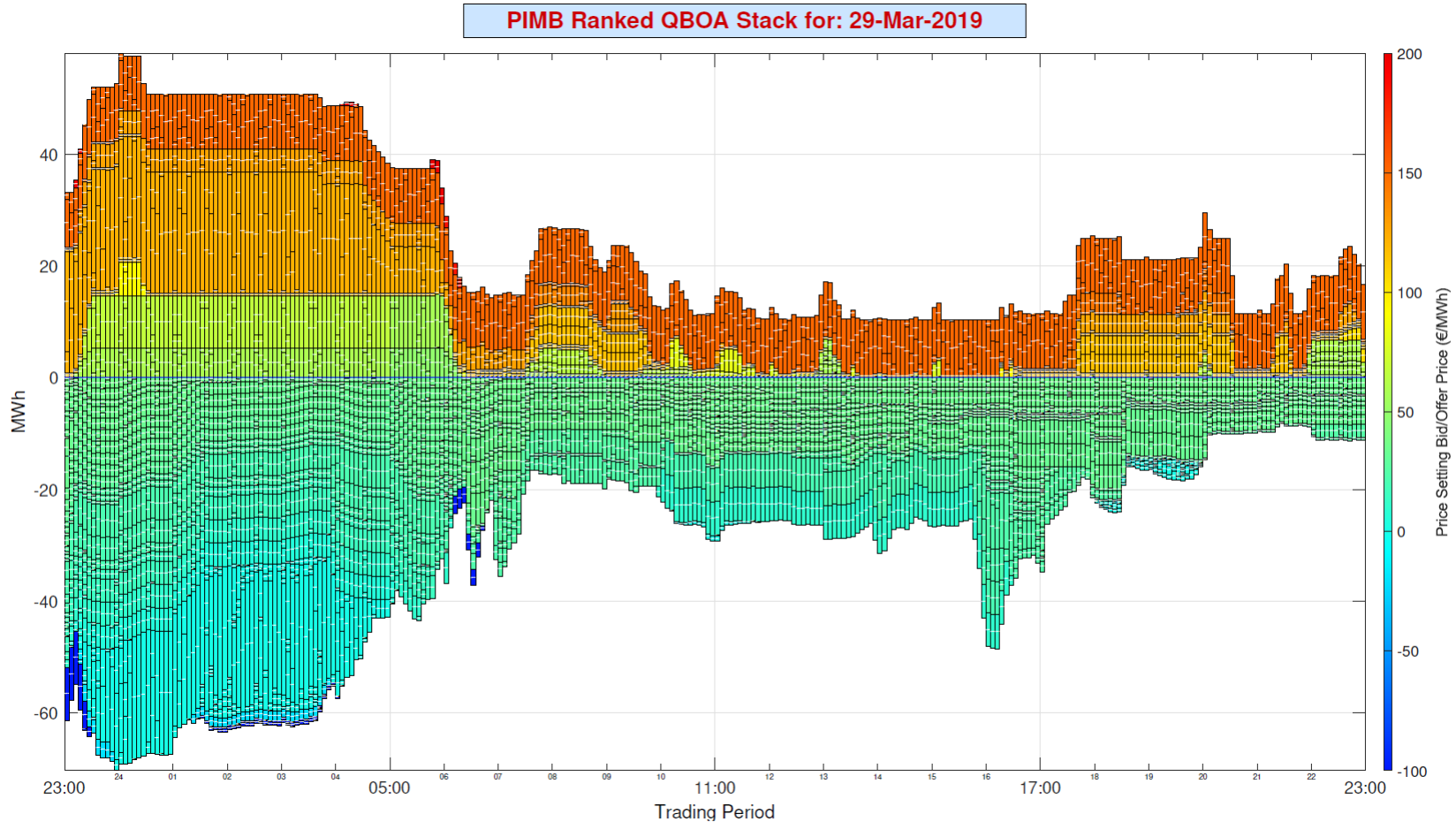
No longer any examples of COD switching from Simple to Complex, all changes in colour seem to match change in unit COD or unit PN/Dispatch, graph makes more sense.

Imbalance Pricing



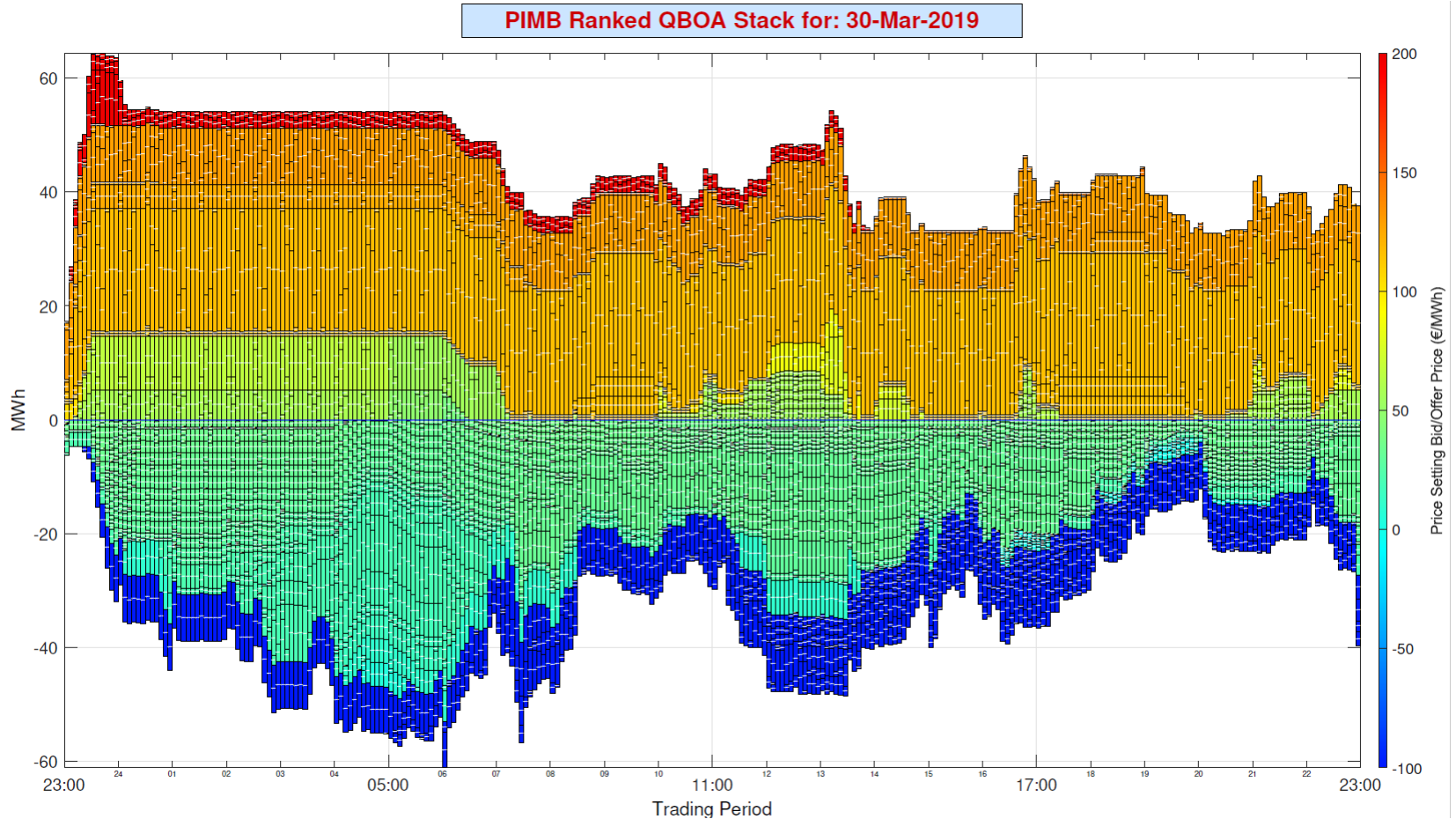
No longer any examples of COD switching from Simple to Complex, all changes in colour seem to match change in unit COD or unit PN/Dispatch, graph makes more sense.

Imbalance Pricing



No longer any examples of COD switching from Simple to Complex, all changes in colour seem to match change in unit COD or unit PN/Dispatch, graph makes more sense.

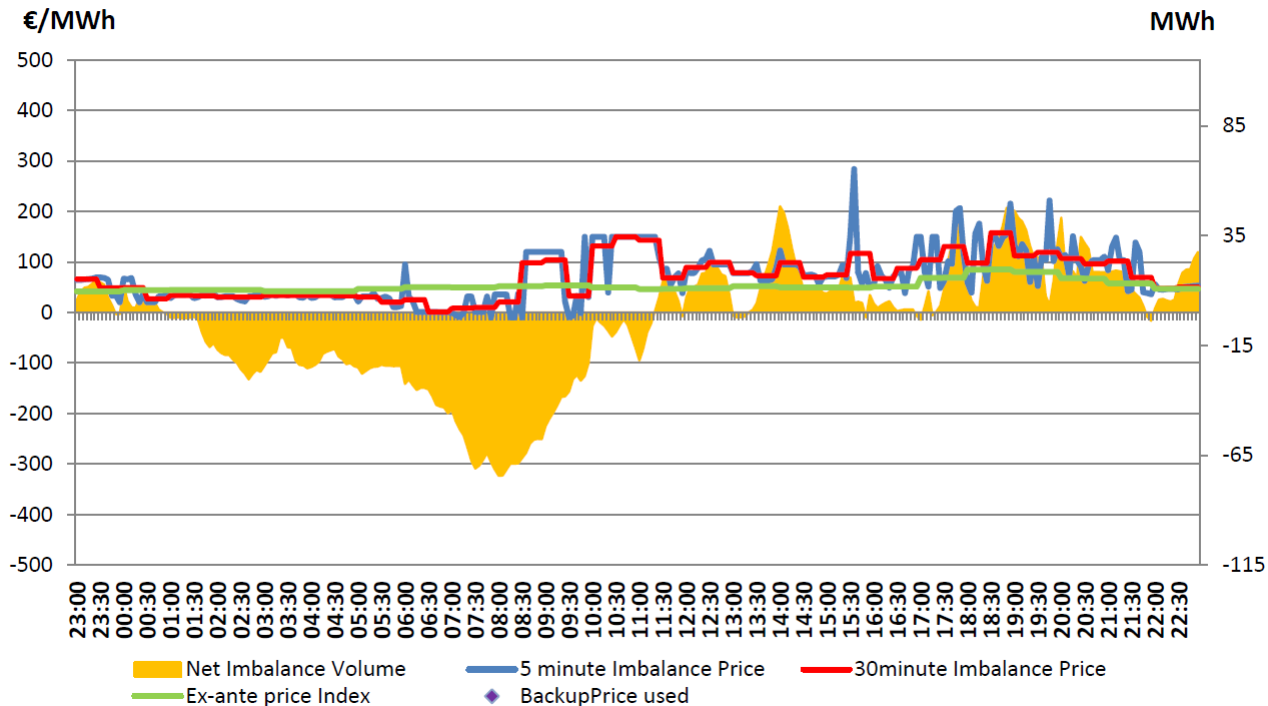
Imbalance Pricing



No longer any examples of COD switching from Simple to Complex, all changes in colour seem to match change in unit COD or unit PN/Dispatch, graph makes more sense.

Imbalance Pricing

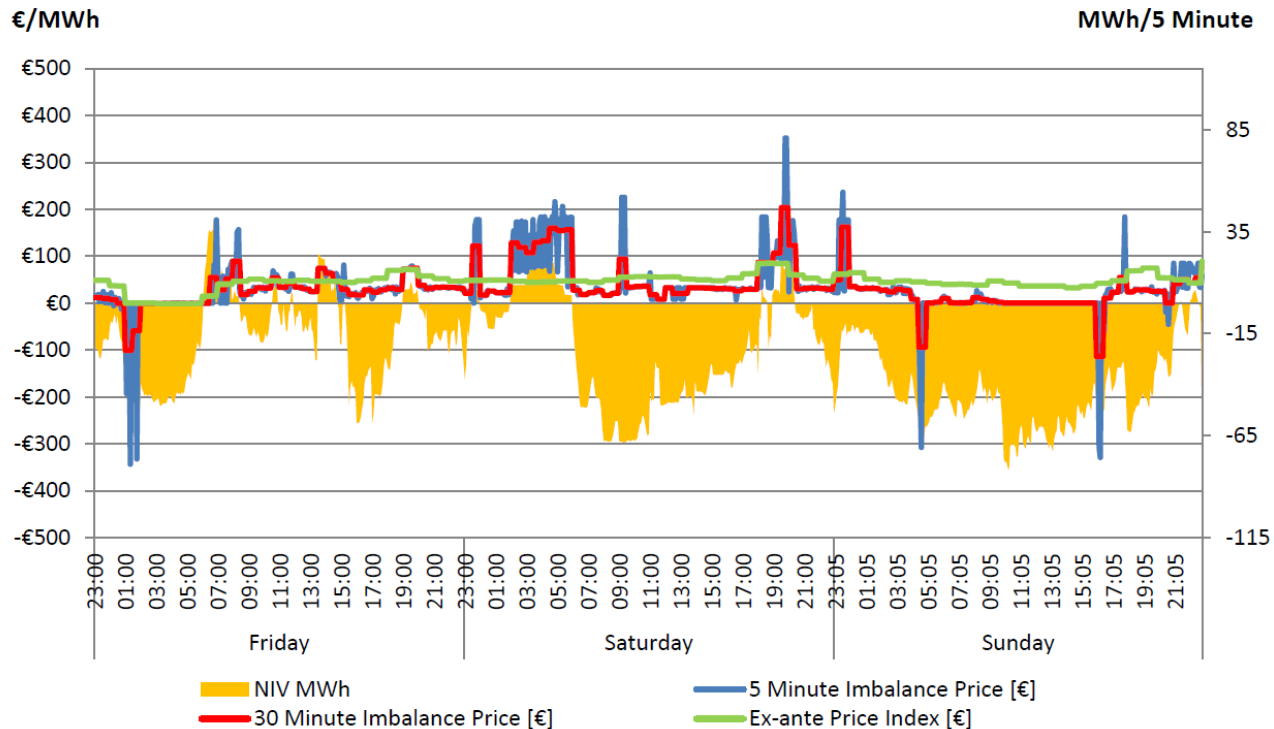
Imbalance Price Report Trade Date: 18/03/2019



Some unintuitive results, such as PIMB going up above ex-ante prices when NIV is negative. This seems to occur normally when the system is highly constrained, PMEA set in opposite direction to NIV. This could happen in particular during morning load rise and evening peak: not many units available unflagged as lots of units are ramping, therefore even if NIV is low or negative, it is often a high priced unit which is available for energy balancing.

Imbalance Pricing

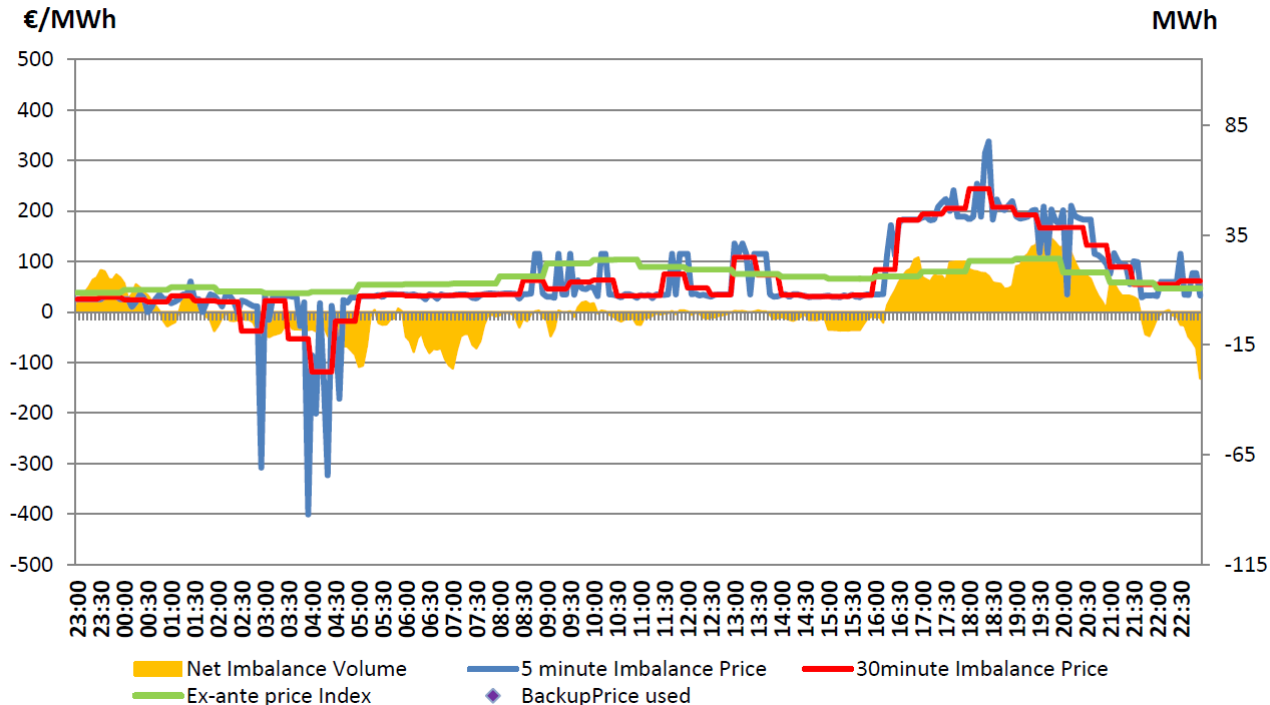
Imbalance Price Report 22nd - 24th of March



Otherwise, examples are generally intuitive: when have high positive imbalance then PIMB has a higher price than ex-ante, low positive or large negative imbalance then PIMB has a lower price than ex-ante. Very intuitive example - red and blue almost directly follow NIV in terms of being less than or greater than green.

Imbalance Pricing

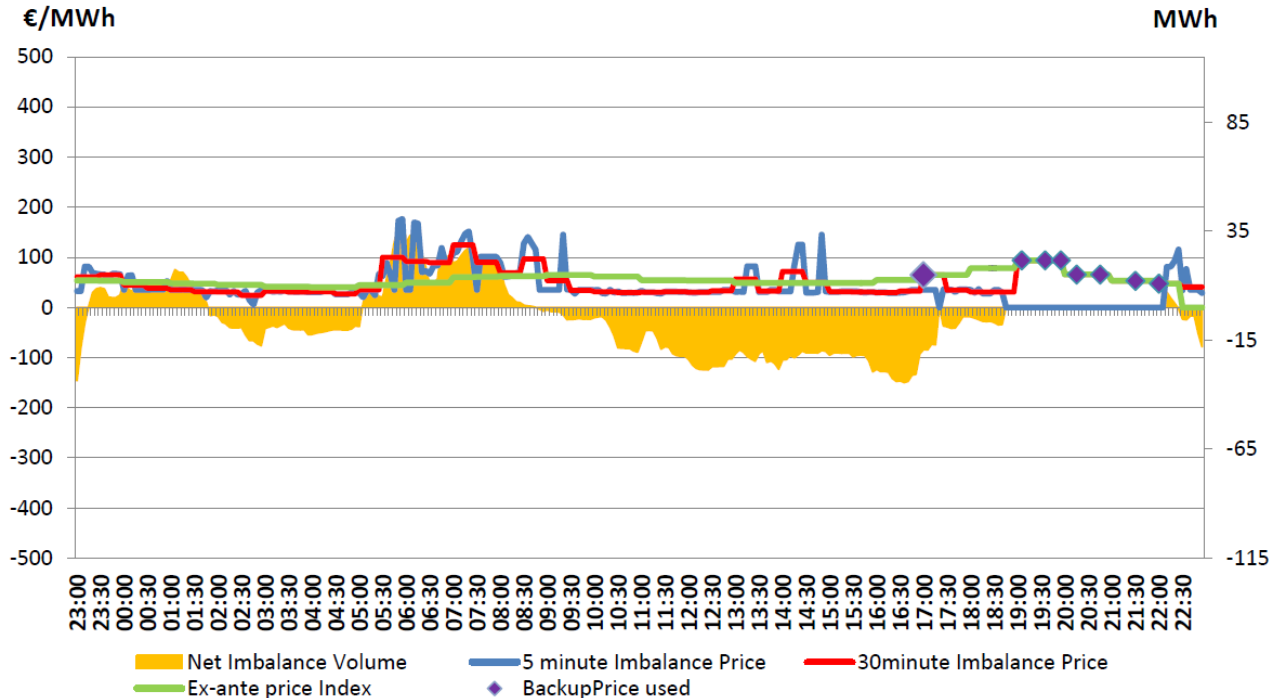
Imbalance Price Report Trade Date: 25/03/2019



Generally intuitive example: imbalance is generally low positive or negative at start of day, PIMB is lower than ex-ante, jumps potentially unintuitively to much lower level because of curtailment of priority dispatch, at midday despite low imbalance the price goes above ex-ante because the system is highly constrained at this time, in the evening the imbalance price follows the large imbalance volume above the ex-ante price, in later evening despite volumes rising the price falls because it is past the peak so cheaper units are available.

Imbalance Pricing

Imbalance Price Report Trade Date: 26/03/2019



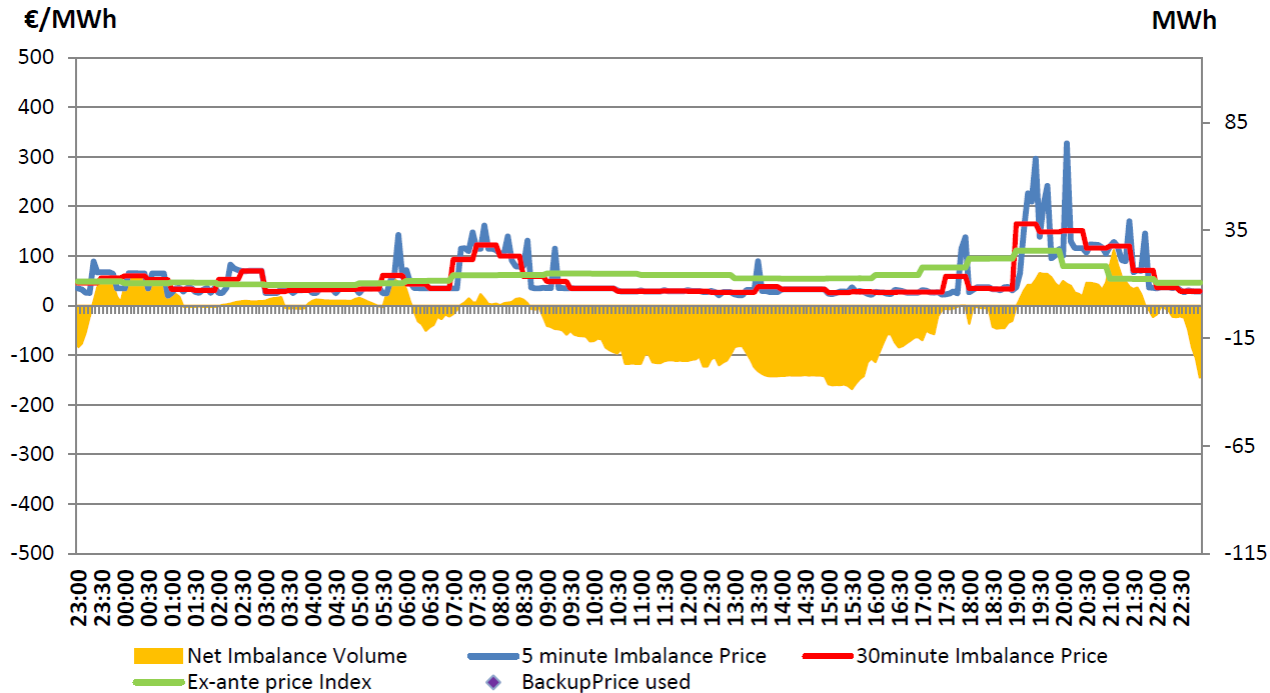
Again generally intuitive example: Imbalance price follows imbalance, when large and positive price goes above, when large and negative price goes below. Doesn't really change for change in direction of NIV between midnight and 2am, this is because there is low demand and lots of cheap generation available but the system is possibly quite constrained so the same units in positive and negative imbalance rules are being used.



Again exception around midday and morning load rise. Backup price used during planned outage

Imbalance Pricing

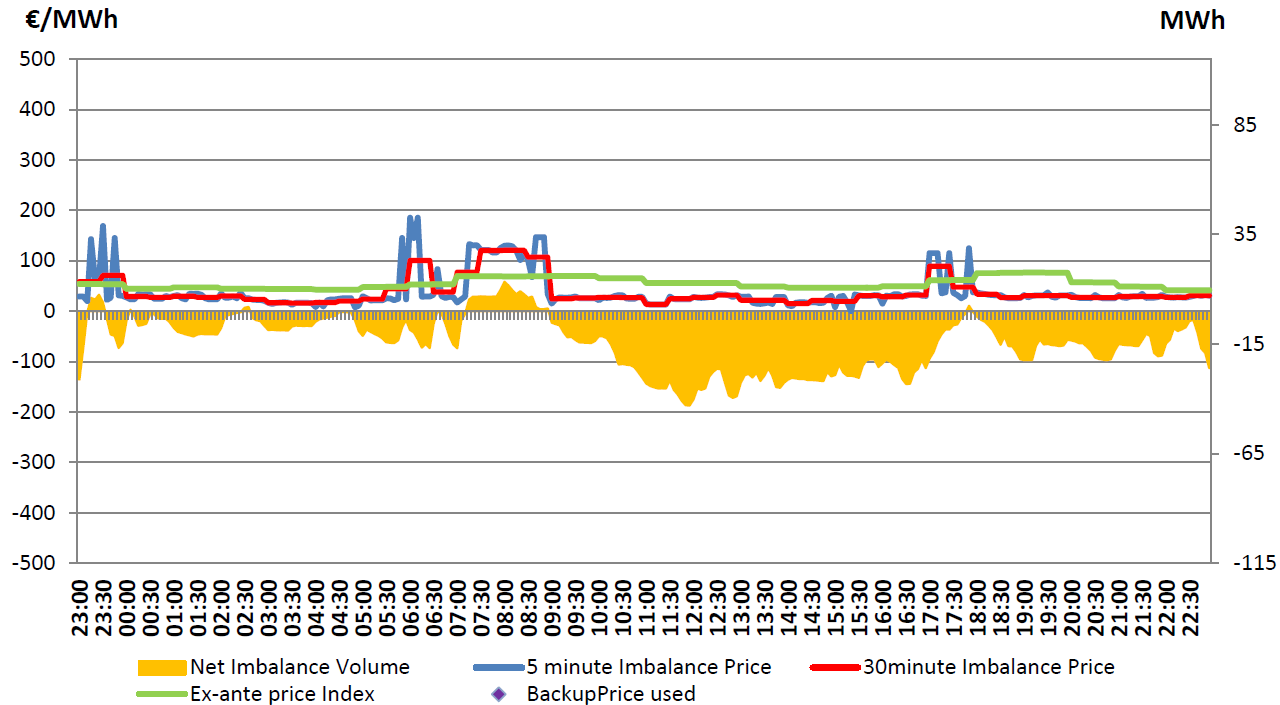
Imbalance Price Report Trade Date: 27/03/2019



Almost entirely intuitive example.

Imbalance Pricing

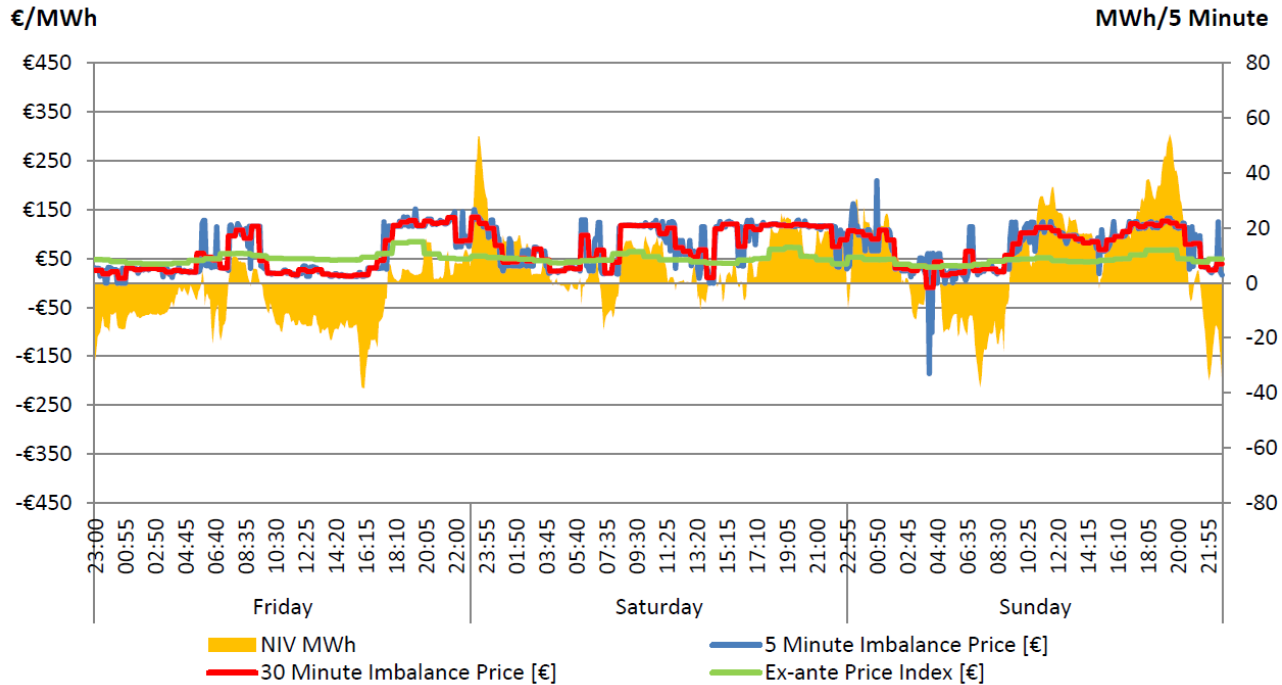
Imbalance Price Report Trade Date: 28/03/2019



Generally intuitive example, with again exceptions around morning load rise and evening peak where imbalance price goes above ex-ante for negative imbalance volume, due to constrained system.

Imbalance Pricing

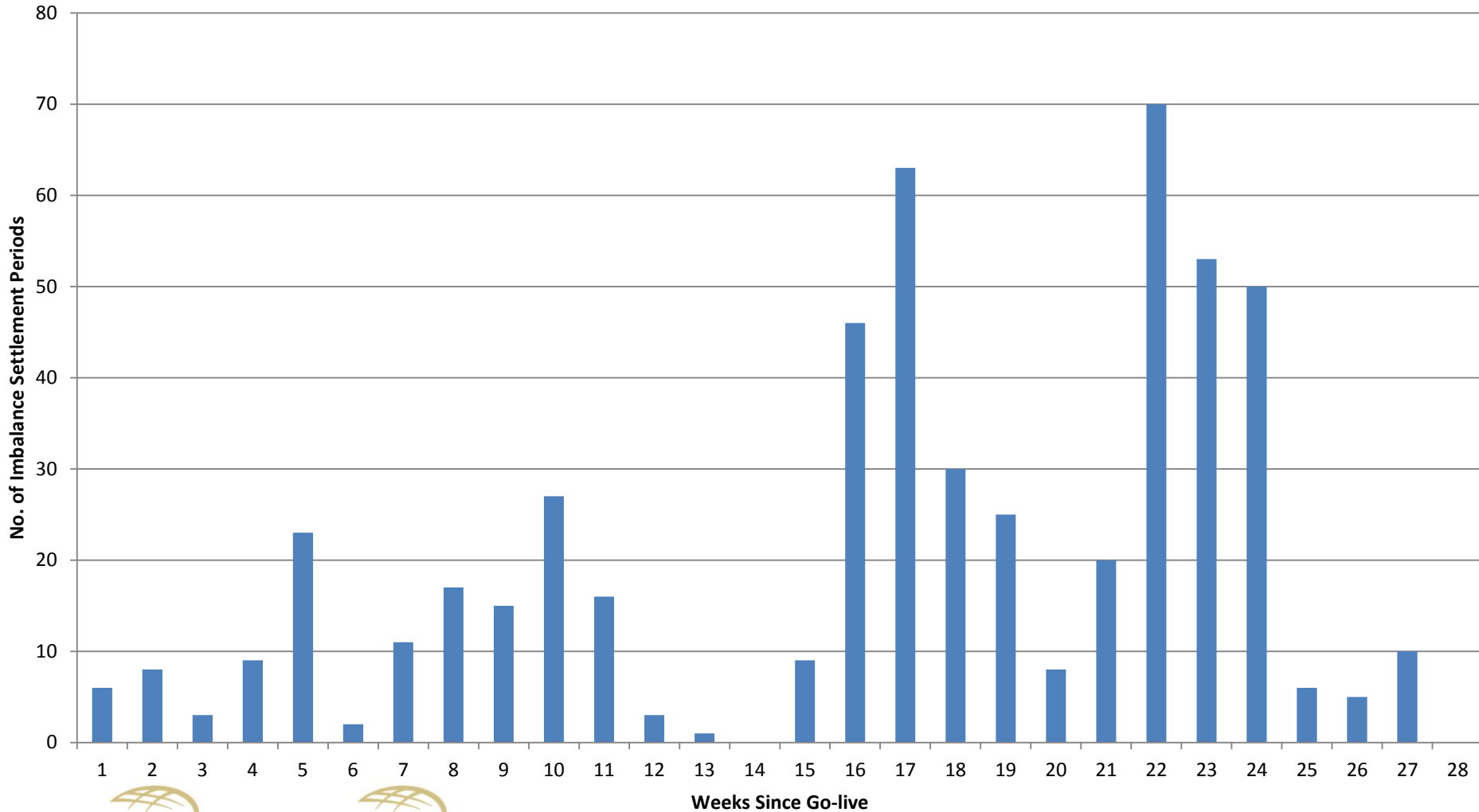
Imbalance Price Report 29th - 31st of March



Almost entirely intuitive with imbalance price following imbalance volume all weekend.

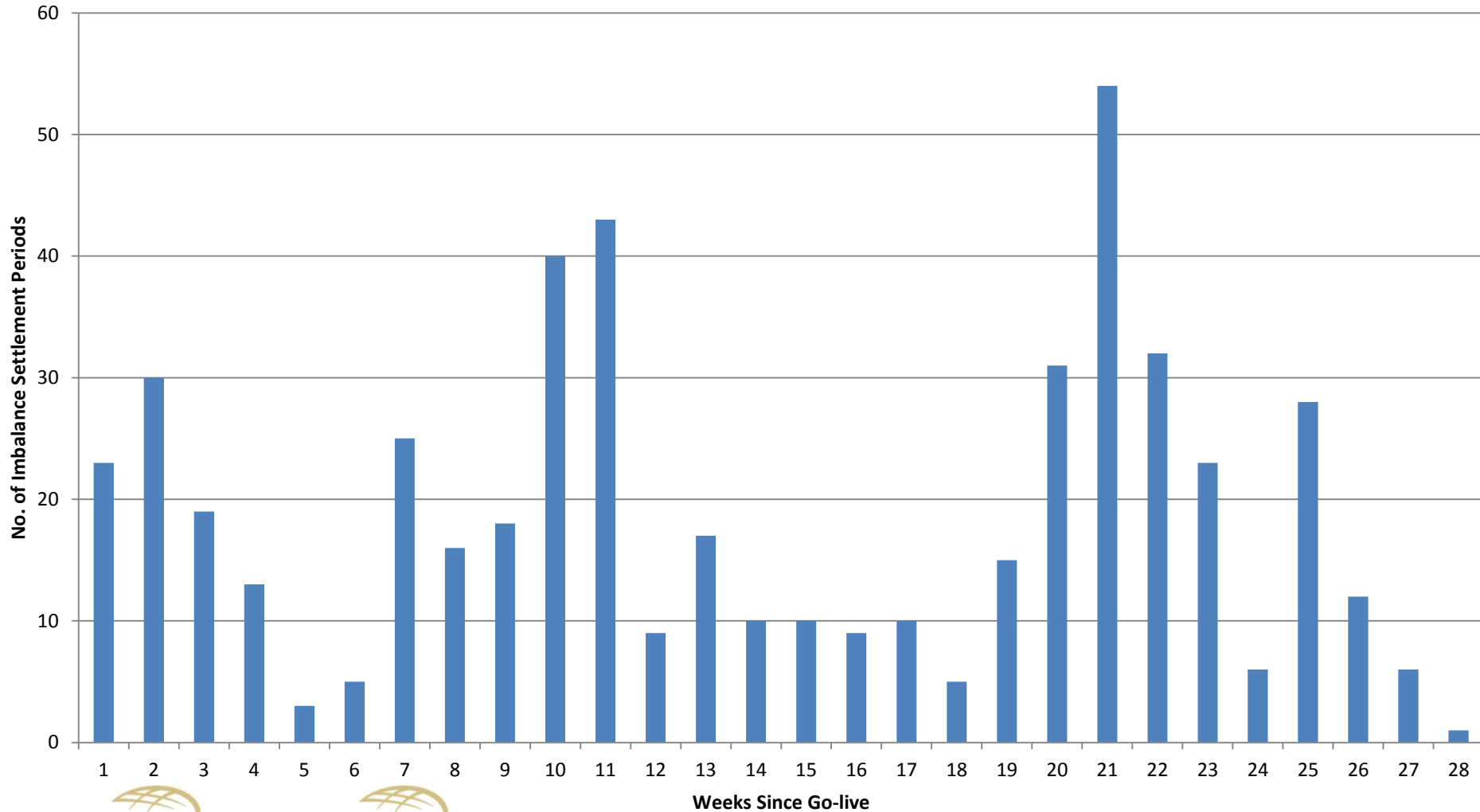
Imbalance Pricing

Number of Times per Week Backup Half Hour PIMB Used



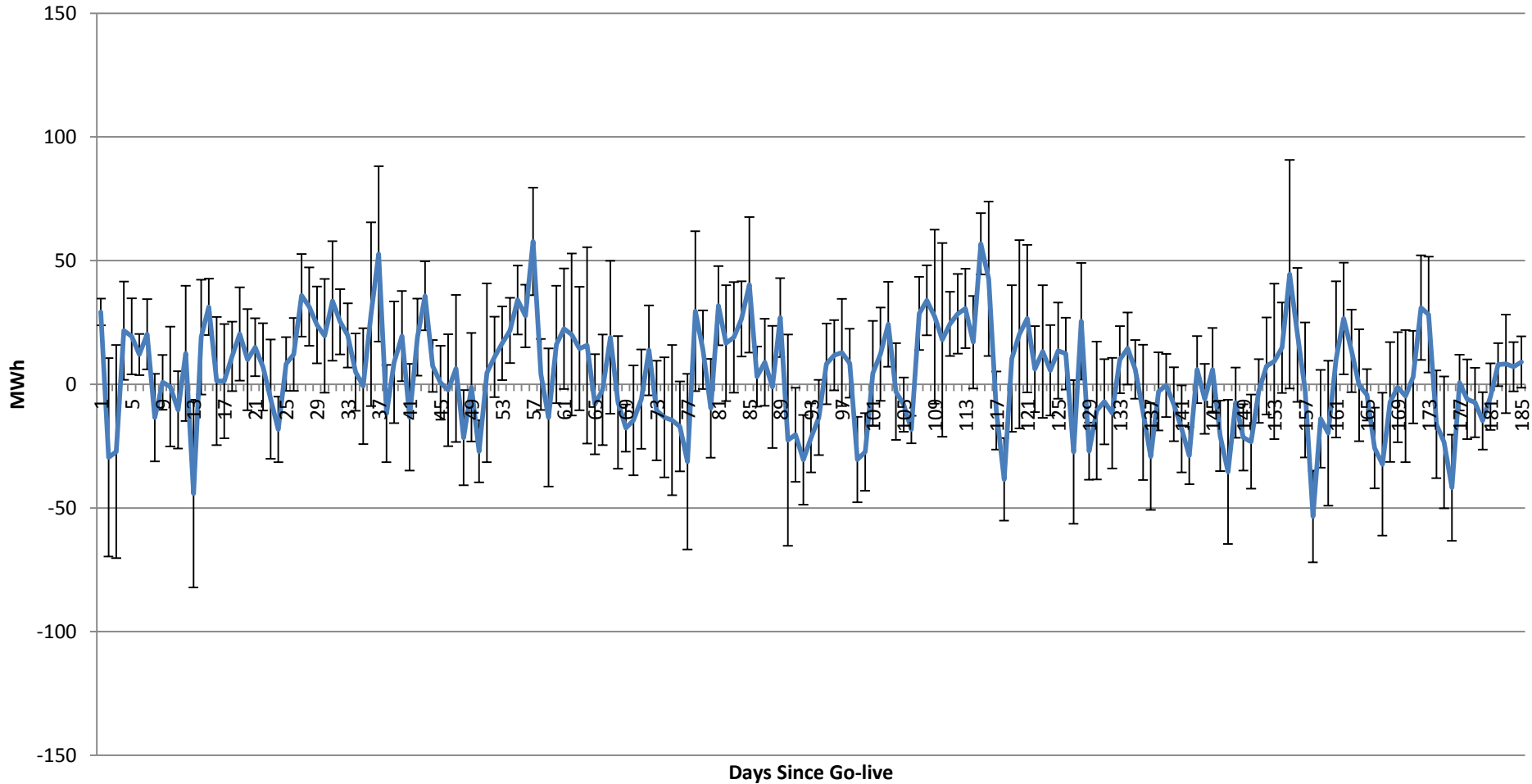
Imbalance Pricing

Number of Times per Week Half Hour PIMB was Negative



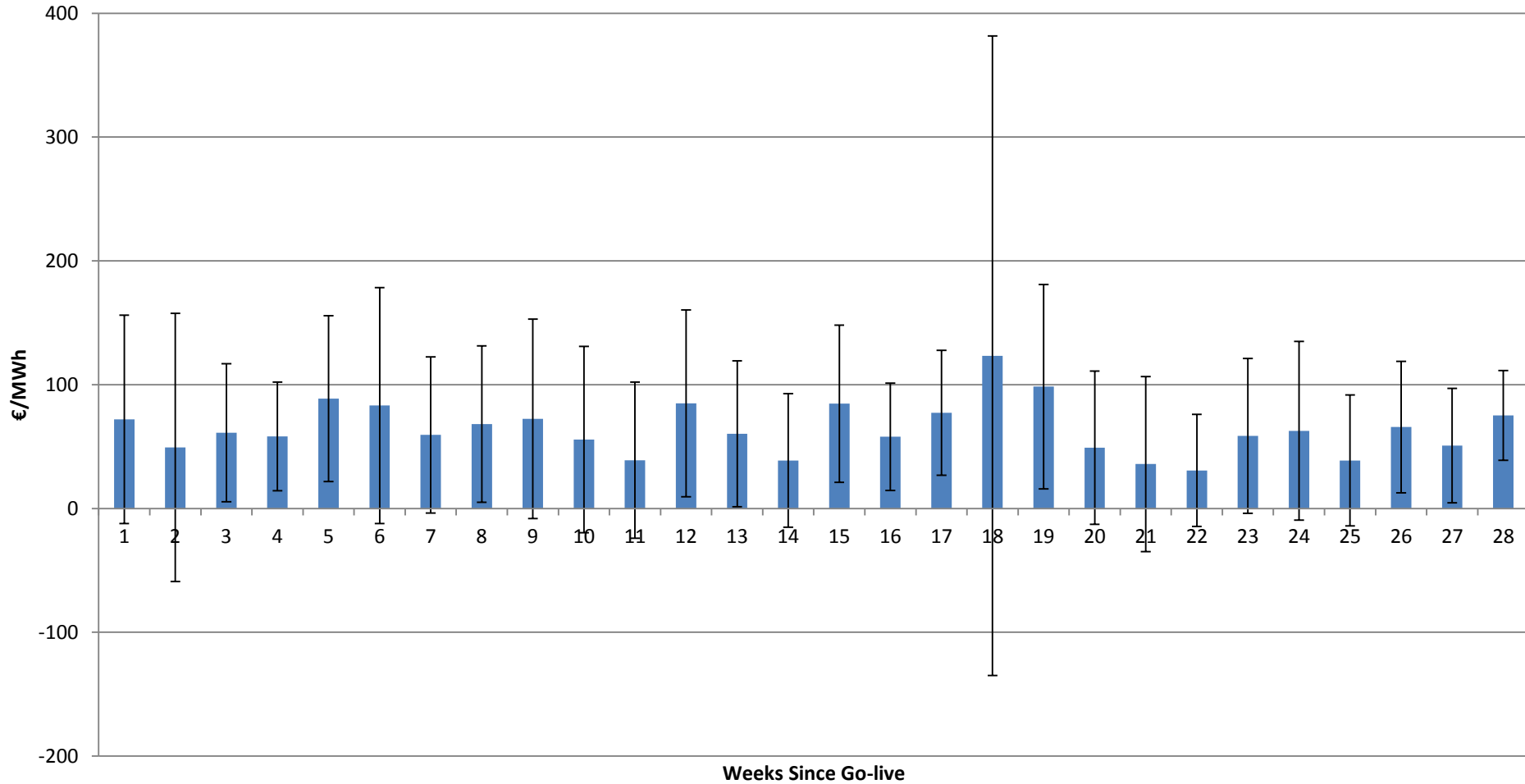
Imbalance Pricing

Daily Average Half Hour Average NIV



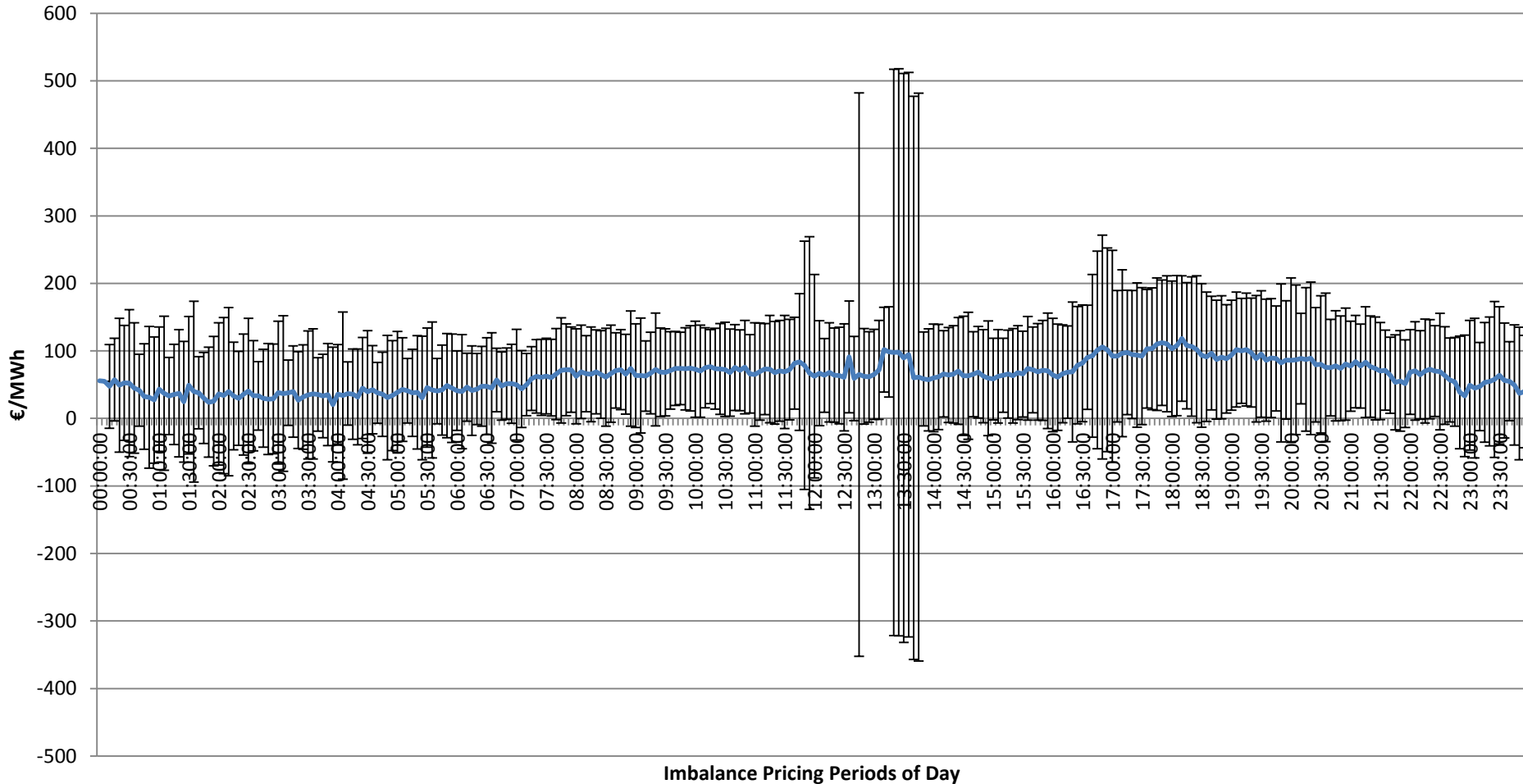
Imbalance Pricing

Weekly Average Half Hour PIMB and Standard Deviation (€/MWh)



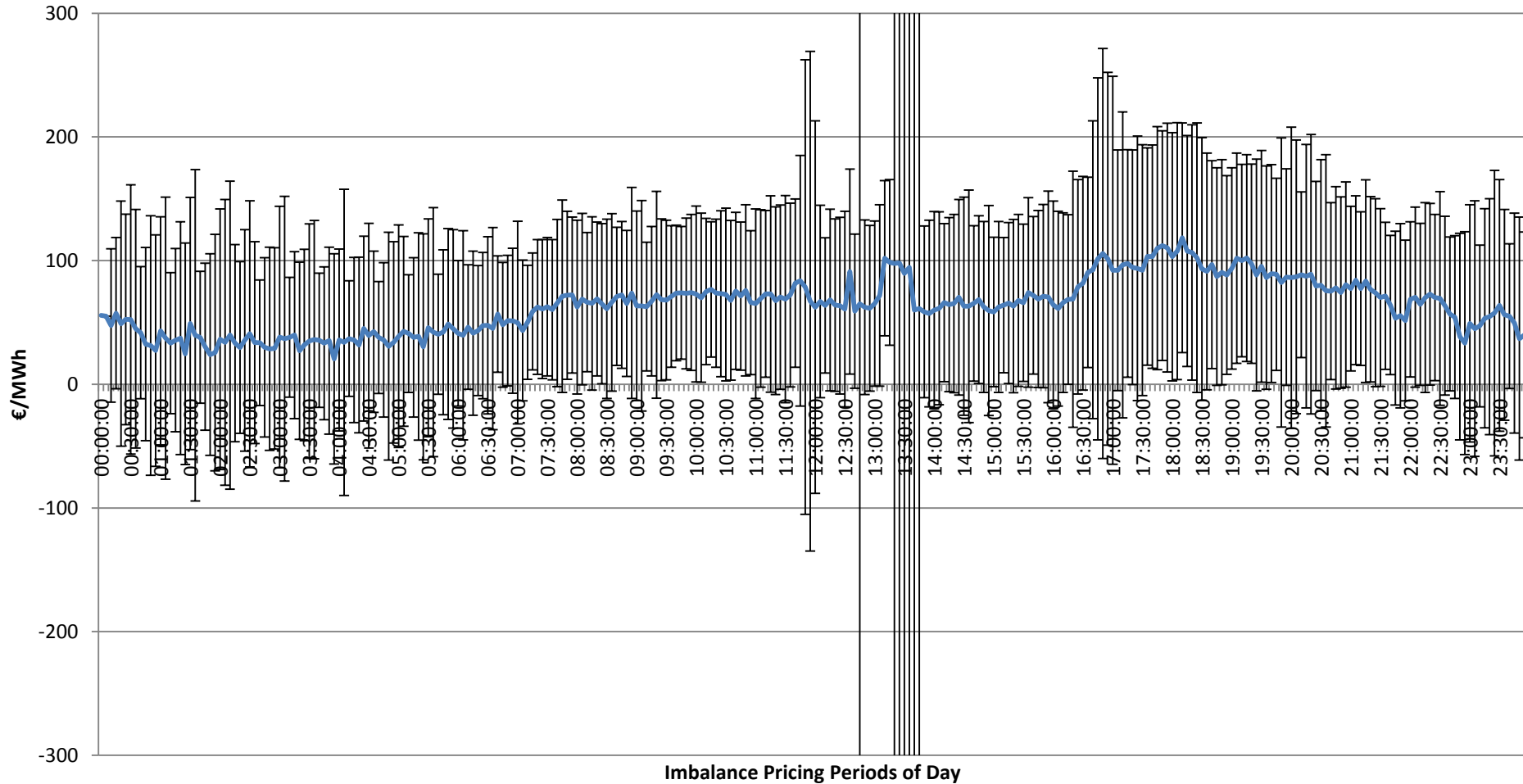
Imbalance Pricing

Daily Average 5 Minute PIMB Price Profile - 01/10/2018 - 02/04/2019



Imbalance Pricing

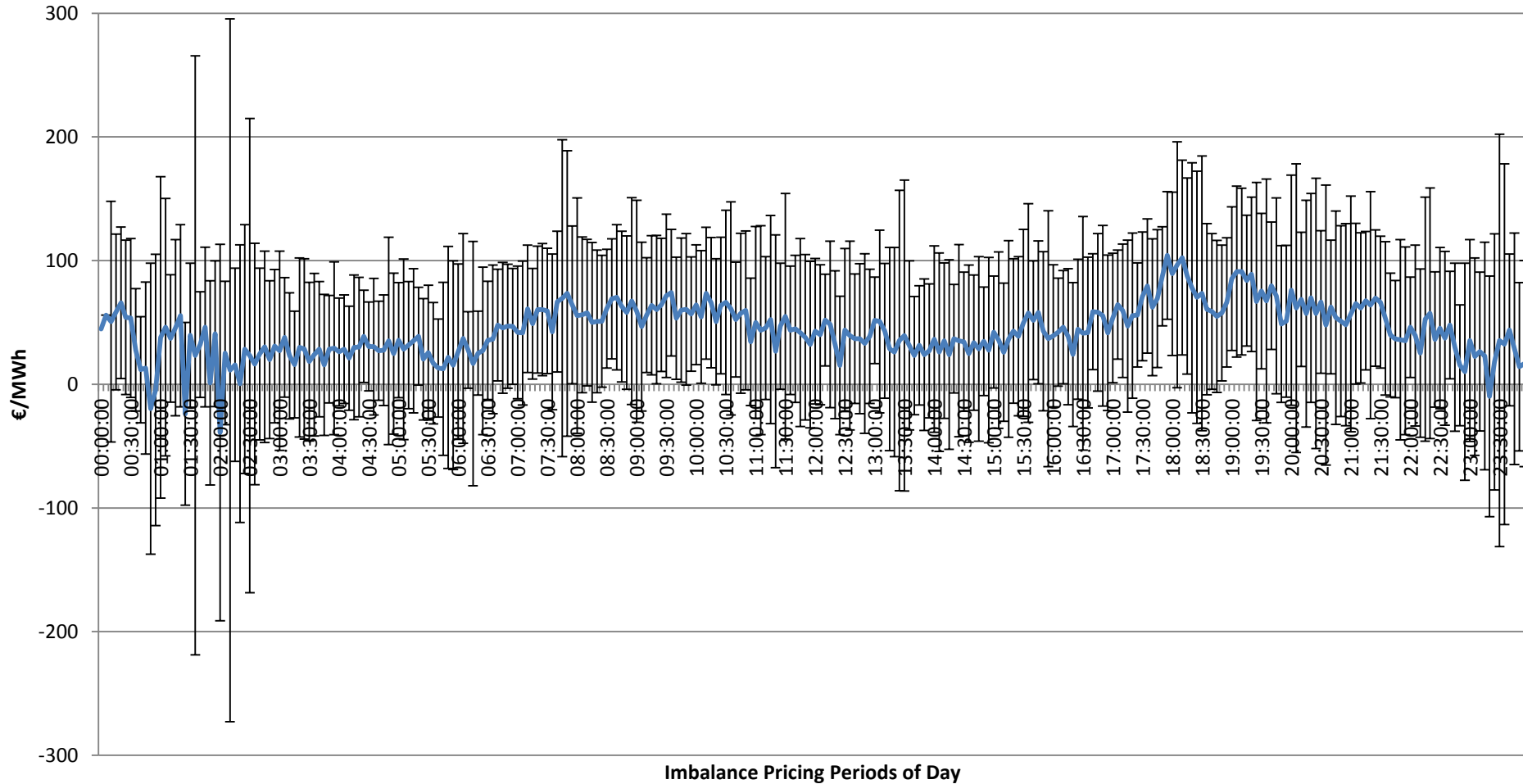
Daily Average 5 Minute PIMB Price Profile - 01/10/2018 - 02/04/2019



— Average of Original 5min Price (€/MWh)

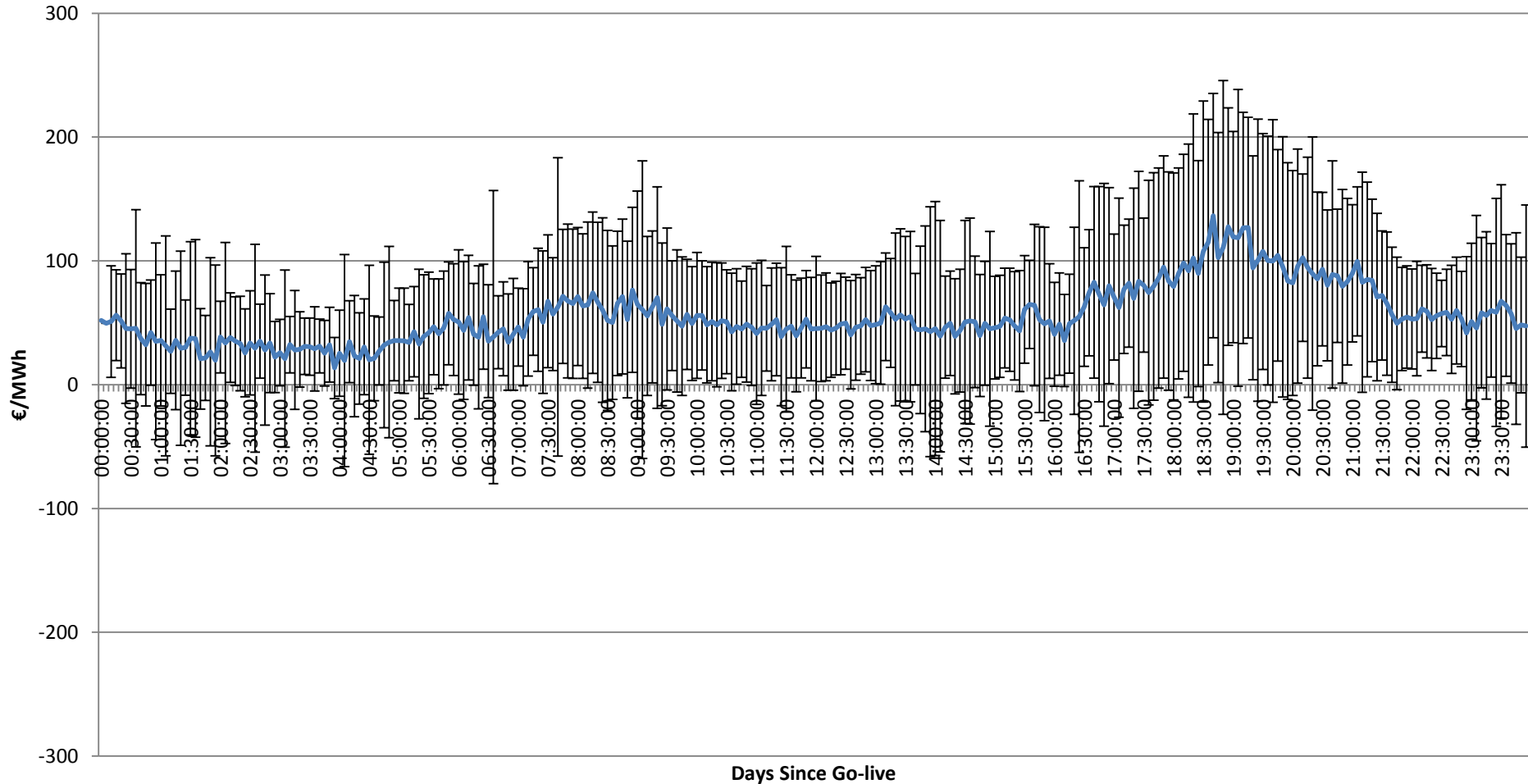
Imbalance Pricing

Daily Average 5 Minute PIMB Price Profile - 01/02/2019 - 28/02/2019



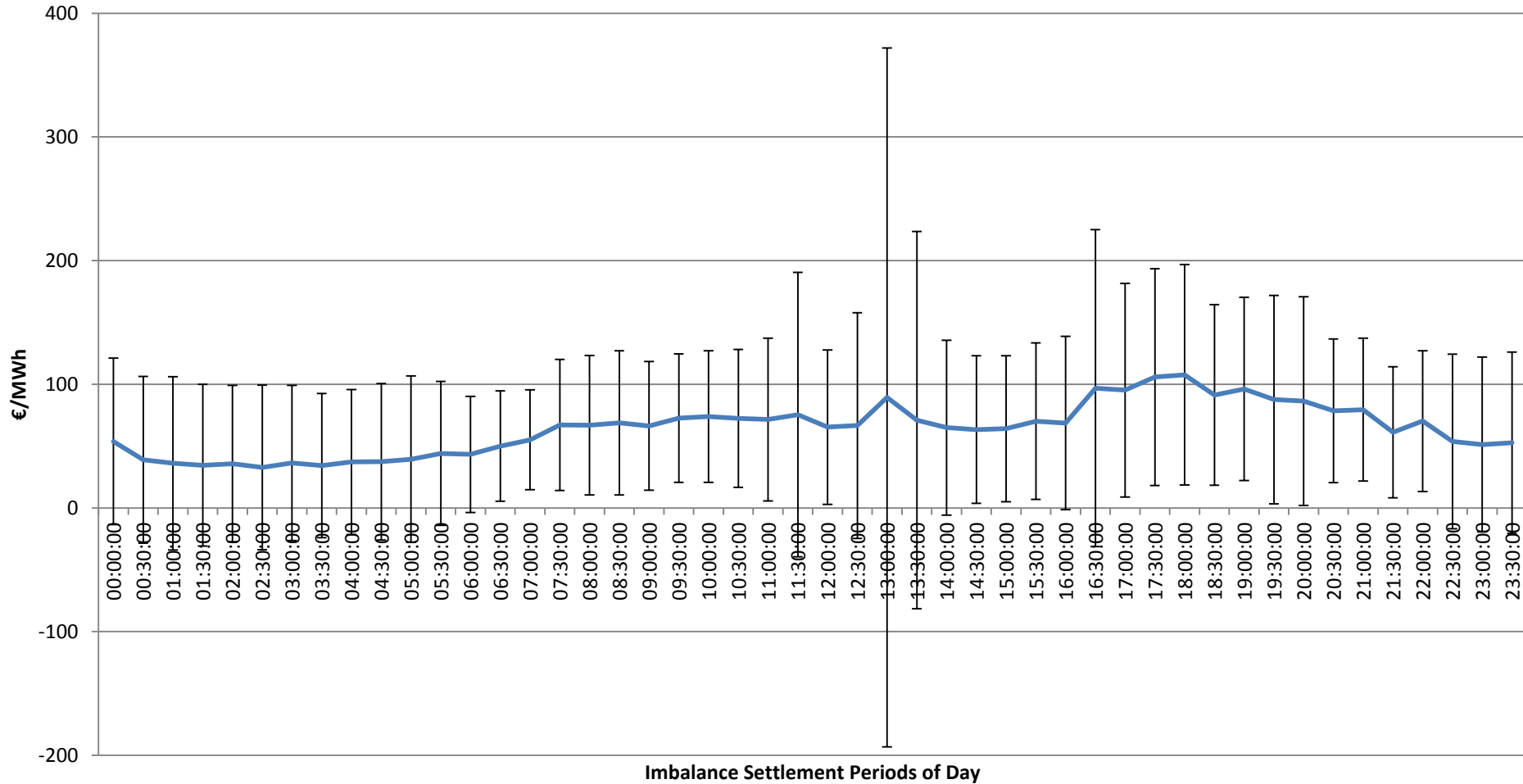
Imbalance Pricing

Daily Average 5 Minute PIMB Price Profile - 01/03/2019 - 31/03/2019



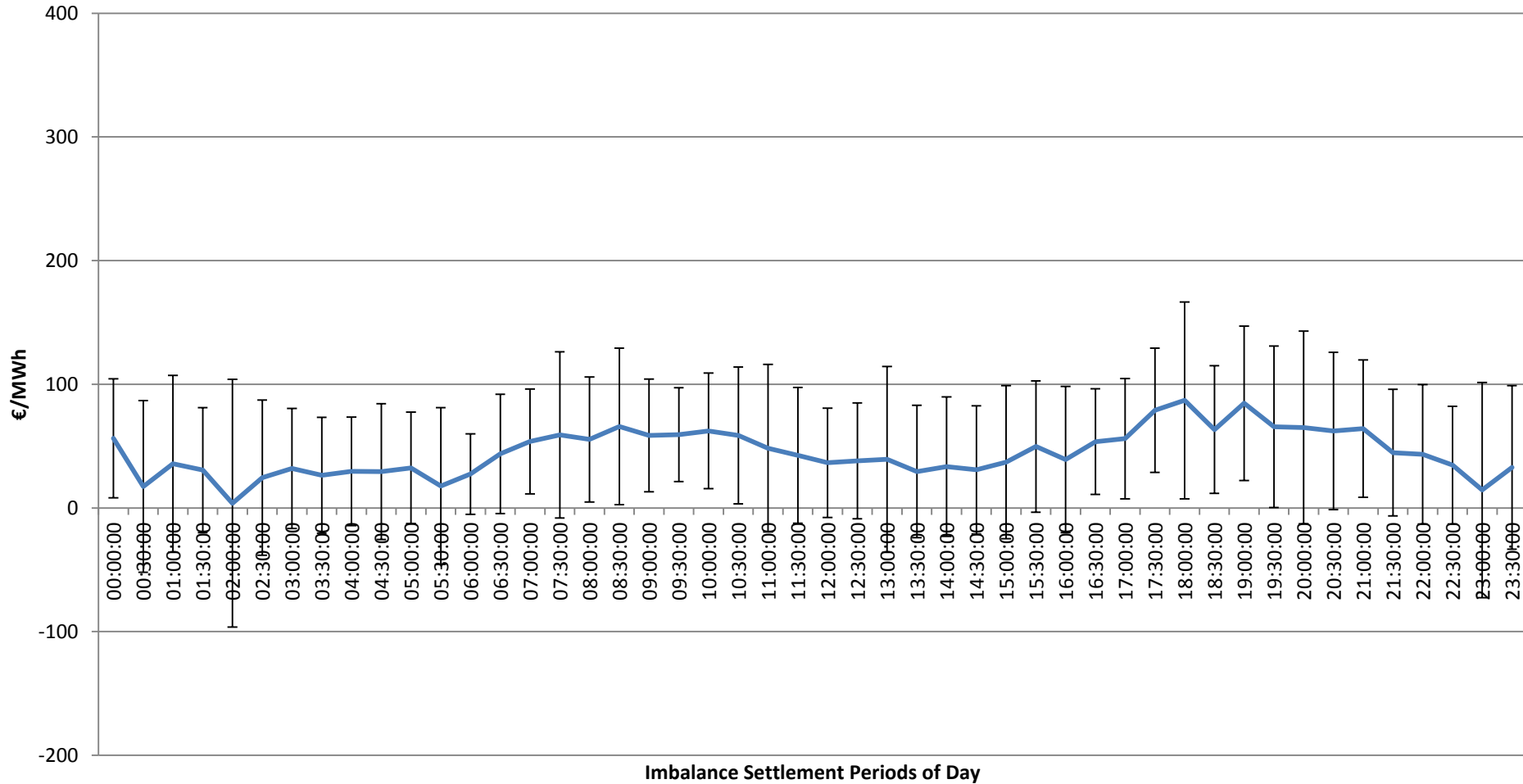
Imbalance Pricing

Daily Average Half Hour PIMB Price Profile - 01/10/2018 - 02/04/2019



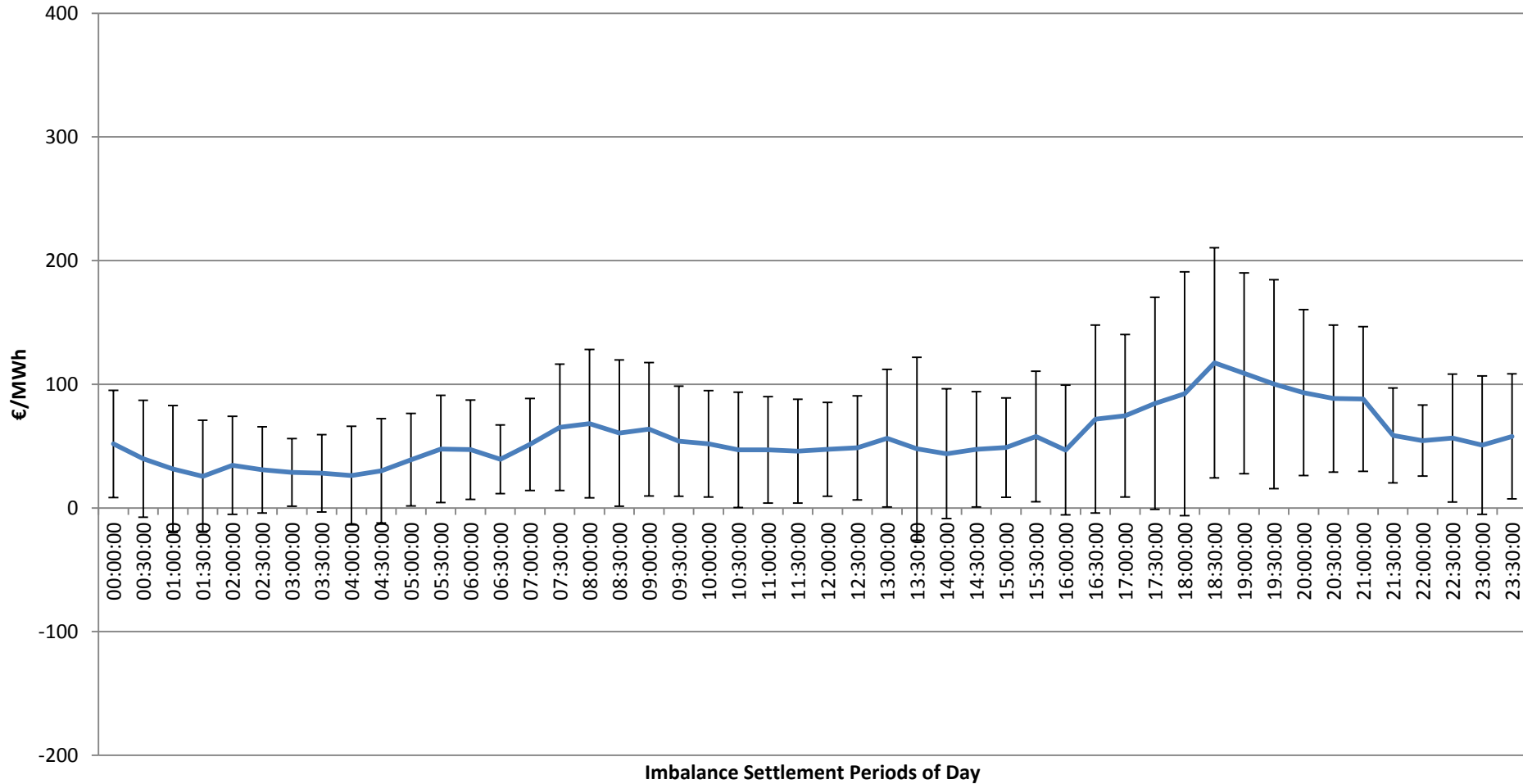
Imbalance Pricing

Daily Average Half Hour PIMB Price Profile - 01/02/2019 - 28/02/2019



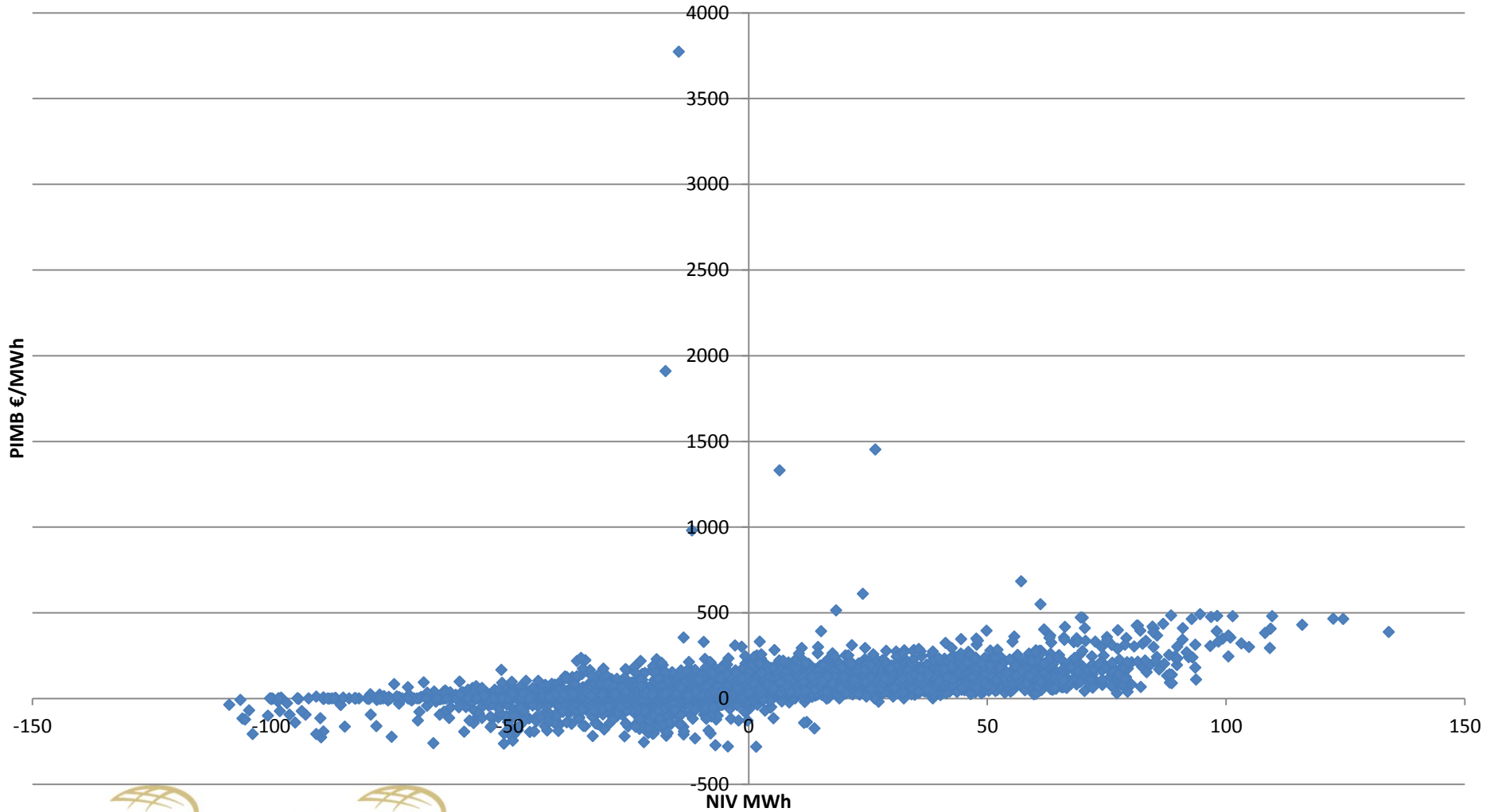
Imbalance Pricing

Daily Average Half Hour PIMB Price Profile - 01/03/2019 - 31/03/2019



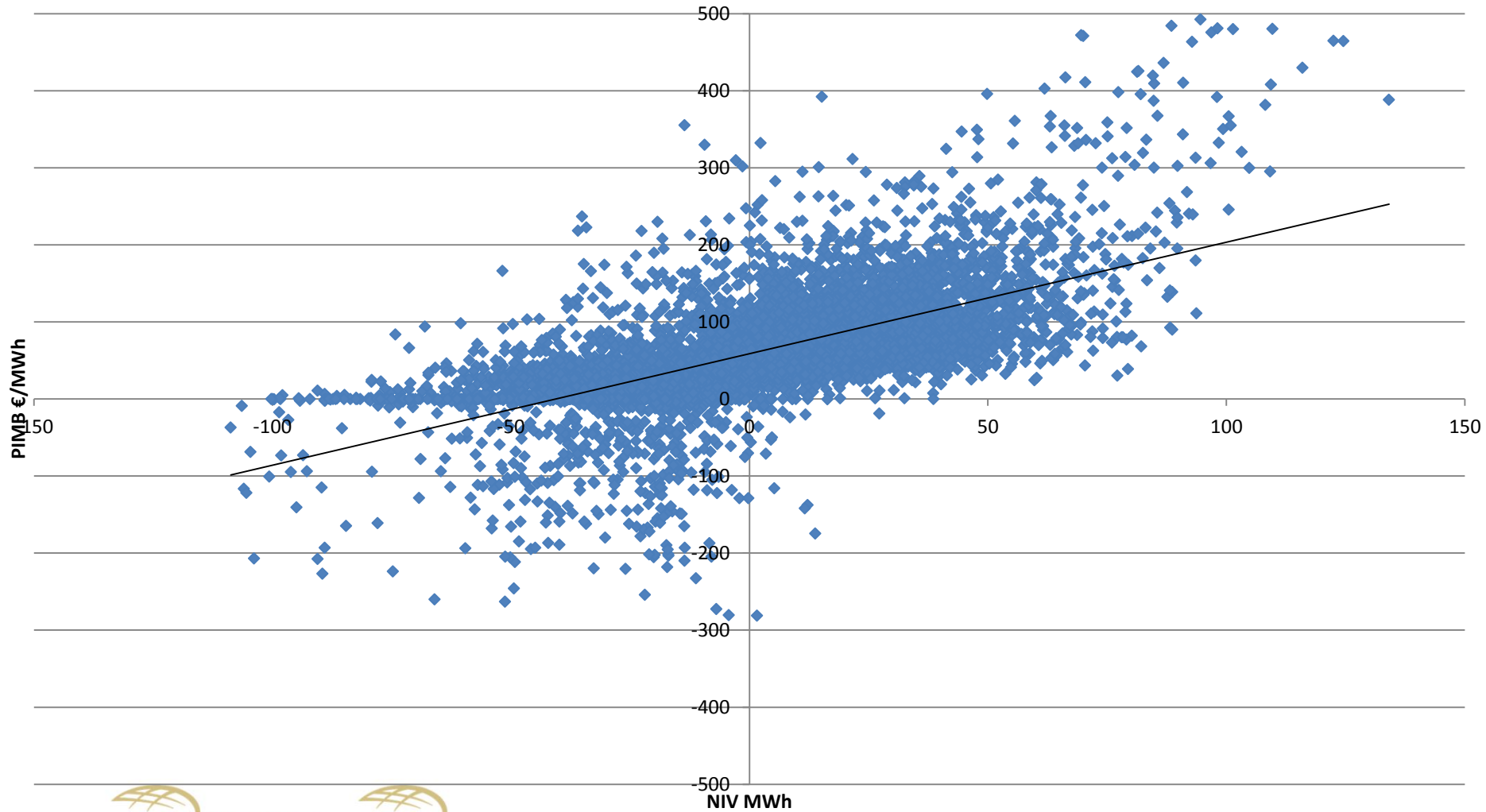
Imbalance Pricing

Half Hour PIMB versus Average NIV - 01/10/2018 - 02/04/2019



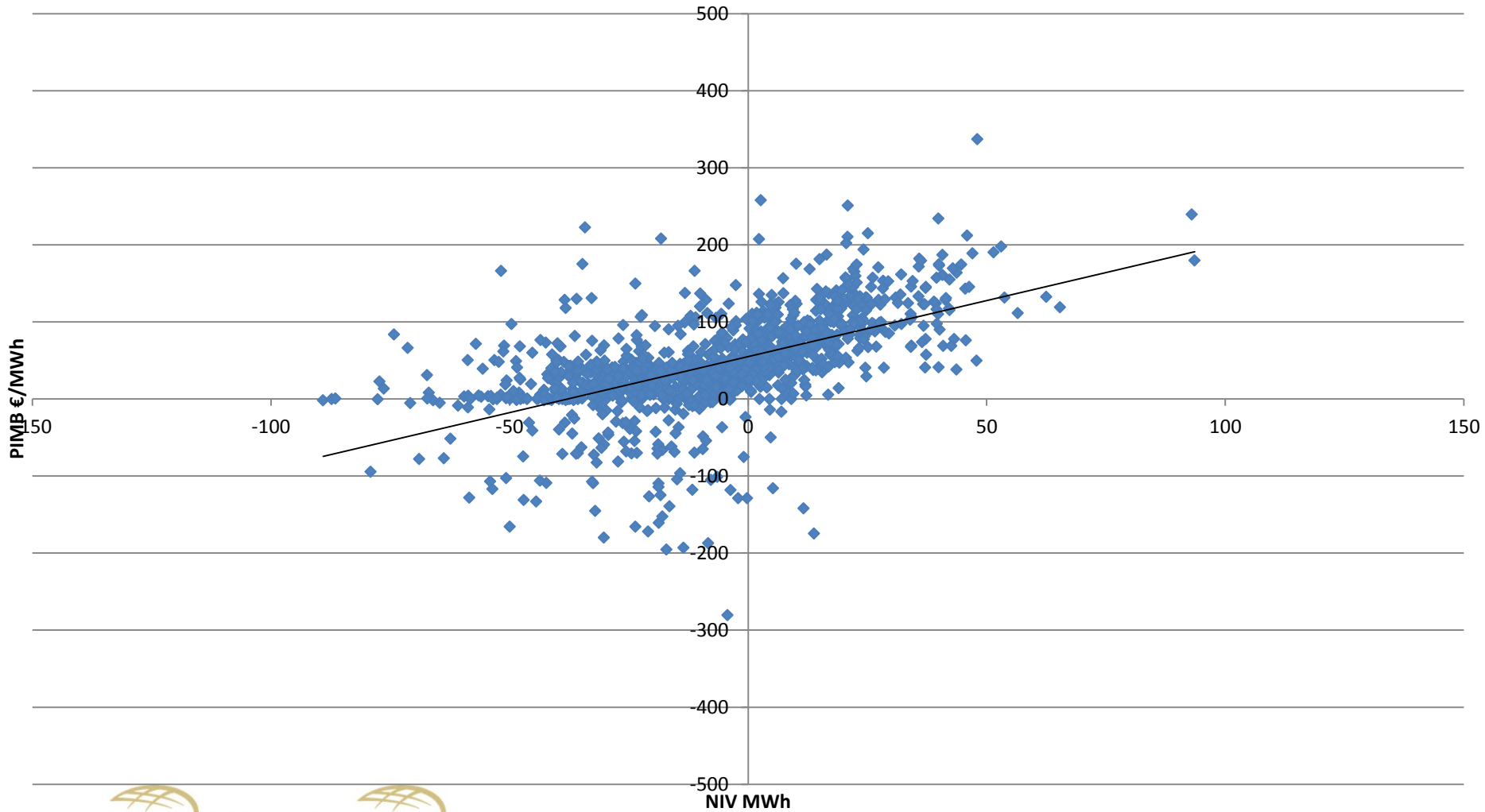
Imbalance Pricing

Half Hour PIMB versus Average NIV - 01/10/2018 - 02/04/2019



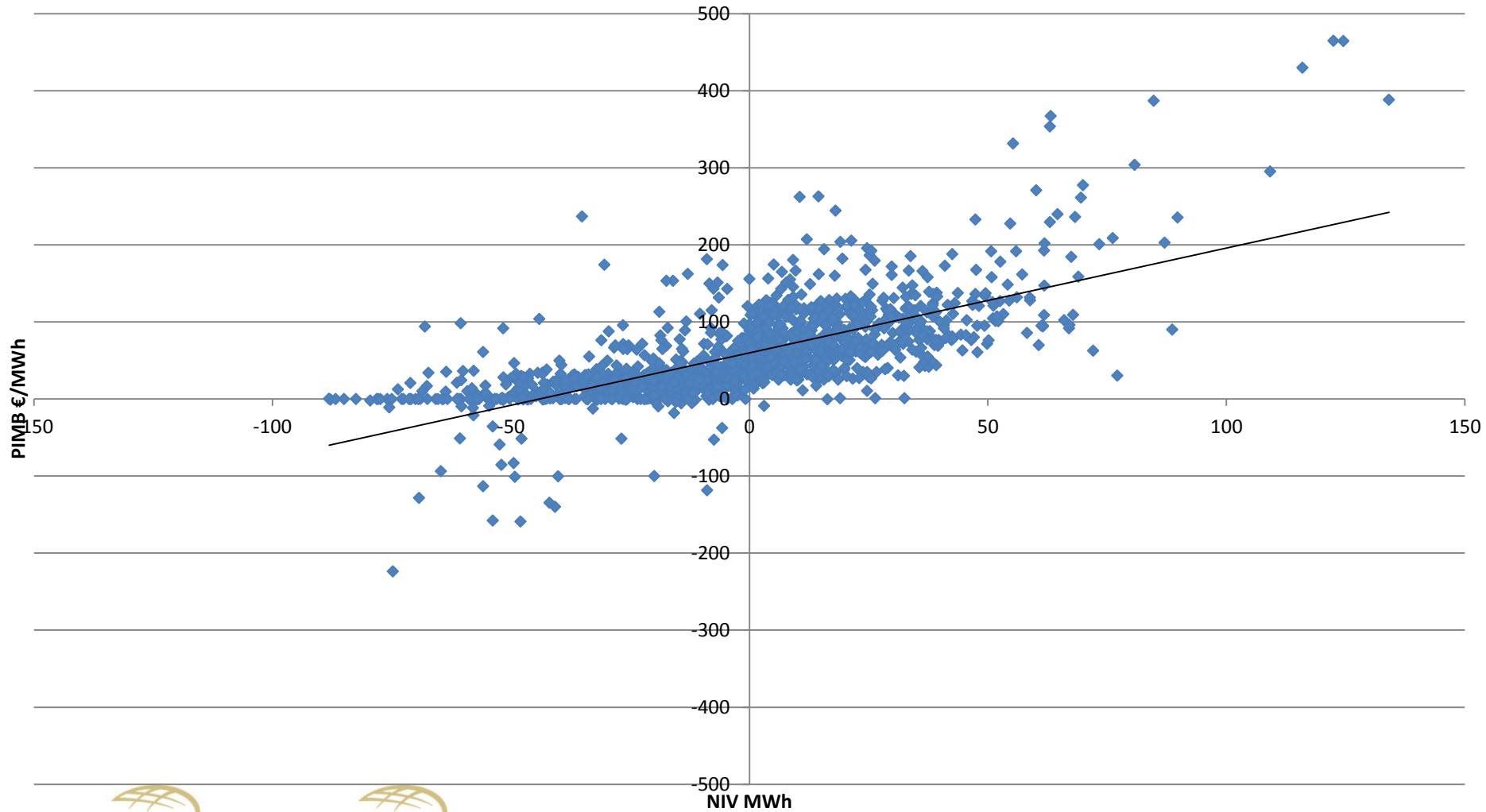
Imbalance Pricing

Half Hour PIMB versus Average NIV - 01/02/2019 - 28/02/2019



Imbalance Pricing

Half Hour PIMB versus Average NIV - 01/03/2019 - 31/03/2019



Balancing Market

- Are there points of additional clarity required in the report on Jan 24th?
 - *“Clarification on the initial conditions of the RTD”*
- **Not clear from notes taken and communications what clarification is required. Can participants specify what they need in this space and we will update the report accordingly.**
- Is there value in a similar report on Oct 9th?
 - *“... a similar report for the 3rd and 9th of October would be useful for participants ...”*
- **Team have begun work on a report on October 9th. Timeline of drafting is likely to see publication late April / early May**
- **Report on October 3rd was not on our plan. To be further considered.**

Balancing Market

- What additional information do participants feel they need to assist in their understanding and analysis of flagging & tagging and imbalance pricing?
 - *“Provision of a loss of load probability report for ROI, NI and SEM would assist participants in identifying potential upcoming issues without needing a warning from the TSOs.”*
 - *“The correction of the known issues with the NIV report and the creation of extra separate NIV reports for each jurisdiction (ROI & NI). Three in total; SEM, ROI and NI. These reports would easily help participants foresee similar events arising again.”*
- **Changes to reports will be a Day 2 (or later) implementation. Feedback received being provided to the Day 2 team for consideration. Meantime, SEMO to review what data available and to potentially provide information note to advise how this information can be collected from existing reports.**

Balancing Market

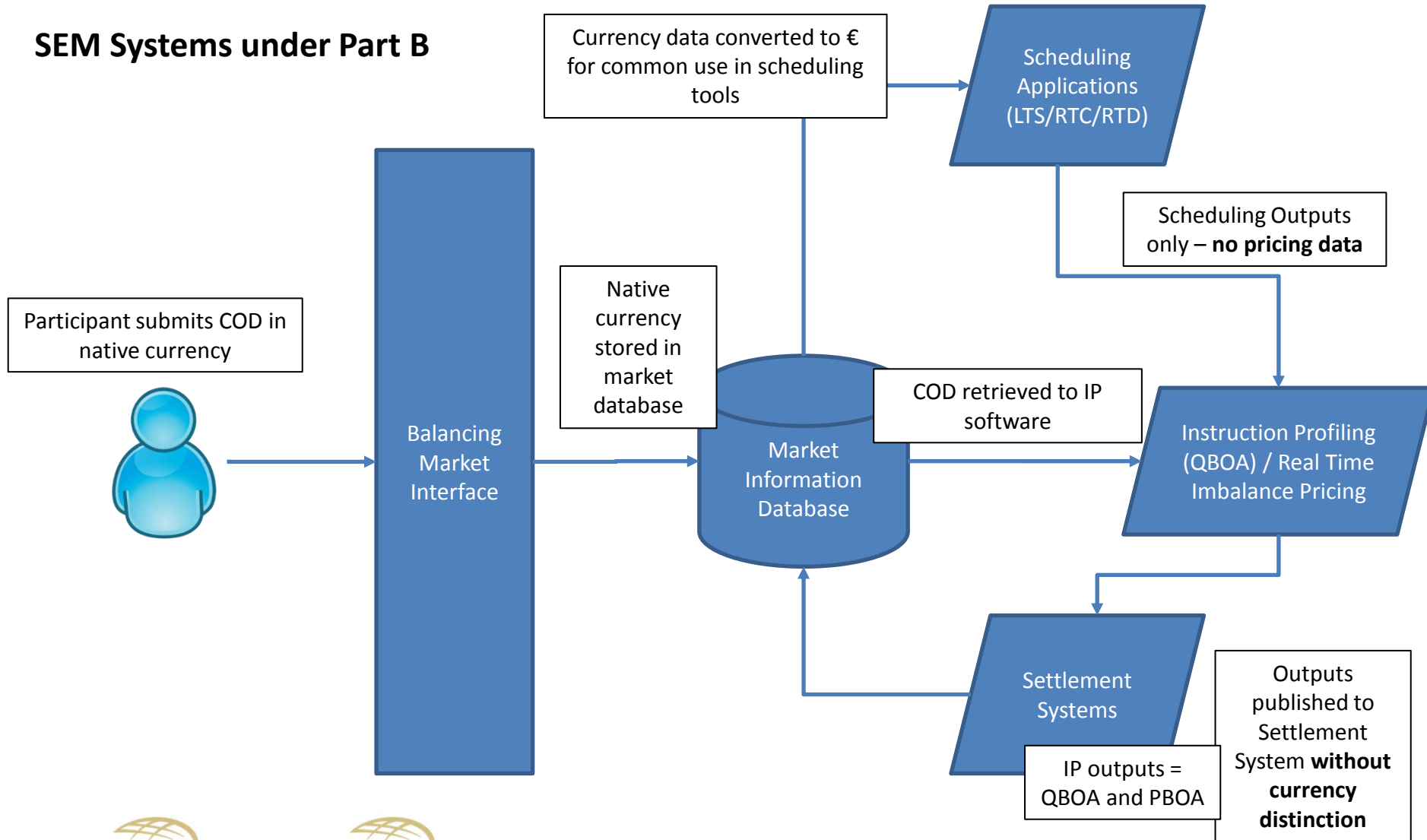
- Further design questions arising from the event of Jan 24th?
 - *MO, TSOs and RAs have met to consider implications of current design*
 - *Reviewing many aspects of imbalance pricing calculations (e.g., impact of locational constraints on pricing, application of PMEA, application of PAR when PMEA applied, etc.)*
 - *Any further discussion of changes will be through the Modifications Panel*
 - *Next steps to be expanded on at next meeting on **April 11th***

Balancing Market

- ***“From a previous MOUG, I asked if it would be possible for SEMO to do a review of the number of actions settled on simple and complex since the start of ISEM”***
- SEMO agreed to look at this from the January MOUG
- Task has proved to be more difficult than expected
- Whether an action is settled on simple or complex bids is not a reportable requirement
- As such, this data is not built in to our systems, nor is it retained by them

Balancing Market

SEM Systems under Part B



Balancing Market

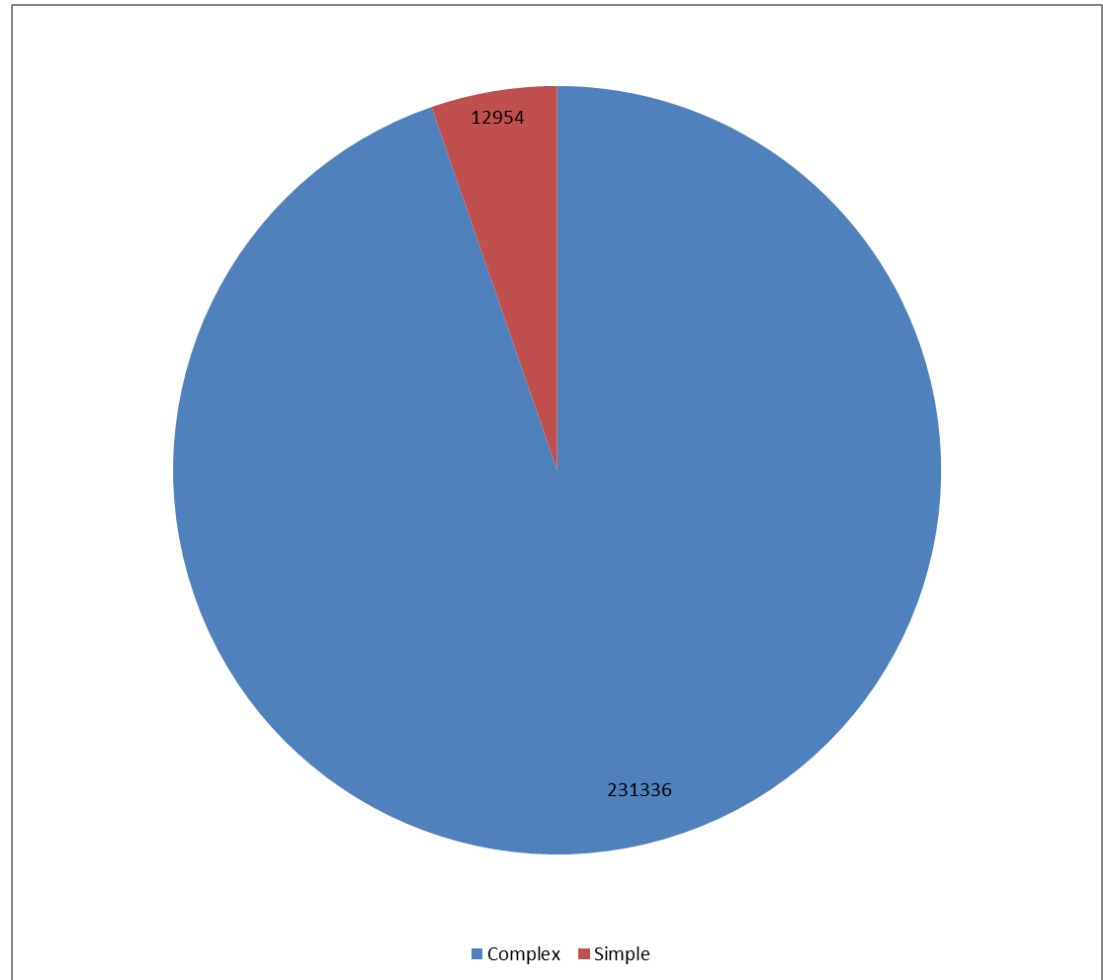
- ***“From a previous MOUG, I asked if it would be possible for SEMO to do a review of the number of actions settled on simple and complex since the start of ISEM”***
- The IP QBOA software is the application that applies the rules of which COD to apply
- Outputs are simply the QBOA and the PBOA
- Settlement systems consume the outputs of the IP QBOA process assuming previous steps have been completed

Balancing Market

- To determine actions settled on complex / simple COD –
 - *Could see the PBOA output and determine which COD type by reviewing COD submissions*
 - *Complex option – needs to consider all COD submissions to determine which was “live” at the Bid Offer Acceptance Time (BOAT)*
 - *Other option to consider the inputs to the IP QBOA*
 - *Using the PUB_5MinImbalPrcSupplInfo report, identify which units are SO Flagged or NIV tagged*
 - *Once a unit is flagged in any five minute period, settled on complex for the entire half hour*

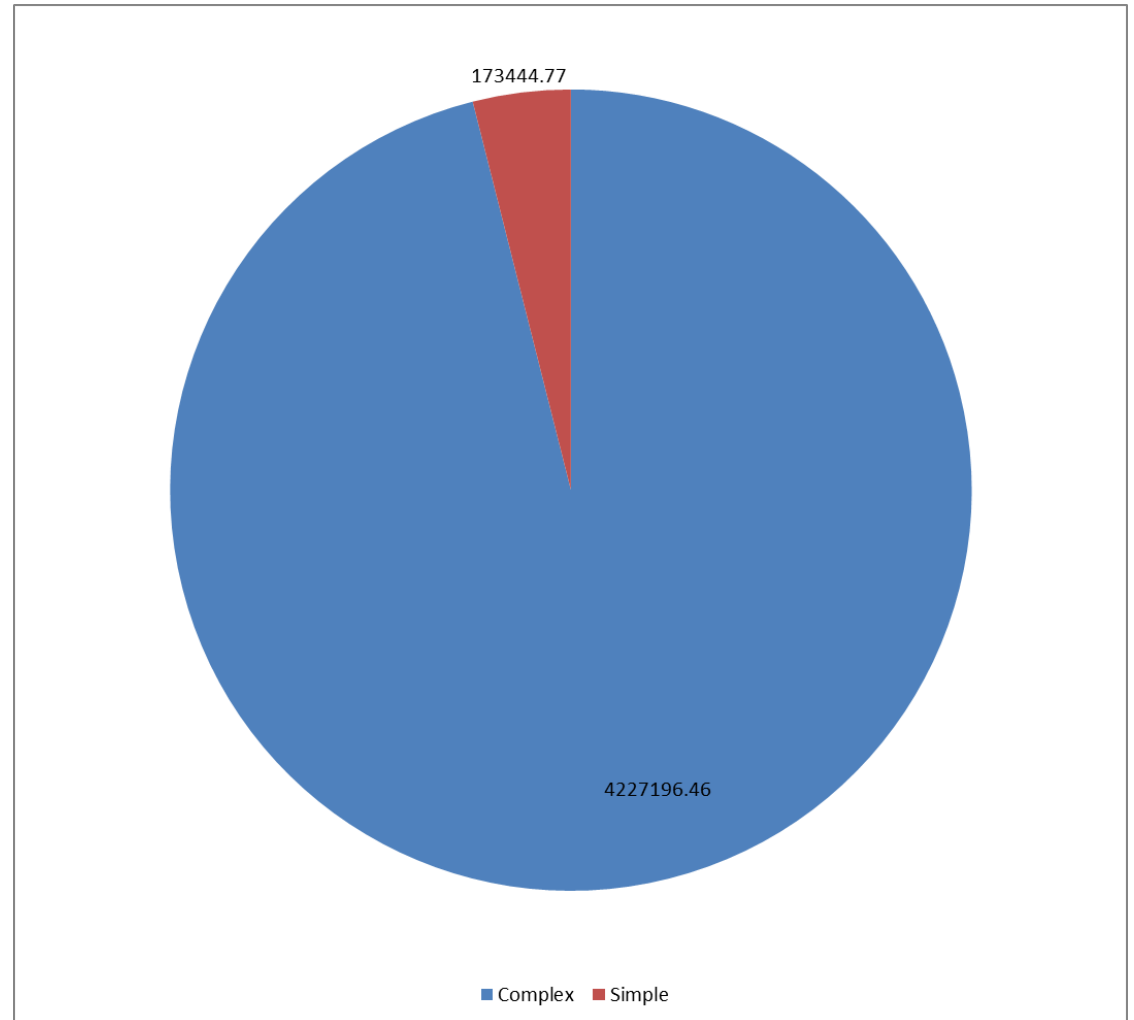
Balancing Market

- *Results not validated but wanted to provide initial finding*
- *High proportion of actions settled on complex COD versus simple*

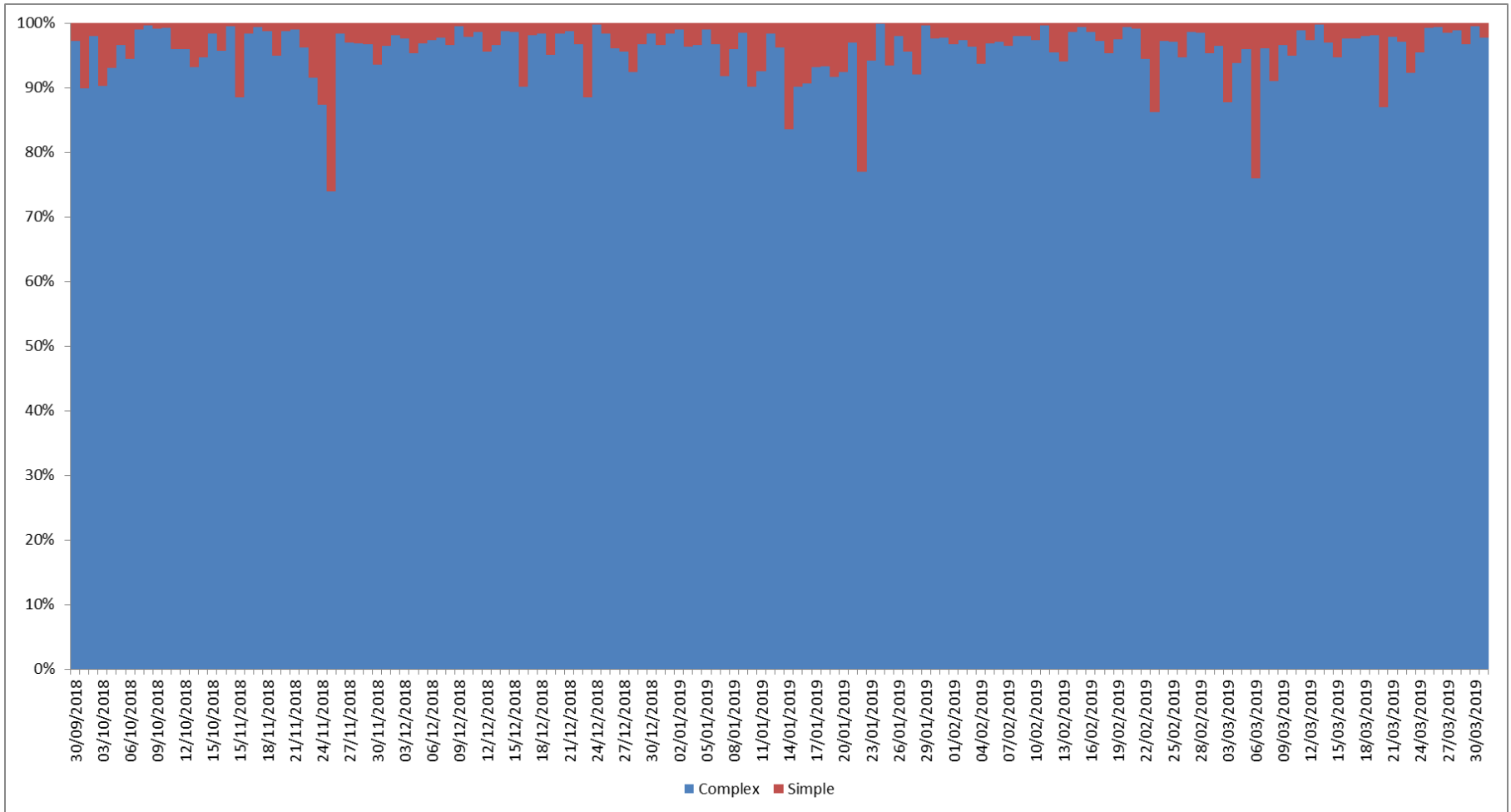


Balancing Market

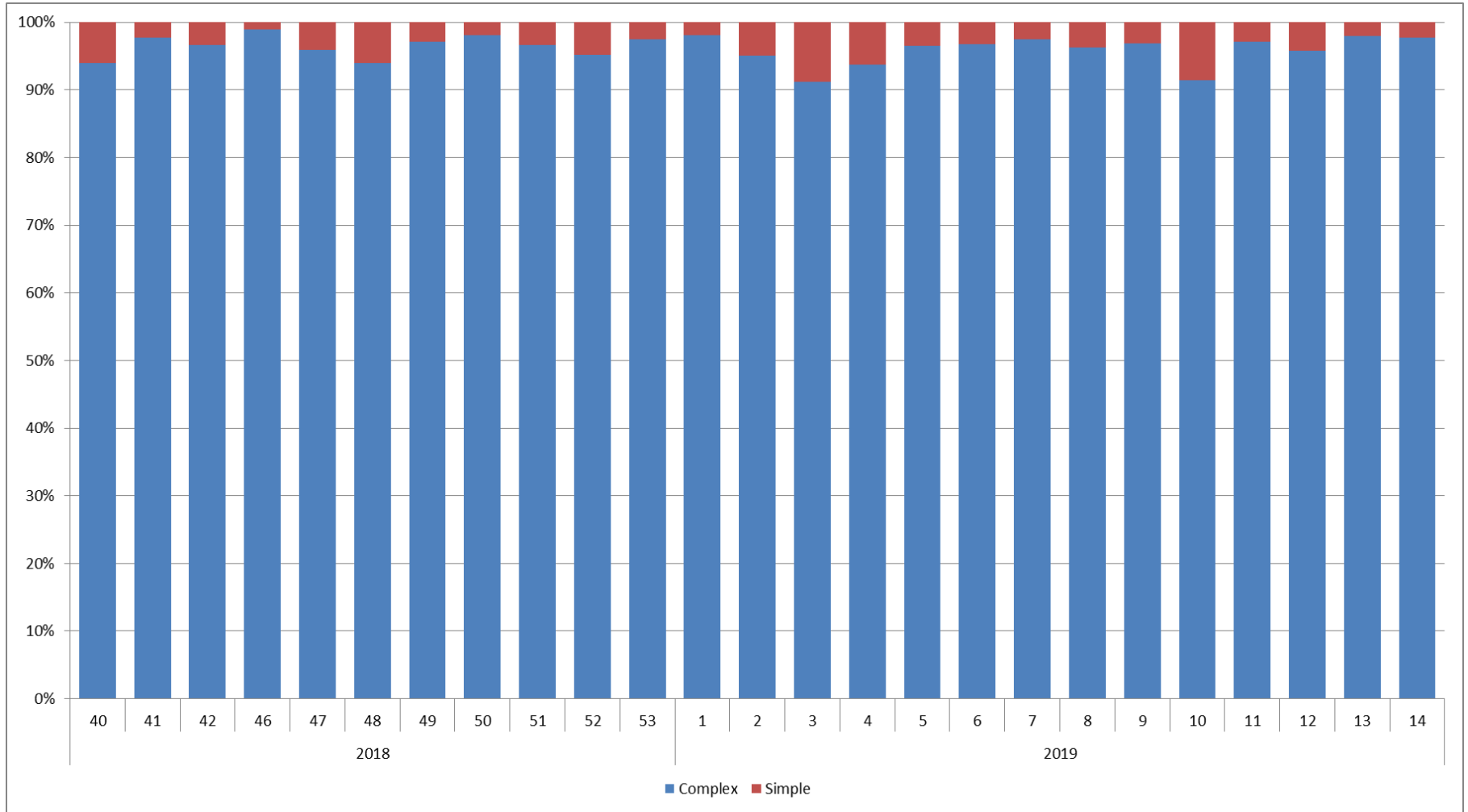
- *Expressed as quantity*
- *173K as simple*
- *Over 4m as complex*



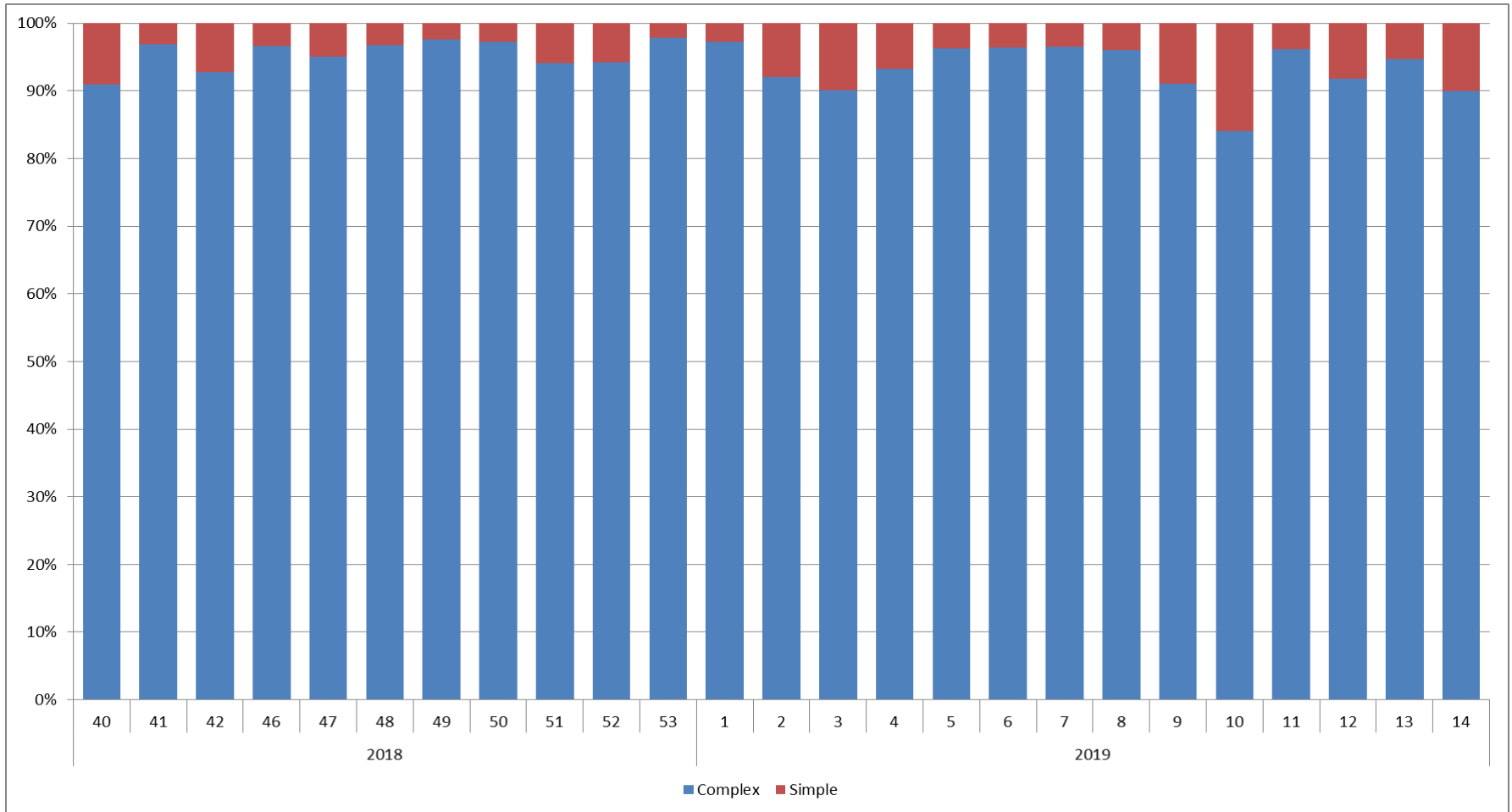
Balancing Market



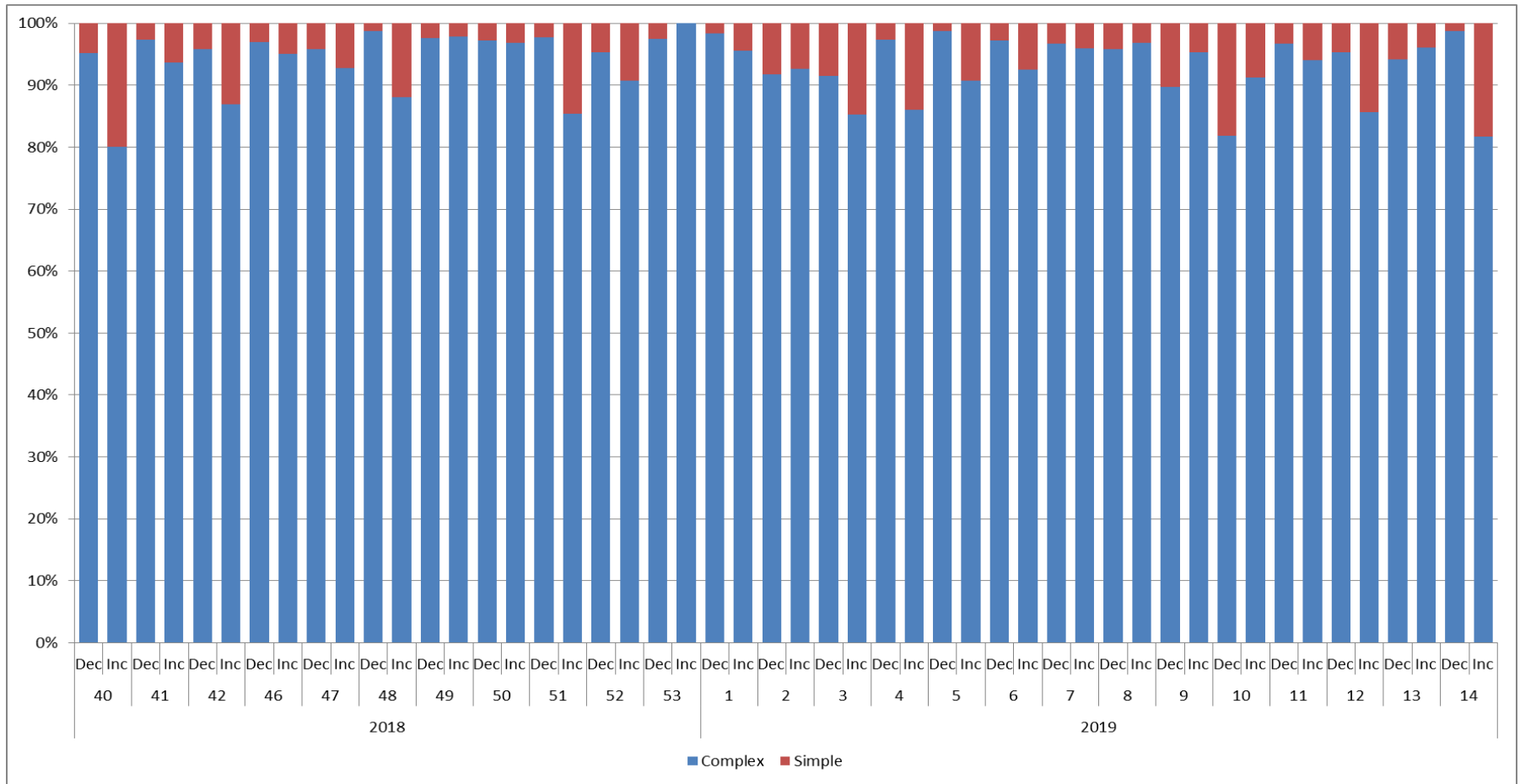
Balancing Market



Balancing Market

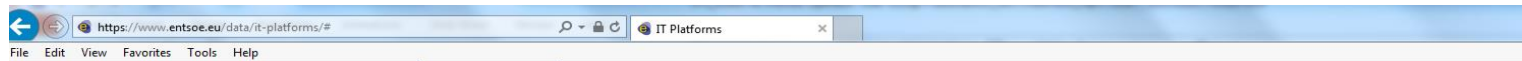


Balancing Market



EAS - European Awareness System

- Action from Special Topic Session – Amber Alert 24th January



European Awareness System

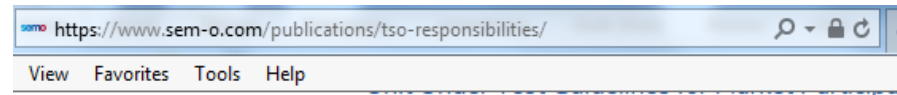
The EAS is the technology platform which allows transmission system operators to exchange information in realtime. All operators input a number of measurements including frequency and cross border exchange. These measurements are then merged to provide an overall European view of each TSO on the platform.

[Find out more](#)

- <https://www.entsoe.eu/data/it-platforms/#>

Information Note on Cork constraint

- Action from Special Topic Session – Amber Alert 24th January



- Will be updating System Operator and Non-Marginal Flagging in the future (TBD)

Operational Methodolo

We publish a number of methodologies related to

- [Short-Term Demand Forecasting](#)
- [Wind and Solar Forecasting](#)

These two methodology documents expand on t

- [Determination of Scheduling and Dispatch Polic](#)

Under EirGrid and SONI Licences we are required to reduce the propensity for starting-up long-notice units. This outcome is designed to contribute towards the ol

- [System Operator and Non-Marginal Flagging](#)

CTPT Trade – 6th March 2019

- TSOs requirement to trade fully described in <https://www.sem-o.com/publications/tso-responsibilities/>
- Trade for priority dispatch or system security only
- Trade on a firm ICRP (after auction is closed)
- Trade executed for system security in N. Ireland on the 6th
- Action Special Topic Session – Amber Alert 24th January
- Can TSO countertrade with itself – trade to import on one and export on other? Answer – see process diagrams. TSO could if met priority dispatch / system security and had agreement from NGENSO.

https://www.sem-o.com/publications/tso-responsibilities/ IT Pla
View Favorites Tools Help

This report contains high level transmission system cha
transmission system in the coming year and into the fu

Operational Processes

Operational processes set out our end to end operator
that describe step by step actions taken in the short ter

- [BP_SO_2.1 Constraints Changes in Scheduling Runs](#)
- [BP_SO_2.2 System Constraints Calculation](#)
- [BP_SO_3.1 Manage Events Impacting Scheduling and](#)
- [BP_SO_3.2 Issue Dispatch Instructions](#)
- [BP_SO_3.3 Manage Fail Sync Fail Min](#)
- [BP_SO_3.4 Dispatch Wind Units via EMS](#)
- [BP_SO_4.2 Demand Forecasting for Scheduling and I](#)
- [BP_SO_4.3 Wind Forecasting](#)
- [BP_SO_5.5 Interconnector Under Test](#)
- [BP_SO_8.6 Generator Outturn Availability](#)
- [BP_SO_8.7 Manage Unit Outage Requests](#)
- [BP_SO_9.1 Demand Control Process](#)
- [BP_SO_9.2 Declaration of System Alerts](#)
- [BP_SO_10.1 Perform Long-Term and Short-Term Sci](#)
- [BP_SO_11.1 Calculation of CBB Trade Prices and Vol](#)
- [BP_SO_11.2 Cross Border Balancing Trading between](#)
- [BP_SO_11.3 Interconnector Emergency Actions](#)
- [BP_SO_11.4 Coordinated Third-Party Trading](#)

Q: Is there any possibility of producing a lunchtime schedule?

A. Not at present

- Significant work at this time to prepare for 14:00 run
 - Data checks, PN approvals, TCG updates etc.
- No major data changes from previous schedule
 - Wind forecast now only received at 13:00
 - Long term commitment decisions typically already made
 - Ad-hoc schedules are already produced asap after a system event, i.e. unit tripping, significant deviation in wind or load forecast etc.

Impact

- The production of additional schedules at present is likely to lead to further delays in producing meaningful updates.
- Participant data is still unsuitable for more automated production of schedules
- Grid Code requirement is for one schedule publication by 16:00 each day.

Agenda

Item	Presenter
Welcome	Anne Fitzgerald
Known Issues Update	Eoin Farrell
Ex-Ante Market	Liam McAllister
Balancing Market	Aodhagan Downey, Martin Kerin, Sam Matthews
Disputes & Repricing Update	Dermot Campfield
Settlements & M+4 Resettlement	Sean O'Rourke, John O'Dea
Capacity Market Timetable	Anne Fitzgerald
Query Management	Claire Breslin
Q&A	

Disputes & Repricing Update

Issue ID	Manifest Errors	Repricing Summary	Status
Rpc1	Incorrect QBOA for a Unit	Will be resolved through repricing	
Rpc2	Incorrect QBOA for a Decommissioned Unit	Will be resolved through repricing	
5720	Negative Reserve Flag	Fixed in Systems [8 th October 2018 Release]	
5739	Exchange Rate	Fixed in Systems [24 th October 2018 Release]	
5712	Non Controllable Wind QBOAs	Fixed in Systems [29 th January 2019 Release]	
5785	Complex COD being used instead of Simple COD	Fixed in Systems [26 th March 2019 Release]	
5831	Cancelled Dispatch Instructions being processed in Imbalance Pricing	Fixed in Systems [26 th March 2019 Release]	
5737	Units being skipped in QBOA calculations	Fixed in Systems [26 th March 2019 Release]	
5806	Incorrect Application of Dispatch Instructions for Pump Storage Unit	Planned implementation in Release C	
5817	Initial Conditions being incorrectly applied	Planned implementation in Release C	
112877	Type 3 PNs Validation Error	Will be resolved through repricing. Workaround available while defect remains open.	
Rpc4	Wind Dispatch Instructions Data Feed Error	Will be resolved through repricing	
Rpc3	Processing of Dispatch Instruction greater than 20 minutes	Will be resolved through repricing	

Date Subject to Upheld Disputes

Dates which are currently disputed/manifest errors identified:

- 01/10/2018 – 24/10/2018
- 27/10/2018 – 29/10/2018
- 01/11/2018 – 28/03/2019

It is expected that further disputes will be submitted until the existing identified manifest errors have been resolved in pricing.

Pricing Issue – PN Validation Error

- Physical Notification Validation Error (**Known Issue #112877**)
- Denial of Under Test PN submission will result in all PNs in the same submission being denied at Gate Closure 2, reverting to a 'null' value.
- Two known instances of this occurring in production.

Trading Day	Periods Impacted
28 th February 2019	1 Unit Impacted between 15:00 and 18:00.
22 nd March 2019	Multiple Units impacted between 13:30 and 23:00

Reminder of Workaround

- Participants advised to include Under Test PNs for a Generator Unit in a separate Type 3 xml submission.
- There is no impact on Type 2 PN Submission (each submission is a unique transaction).
- Participants may wish continue with this process post fix implementation; as denial of Under Test PNs for a Unit will still result in all other PNs reverting to the previously approved version (i.e. new PN changes will be rejected at Gate Closure 2).

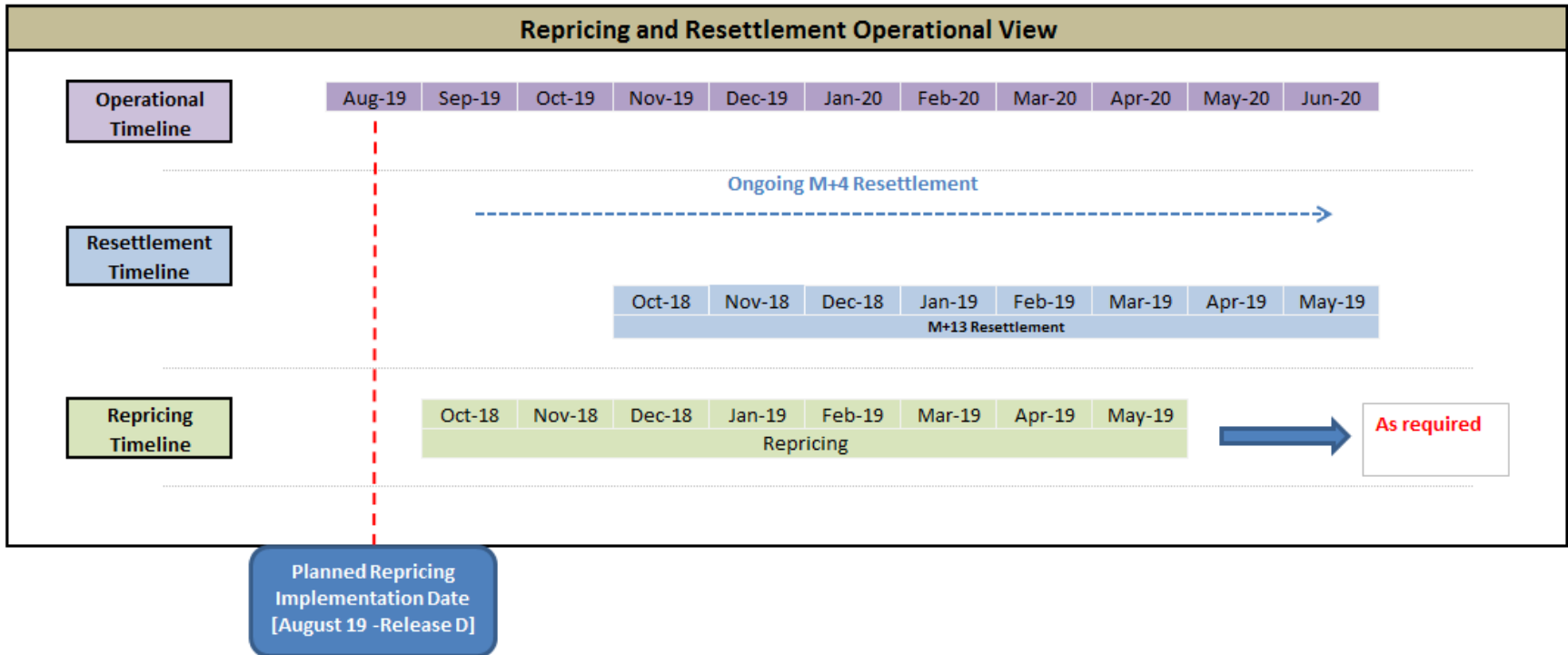
Pricing Issue – Wind Data Feed Error

- Data feed issue where wind Dispatch Instructions (DIs) did not feed through to Imbalance Pricing.
- There were no DIs submitted between 17:00 on 9th March to 16:00 on the 11th March 2019.
- There are only two wind units appearing in the bid stack during this time, not reflecting the real-time DIs during this period.

Impact of Issue

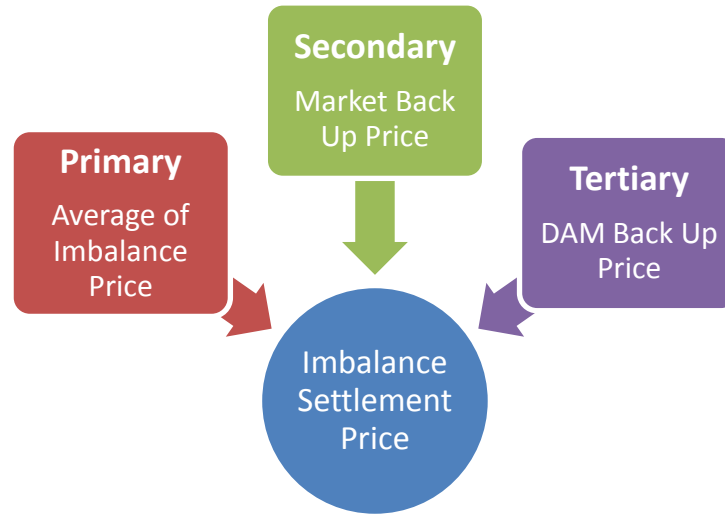
- Controllable Wind Units will not be assigned QBOA for periods where they have been assigned CURL or an LOCL instruction.
- High volume of both CURL and LOCL instructions issued over this period.
- Impact on both the NIV and on Imbalance Price in the intervening Trading Periods.

Repricing Schedule



Note: The repricing timelines are indicative based on current release plan.

Planned BMI Outages



Planned BMI Outage (Imb Pricing available)

- Advance Communication of Outage .
- No communication issued with regards to Imbalance Pricing, as the functionality is expected to be fully available.

Planned BMI Outage (Imb Pricing unavailable)

- Advance Communication of Outage.
- Advance Communication of impact to Imbalance Pricing; confirming that Imbalance Pricing will not be available – back up prices will be used.
- Retrospective communication detailing use of DAM Back Up Price will be issued the subsequent working day.

Agenda

Item	Presenter
Welcome	Anne Fitzgerald
Known Issues Update	Eoin Farrell
Ex-Ante Market	Liam McAllister
Balancing Market	Brendan O'Sullivan, Martin Kerin, Sam Matthews
Disputes & Repricing Update	Dermot Campfield
Settlements & M+4 Resettlement	Sean O'Rourke, John O'Dea
Capacity Market Timetable	Anne Fitzgerald
Query Management	Claire Breslin
Q&A	

Settlements : March 2019 data key process updates

Settlement Dates	Run Category	Run Type	Runs completed	On Time	Delayed – Same Day publication	Delayed > 1 Day
1 st – 31 st	Settlements	Indicative	31	9	4	18
1 st – 26 th	Settlements	Initial	25	3	14	8
1 st – 29 th	Settlement Documents	Weekly	4	2	1	1
1 st – 29 th	Credit Reports	Daily	60	60	-	-
1 st – 29 th	Payments In	Weekly	4	4	-	-
1 st – 29 th	Payments Out	Weekly	4	4	-	-

Key issues impacting Settlement Document timelines

Key Date (s)	Issue	Impact to schedule timelines	Issue Status
Mar 8 th	Instruction Profiler QBOA - 'Error in Slope'	<ul style="list-style-type: none"> Settlement Documents due Friday 8th March for Settlement period of 24th to the 2nd March : publication was moved to Monday 11th March. Payments IN/OUT dates adjusted. 	Newly Raised – Awaiting Ticket IDs
Mar 15 th	Incorrect IPQBOA values (KIR ID: 5893)	<ul style="list-style-type: none"> Settlement Documents due Friday 15th March for Settlement period of 3rd to the 9th March : publication was delayed until 15.45pm. 	Temporary workaround is in place. Permanent solution to be provided by ABB

Other Key points:

- **Systems performance** impacting run times of settlement runs – ***fix released on Tue 26th March. 5pm timelines met on April 1st for Monday indicatives.***
- **Increase of additional** catch-up days in March due to the backlog of runs caused by above events (on top of normal Monday/Thursday catch-up days)
- **Sequence of initial settlement runs** : Current dependency on weekly Friday run to be completed before continuing to Saturday run (weekly fixed costs)
- **Additional pro-active analysis** continues re: “Incorrect IPQBOA values (KIR ID: 5893)” – impact to processing timelines to perform required analysis

M4 Resettlement Plan 1/2

- M4 Resettlement for date range 30th Sept (last hour) to 06th October to be included in Settlement Documents on 03rd May 2019.
- What's to be included:
 - Updated Metering data as required
 - Formal queries and defect fixes affect billing period and subsequent days that has been resolved
 - Instruction Profiler will included (Dispatch quantities, Dispatch Instructions)
 - Hotfixes applied since Oct 1st
 - Jan 29th Release
 - Mar 26th Release
- Challenges:
 - Only changes expected from the above have occurred
 - Bill case performance issue now resolved enabling processing to proceed
 - Validating enhanced resettlement solution (includes Instruction Profiler changes)

M4 Resettlement Plan 2/2

- M+4 Statement and Report:
 - Produced billing week period by 17:00 on a Thursday

 - M+4 Settlement Documents:
 - Included in Initial Settlement Documents
-
- Market messages to issue re: Settlement Calendar M+4 update details.

 - Resettlement solution options for settlement period of Jan 20th – Jan 26th being reviewed with vendor

Settlements : M+4 / Ad-hoc resettlement updates

- First M+4 period of Sep 30th – Oct 6th to be included with Settlement Documents May 3rd
- Plan for M+4 catch-up being reviewed pending successful publication of first M+4 week
- Following on from updates re: “I-SEM Day 1+, High-Level Indicative Release Timeline” & Repricing solutions
 - M+4 will include:
 - Updated Metering received from MDPs
 - Hotfixes applied since Oct 1st
 - Jan 29th Release
 - Mar 26th Release
 - M+4 will exclude:
 - Pricing resettlement
- Resettlement solution options for settlement period of Jan 20th – Jan 26th being reviewed with vendor

Settlement Defects & Analysis

Fixed Costs (CFC - Newly Identified)

Defect ID (KIR)	Description	Status
#5950	DSUs should not have Day ahead, Within Day Difference & Non-Performance charges applied in settlement as the QDIFFTRACK should equal to Zero as per F18.7.1 T&SC	Delivered for Testing
#5940	MPOP FPN Misalignment with MMS: Period of Market Operation Trading Period Starting points in CSB not aligned with the MMS, including incorrect application of minute resolution. Should be 30 min resolution. (ATS 110082)	Delivered for Testing
#5944	FPN Curve not applying Heat State to CFC inputs correctly: Incorrect or No Heat State being applied within CSB, therefore Start-Up costs not being included within the CFC calculation	Analysis with Vendor
#5910	Start-up flag for CSUR with Warmth State: Incorrect or no CFC start-up / shutdown costs	Analysis with Vendor
#5909	BOA and Start up / no load cost not being calculated when first BOA = 0 : Incorrect or no CFC start-up / shutdown costs	Delivered for Testing
#5888	Metered Quantity for DSUs - DSUs should not have an undelivered quantity. Metered quantity must be made equal to the dispatched quantity	Delivered for Testing
#5972	No CFC component costs calculated for Initial vs. Indicative intermittently (No COP IDs were calculated for Initial)	Delivered for Testing

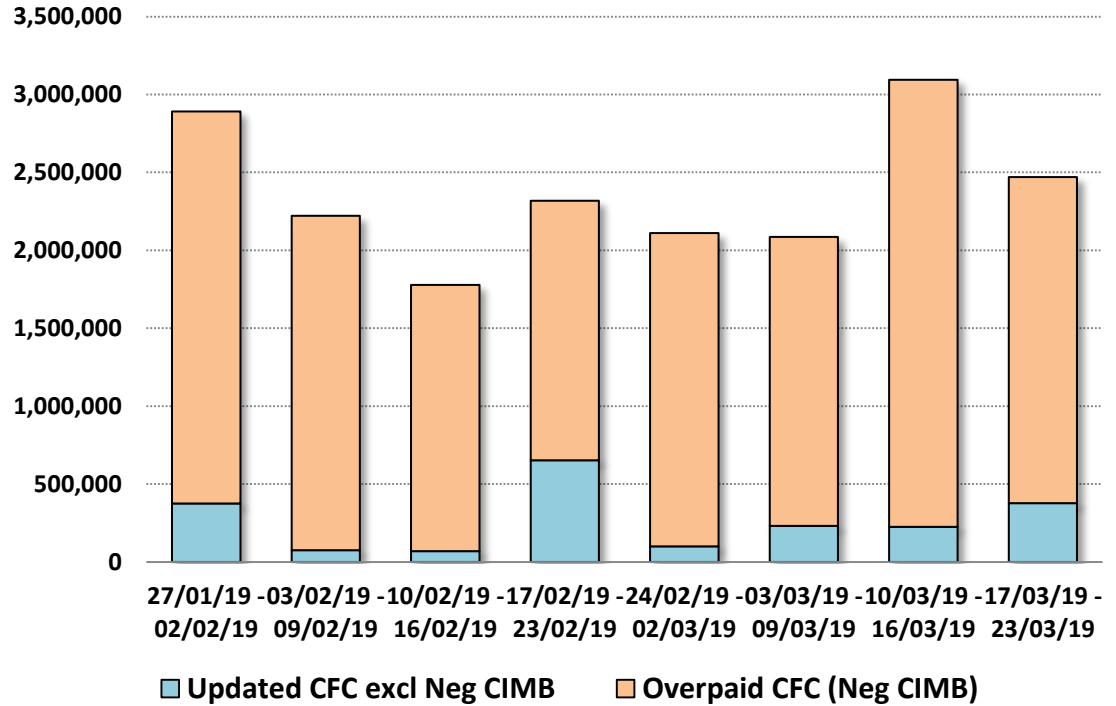
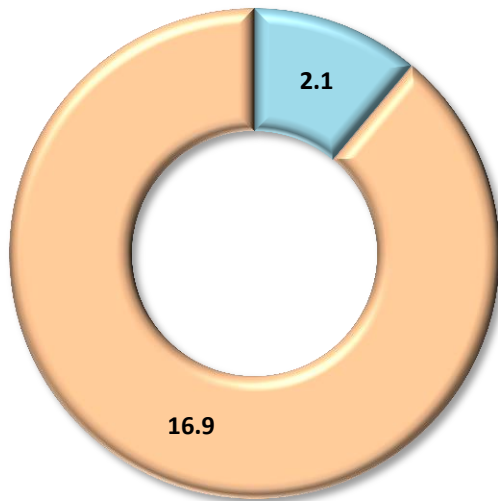
Settlement QBOA Defects

Instruction Profiling QBOA

Defect ID (KIR)	Description	Status
#5936	Multiple instances of <u>QAO and QAB being inconsistent</u> i.e. large positive QAO and a large negative QAB when FPN and QD are similar.	Delivered for Testing
#5943	<u>Simple/Complex COD:</u> Flags and Tags are not being applied in the half hours they should. Prices are being applied only to the period where the DI is effective then persisting for all associate BOAs.	Delivered for Testing
#5893	BOAs were intermittently calculated incorrectly when QD was equal to the FPN with a BOA generated. Also where QD is similar to FPN yet large variances in QAO and QAB.	Delivered for Testing
Newly Raised – Awaiting Ticket IDs	Instruction Profiler QBOA - ' <u>Error in Slope</u> ' x 3 Missing BOA Periods from OUI/CSB intermittently <i>To be added to KIR once confirmed as new defects with Vendor</i>	Analysis with Vendor

Make Whole Payments (MOD_34_18 - Negative CIMB)

CFC



■ Updated CFC excl Neg CIMB ■ Overpaid CFC (Neg CIMB)

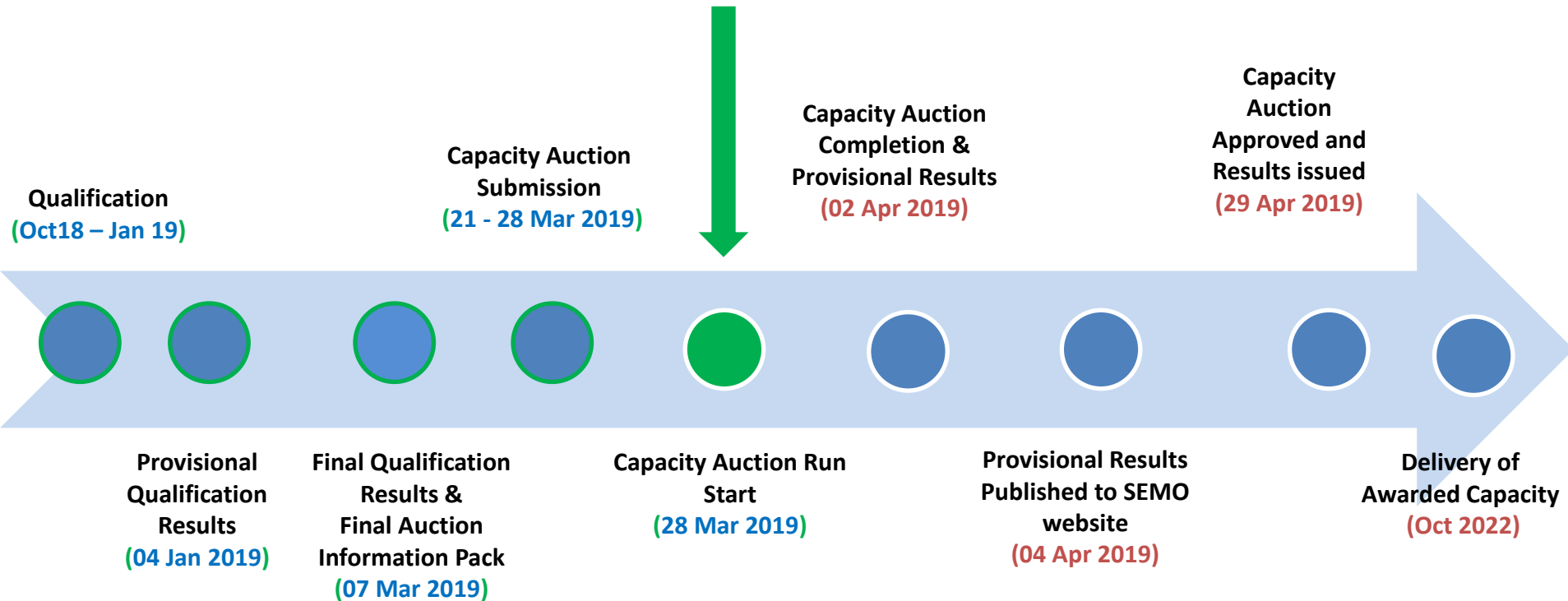
CFC Overview	Total
Original CFC	18,384,970
What CFC should be (Neg CIMB)	2,106,557
Difference (Balance PT's need to pay back in RS)	16,278,413
% Diff	-89%

Since 27th January 2019: SEMO paid out 18.3M in CFC and will be retrieving 16.2M back from PT's.

Agenda

Item	Presenter
Welcome	Anne Fitzgerald
Known Issues Update	Eoin Farrell
Ex-Ante Market	Liam McAllister
Balancing Market	Brendan O'Sullivan, Martin Kerin, Sam Matthews
Disputes & Repricing Update	Dermot Campfield
Settlements & M+4 Resettlement	Sean O'Rourke, John O'Dea
Capacity Market Timetable	Anne Fitzgerald
Query Management	Claire Breslin
Q&A	

T-4 2022/2023 Capacity Auction Timeline

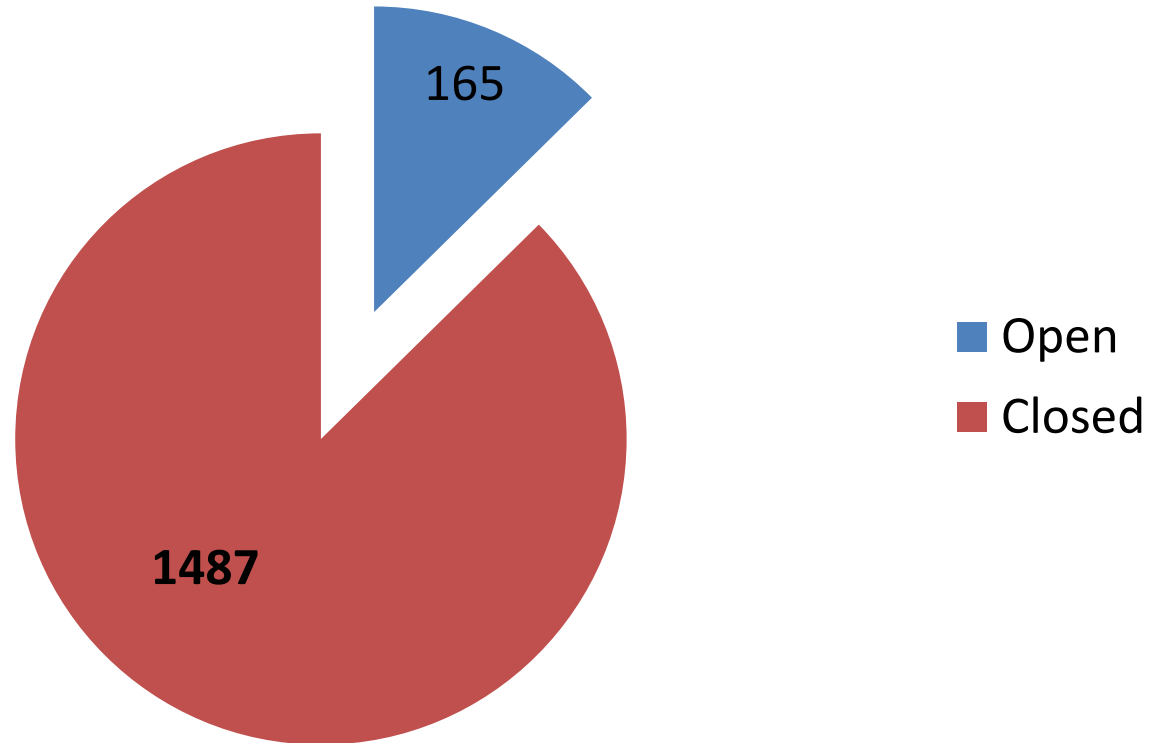


- Participants will be available to view only their own results on Tuesday 2nd of April. Results are confidential.
- Provisional results will be published on the SEMO website on Thursday 4th of April

Agenda

Item	Presenter
Welcome	Anne Fitzgerald
Known Issues Update	Eoin Farrell
Ex-Ante Market	Liam McAllister
Balancing Market	Brendan O'Sullivan, Martin Kerin, Sam Matthews
Disputes & Repricing Update	Dermot Campfield
Settlements & M+4 Resettlement	Sean O'Rourke, John O'Dea
Capacity Market Timetable	Anne Fitzgerald
Query Management	Claire Breslin
Q&A	

General Query Status – From Oct 2018



12% Decrease on open queries

Formal Queries and Disputes

Disputes:

Open: 3 (2 pending Dispute Resolution Board verdict).

Completed: 78

In total: **81**

Formal Settlement Queries:

Completed: 141

In progress: 4

In total: **145**

Agenda

Item	Presenter
Welcome	Anne Fitzgerald
Known Issues Update	Eoin Farrell
Ex-Ante Market	Liam McAllister
Balancing Market	Brendan O'Sullivan, Martin Kerin, Sam Matthews
Disputes & Repricing Update	Dermot Campfield
Settlements & M+4 Resettlement	Sean O'Rourke, John O'Dea
Capacity Market Timetable	Anne Fitzgerald
Query Management	Claire Breslin
Q&A	

Close

- SEMO Website: <http://www.sem-o.com/>
- Semopx Website: <http://www.semopx.com/>
- Queries: Info@sem-o.com; Info@semopx.com

Thank you for your attendance.