Market Operator User Group

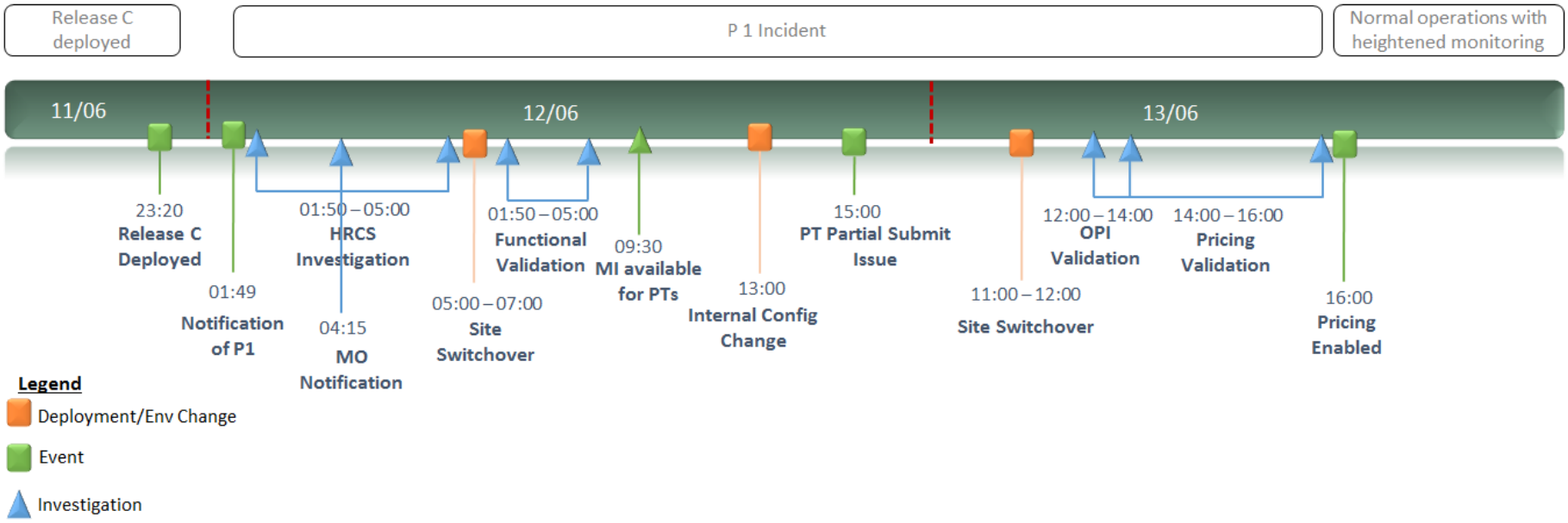
Belfast, 20 June 2019

Agenda

Item	Presenter
Welcome	**Anne Fitzgerald**
General System Failure	**Anne Fitzgerald**
Known Issues Update	Eoin Farrell
Ex-Ante Market	Liam McAllister, Michael Atcheson
Balancing Market	Rory Cafferky
Settlements	Sean O'Rourke, John O'Dea, John Tracey
Disputes & Repricing Update	Julie McGee
Brexit Update	Michael Kelly
Market Participant Roadmap	Mark Needham
Query Management	Anne Fitzgerald
Q&A	

I-SEM P1 Incident – Timeline of Key Events

- On the 13/06 at 01:48 / 01:499 automated alerts from the Oracle DB and middleware alerted 24/7 that the MMS system was unreachable.
- This was a P1 incident, related to database corruption on the Dublin database.
- All market and operational services were effected, and it was therefore classified as a GSF.
- The Market Operator was contacted at circa 04:45, and followed the GSF process from there.
- Partial service was restored at circa 7am with an application switch to Belfast.
- Over the next two days the Balancing Market and SEMO Settlement experienced intermitted issues as full service tried to be restored.
- The below timeline highlights the key events / activities carried out by EirGrid.
- A full timeline of events / activities can be found on the following slides



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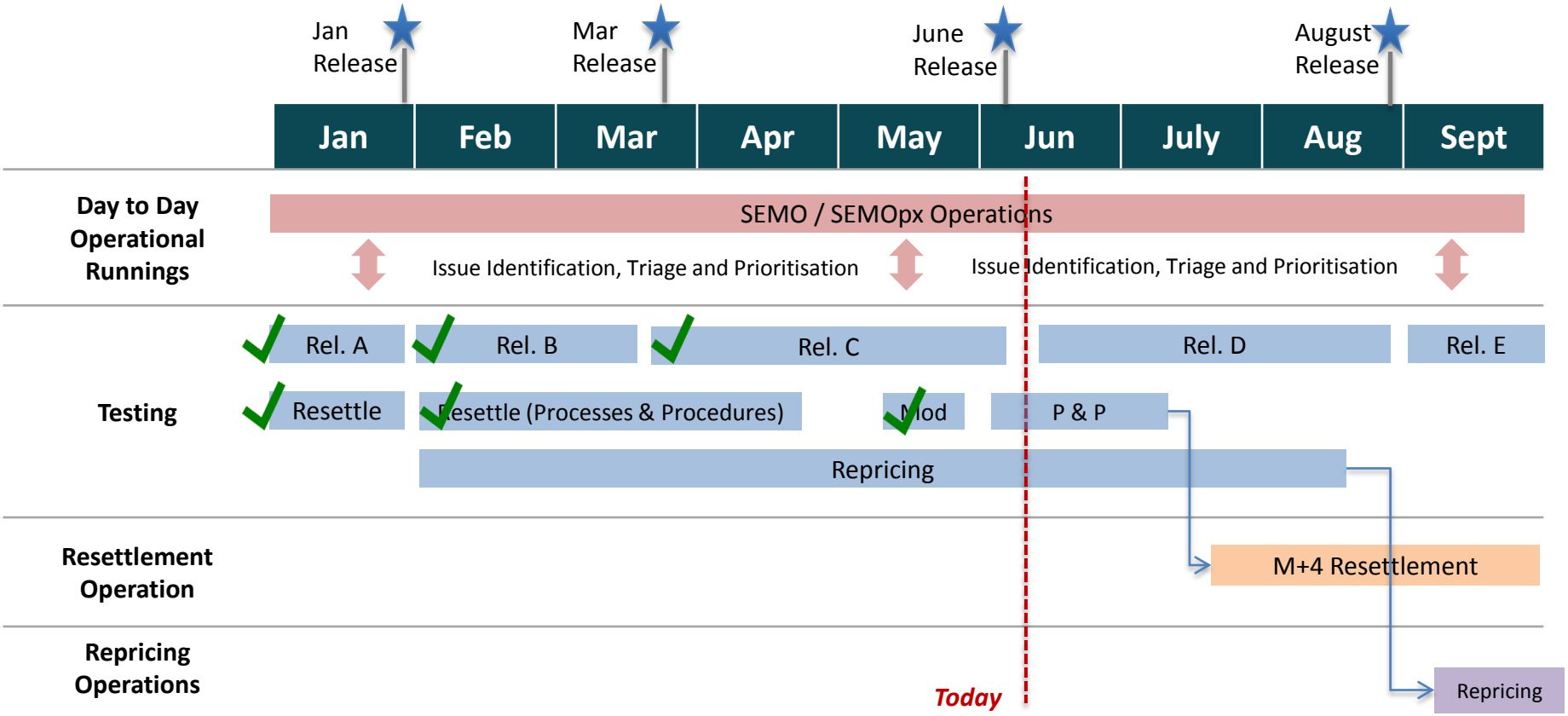
I-SEM Day 1+, High-Level Indicative Release Timeline

- 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 (MMS 1.1.8.1 / CSB 1.2.4) deployed to production 12th of June 2019



Known Issues Update – Summary (1 of 2)

- 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 29th of January 2019	14 Issues	• 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 26th of March 2019	4 Issues	• 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
Hotfixes	Ad Hoc deployments to Release B	2 issues	• Multiple unit PN submissions with units under test • M+4 optimisation hotfix • QBOA Optimisation Hotfix • 30 Minute imbalance price not being produced (in test

Known Issues Update – Summary (2 of 2)

- 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 C	Closed	26 Issues	• Fixes for Reports highlighted as priorities from participants • Incorrect MW QTY values in REPT_078/079 • CFC improvements • Improvements to the QBOA function • Consolidation of hotfixes
Release D	Expected W/C 24th June to test	11 issues	• Improvement to CFC • REPT_082 publishing data for de registered units • REPT_042 Net Interconnector schedule incorrectly calculated • Repricing Functionality
Release E	TBC	TBC	• 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
SEMOpx. 004	M7 'Own Orders'	"The latest M7 version brought a display bug in the system. When traders enter orders using M7 client, orders from the logged in trader are shown in white instead of coloured.This was resolved in ComTrader version 6.6.100 deployed for SEMOpx members 03/05/2019. Our service provider has advised no downtime will be required for this deployment however, SEMOpx Members were advised that the new ComTrader version is available for download via a dedicated link, via an operational message issued to registered Traders."	No material impact to SEMOpx Members; impacts user experience with platform as 'own trades' cannot be easily differentiated from competitors.	Closed	3rd May 2019

Known Issues Update – SEMOpx

ID	Name	Description	Impact to Market Participants	Status	Resolution Date
SEMPOpx.005	M7 – Market View	Raised 22/05/2019: Bug in market view > aggregation display. If a trader has an order in for a certain contract, this contract is expected to display in the Market Overview in Blue indicating inclusion of own order in the aggregation of all orders for this contract. However it can, on occasion, be seen that the Market Overview still displays the contract in white despite containing an own order. It should be noted that matching is unaffected, the bug being limited solely to the display colour.	Display issue only. No impact to matching.	Closed	On the 04/06/2019 the new non-mandatory ComTrader version 6.6.100.2 was made available under the following link: http://m7trading.deutsche-boerse.com/semo-prod/
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 29th 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 26th 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 26th 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 26th 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.	Closed	Release C, 11th June 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	Closed	Release C, 11th June 2019 .
5870	REPT_081 hourly Anonymized INC and DEC Curves	REPT_081 can contain records for a full day rather then on a 30 minutes basis as per design	Report can publish inaccurate data	Closed	Release C, 11th June 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	Closed	Release C, 11th June 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.	Closed	Release C, 11th June 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	Closed	Release C, 11th June 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.	Closed	Release C, 11th June 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	Closed	Release C, 11th June 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.	Closed	Release C, 11th June 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	Closed	Release C, 11th June 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.	Closed	Release C, 11th June 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.	Closed	Release C, 11th June 2019 .
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	In Day 1 plus scope, Target to include in Rel. D Resolution: Software update from vendor
5845	REPT_022: Initial Interconnector Flows and Residual Capacity	This report is appearing EMPTY in the MPI and website.	Report unavailable to Market Participants and General Public.	In Analysis	In Day 1 plus scope, Target to include in Rel. D Resolution: Software update from vendor CR currently in review
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.	In Analysis	In Day 1 plus scope, Target to include in Rel. D Resolution: Software update from vendor

Known Issues Update – Balancing Market

ID	Name	Description	Impact to Market Participants	Status	Resolution Date
117257/ 6031	Access of MPI information before registration Date	A user who is registered in the Balancing Market receives a market effective date. They are not able to access any published information in the MPI before this date market effective date.	New users will not be able to access historical I-SEM data before their registration date in the MPI. Public reports are published to the SEMO website. Users will be unable to access reports from before registration.	In Analysis	In Day 1 plus scope, Target to include in Rel. D 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, Target to include in Rel. E Resolution: Software update from vendor
5991	Application of De Minimis Acceptance Threshold (DMAT) in Imbalance Pricing	Imbalance Pricing validation is resulting in QBOA volumes greater than DMAT to not be included in Imbalance Pricing calculations. Where a Unit has an Accepted Offer and Accepted Bid, one of which is below DMAT, both volumes are being omitted from the calculation.	Incorrect QBOA values, resulting in impact to Imbalance Price	In Analysis	In Day 1 plus scope, target to include in Rel E Resolution: Software update from vendor
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	In Day 1 plus scope, target to include in Rel E Resolution: Software update from vendor

Known Issues Update – Balancing Market

ID	Name	Description	Impact to Market Participants	Status	Resolution Date
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	In Day 1 plus scope, Release TBC Resolution: Software update from vendor
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.	In Analysis	In Day 1 plus scope, Release TBC Resolution: Software update from vendor
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.

Known Issues Update – Balancing Market

ID	Name	Description	Impact to Market Participants	Status	Resolution Date
SEMO_WEB .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
SEMO_WEB _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
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
5329	Reports missing 1st ISP of Trade Day	Reports not showing first ISP interval for trade date in report. REPT_078: Aggregated Contract Quantities for Generation REPT_079: Aggregated Contract Quantities for Demand REPT_080: Aggregated Contract Quantities for Wind	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.	In the process of submission to the RA's for approval	TBC Resolution: Software update from vendor

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
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
5587	Missing Reports on the new SEMO Website	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)	No material impact to Market Participants or General Public as these reports are now being uploaded manually to the SEMO website.	In the process of submission to the RA's for approval	TBC Resolution: Software update from vendor
5603	REPT_081 hourly Anonymized INC and DEC Curves	Currently the report cumulatively adds each MW quantity to the last MW quantity rather then the difference. This results in erroneous MW values in the report.	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.	In the process of submission to the RA's for approval	TBC Resolution: Software update from vendor
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

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
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: ITS update
102081	REPT_006: Daily DI Report	For P/S Units, intermittent representation of duplicate values (MWOF) 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

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 29th 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 29th 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 29th 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 29th 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 29th 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 29th 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 29th 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 29th 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 29th 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 29th 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 29th 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 29th 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 29th 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 29th 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 29th 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 26th 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 26th 2019

Known Issues Update – Settlement

ID	Name	Description	Impact to Market Participants	Status	Resolution Date
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.	Closed	5th April 2019
5888	Metered Quantity for DSUs	DSUs should not have an undelivered quantity. Metered quantity must be made equal to the dispatched quantity	Affecting settlement calculations for DSUs, resulting in non-zero undelivered quantities, which should be zero.	Closed	Release C, 11th June 2019 .
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	Closed	Release C, 11th June 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	Closed	Release C, 11th June 2019.

Known Issues Update – Settlement

ID	Name	Description	Impact to Market Participants	Status	Resolution Date
5950	Difference & NP Charges for DSUs	DSUs Day Ahead, Within Day Difference Quantities & Charges are being incorrectly applied to DSUs as per F.18.4 & F18.5 of the TSC. Calculation of QDIFFTRACK for DSUs being incorrectly applied to DSUs Day Ahead, Within Day Difference Quantities & Charges and Non-Performance Charges	DSUs specific – The calculation of QDIFFTRACK should be zero as per F.18.5 exclusion clause within the TSC including F2.1.2. Ex-Ante quantities are tracked via the FNDDS calculation.	Closed	Release C, 11th June 2019 .
5972	Incorrect CNLR to Generators	There are two problems: a) The Fixed Cost calculation of CNLR will for (most) periods of MPOP include the interval prior to MPOP start in the summation. b) The Fixed Cost calculation of CNLR will for (most) periods of MPOP not do correct check on Dispatch Quantity for the last interval.	Incorrect CNLR to Generators	Closed	Release C, 11th June 2019 .
5799	Incorrect CFC and Premium Payments	Caused by incorrect QBOA calculation in particular circumstances	CFC and Premium data incorrect. Improvement in QBOA Calculation	Closed	Release C, 11th June 2019 .

Known Issues Update – Settlement

ID	Name	Description	Impact to Market Participants	Status	Resolution Date
5979	Error in Import of Dispatch Instruction Profiles to Settlement	Dispatch Instruction Profile is not being imported correctly into CSB where there are updated values from MA	Contiguous Periods of Operation are not being applied correctly where the Dispatch Instruction Profile has not imported correctly. Resulting in incorrect CFC calculation for affected Settlement Day/units.	Closed	Release C, 11th June 2019 .
5990	Difference Payment Calculation does not set final QDIFFTRACK to 0 if there are no Day Ahead or Intra Day trades	System not considering the scenario where there are no Day Ahead trade and thereby no QDIFFDA. QDIFFDA should default to 0 in calculation of QDIFFTRACK.	QDIFFPIMB not being calculated where there are no Day Ahead Trades. Missing trading Period calculation & data on reports where there are no Day Ahead trades.	Closed	Release C, 11th June 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	Closed	Release C, 11th June 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	Closed	Release C, 11th June 2019 .

Known Issues Update – Settlement

ID	Name	Description	Impact to Market Participants	Status	Resolution Date
6010	Trading Site Units not linked to GU/SU IDs in CSB	Registration Import for Trading Sites(TS) is creating an Error for future effective date elements and end dating TS registration Data.	Trading Site Reg data being end dated in the settlement system when Error occurs, therefore correct TS config and calculations are affected. Settlement check and Manual workaround in place to ensure Trading site configuration is applied before running settlement.	In Analysis	In Day 1 plus scope, target to include in Rel D 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, Target to include in Rel. D Resolution: Software update from vendor
6004	Error in calculation of CDIFFCNPA and CDIFFCNPB	The system shall calculate the CDIFFCNPB and CDIFFCNPA as zero in the 1st and last ISP of the capacity year for each CMU.	Calculation is currently setting the last and first ISP to CDIFFCNPA / B_(Ω(γ-1)) for the Capacity Tear for each CMU	In Analysis	In Day 1 plus scope, Target to include in Rel D Resolution: Software update from vendor

Known Issues Update – Settlement

ID	Name	Description	Impact to Market Participants	Status	Resolution Date
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	In Day 1 plus scope, Target to include in Rel. D 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	In Day 1 plus scope, Target to include in Rel. D Resolution: Software update from vendor
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	In Analysis	In Day 1 plus scope, target to include in Rel. D 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, Target to include in Rel. D Resolution: Software update from vendor
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.	In Analysis	In Day 1 plus scope, target to include in Rel. E Resolution: Software update from vendor
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	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
6001	ISEM Slope Error	31st Indicative related to long day affecting 11 units - still being investigated by ABB	Multiple units had no BOAs created for the 31st March Indicative Settlement IP run.	In Analysis	In Day 1 plus scope, drop TBC Resolution: Software update from vendor
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.	In Analysis	TBC Resolution: Software update from vendor
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	TBC Resolution: Software update from vendor

Known Issues Update – Settlement

ID	Name	Description	Impact to Market Participants	Status	Resolution Date
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	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
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

Known Issues Update – Settlement

ID	Name	Description	Impact to Market Participants	Status	Resolution Date
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
5997	ISEM CSB FX rate after short day incorrect	After the clock change the push & or CSB is not applying the FX rate to the trading period 23:30 and & 00:00 correctly when they change.	Inaccurate settlement due to FX rate for 1hour period	In Analysis	TBC Resolution: Software update from vendor
5998	Differences in BOA values between OUI and CSB	Differences in BOA values between OUI and CSB intermittently	Missing volumes from Initial IP leading to inaccurate balancing settlement	In Analysis	TBC Resolution: Software update from vendor

Known Issues Update – Settlement

ID	Name	Description	Impact to Market Participants	Status	Resolution Date
6035	Fixed Cost Calculation sums values from all AdHoc runs of a Billing Week instead of using the latest AdHoc run for each day	CFC calculation will sum the CIMB, CPREMIUM, CDISCOUNT, CABBPO, CAOOPO and CCURL amounts from both Ad Hoc Run #1 and Ad Hoc Run #2. It should only make use of the values from the latest Ad Hoc Run..	Incorrect CFC amounts in settlement documents where there is an instance of an ad-hoc completed over a previous ad-hoc for the same billing period.	In Analysis	TBC Resolution: Software update from vendor
6044	QD determinant missing from REPT_44 in indicative & initial reports for a range of units and dates	QD determinant missing from REPT_44 in indicative & initial reports for a range of units and dates based on Reliability Options not being present for the units.	if a GU does not have an RO in which to calculate difference charges QD not present on REPT_044 as it is calling the value from the difference charges calculations. Result is QD is never published in REPT_044 for affected units (particularly wind units)	In Analysis	TBC Resolution: Software update from vendor
6042	Resettlement - Settlement Document Previous Purchases and Previous Sales are not populated correctly	Settlement Documents containing re-settlement Billing periods, the previous_gross_amount figure is correctly populated as the figure from the original settlement however none of the ***_prev figures are being populated.	Unable to view the previous sale and purchases proportion within settlement documents containing re-settlement.	In Analysis	TBC Resolution: Software update from vendor
CR092	CR092 – Loss Factor Application for Interconnectors in Settlement	Change required for the provisions for loss-adjustment when an Interconnector is exporting (see below). This Change Request introduces the omitted provisions, as they are resulting in incorrect settlement outcomes.	Loss factors (export) incorrect on interconnectors in settlements leading to underpayment to this point in the market	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
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	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

Agenda

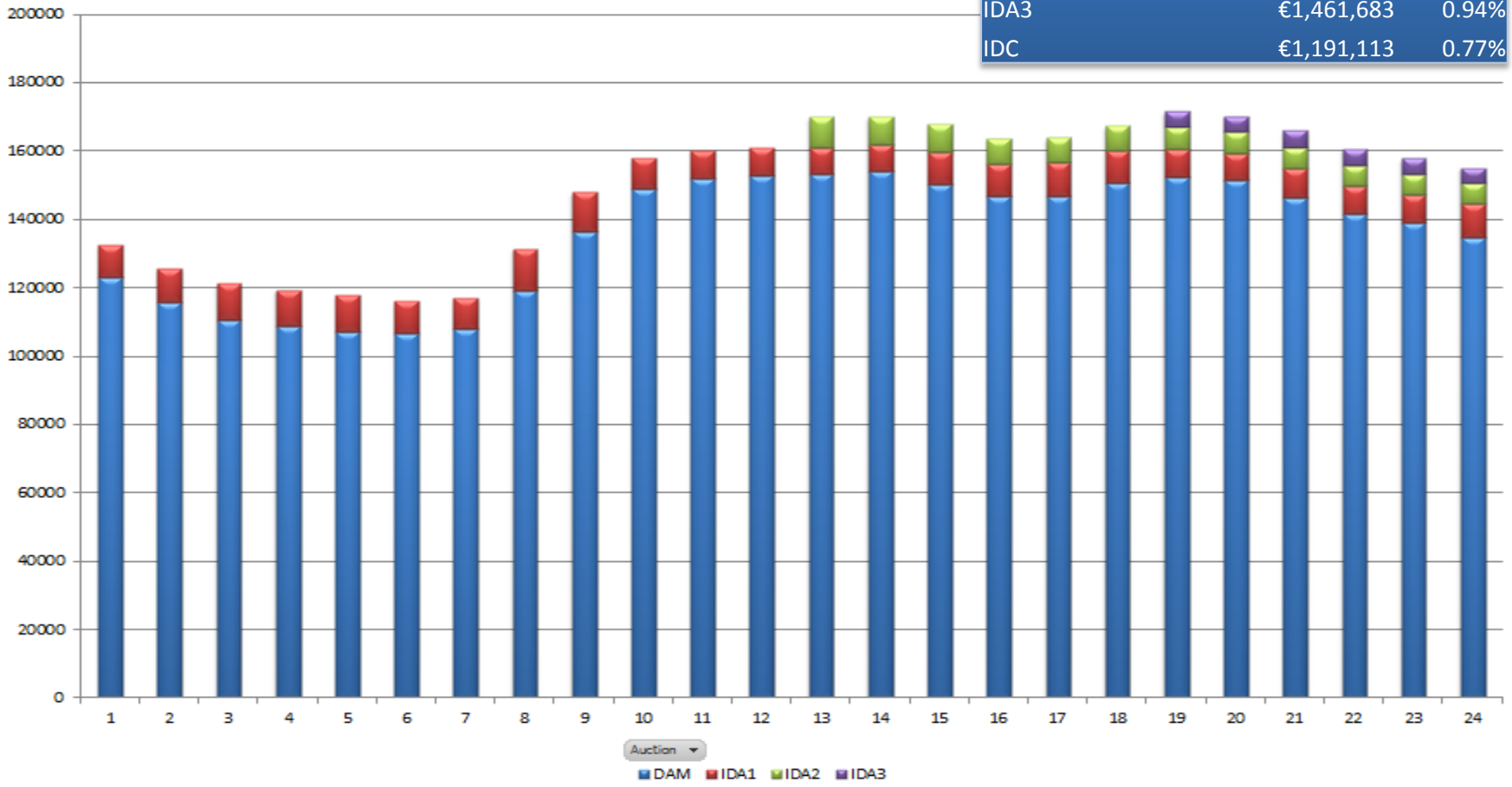
Item	Presenter
Welcome	Anne Fitzgerald
General System Failure	Anne Fitzgerald
Known Issues Update	Eoin Farrell
Ex-Ante Market	**Liam McAllister, Michael Atcheson**
Balancing Market	Rory Cafferky
Settlements	Sean O'Rourke, John O'Dea, John Tracey
Disputes & Repricing Update	Julie McGee
Brexit Update	Michael Kelly
Market Participant Roadmap	Mark Needham
Query Management	Anne Fitzgerald
Q&A	

Ex-Ante Markets

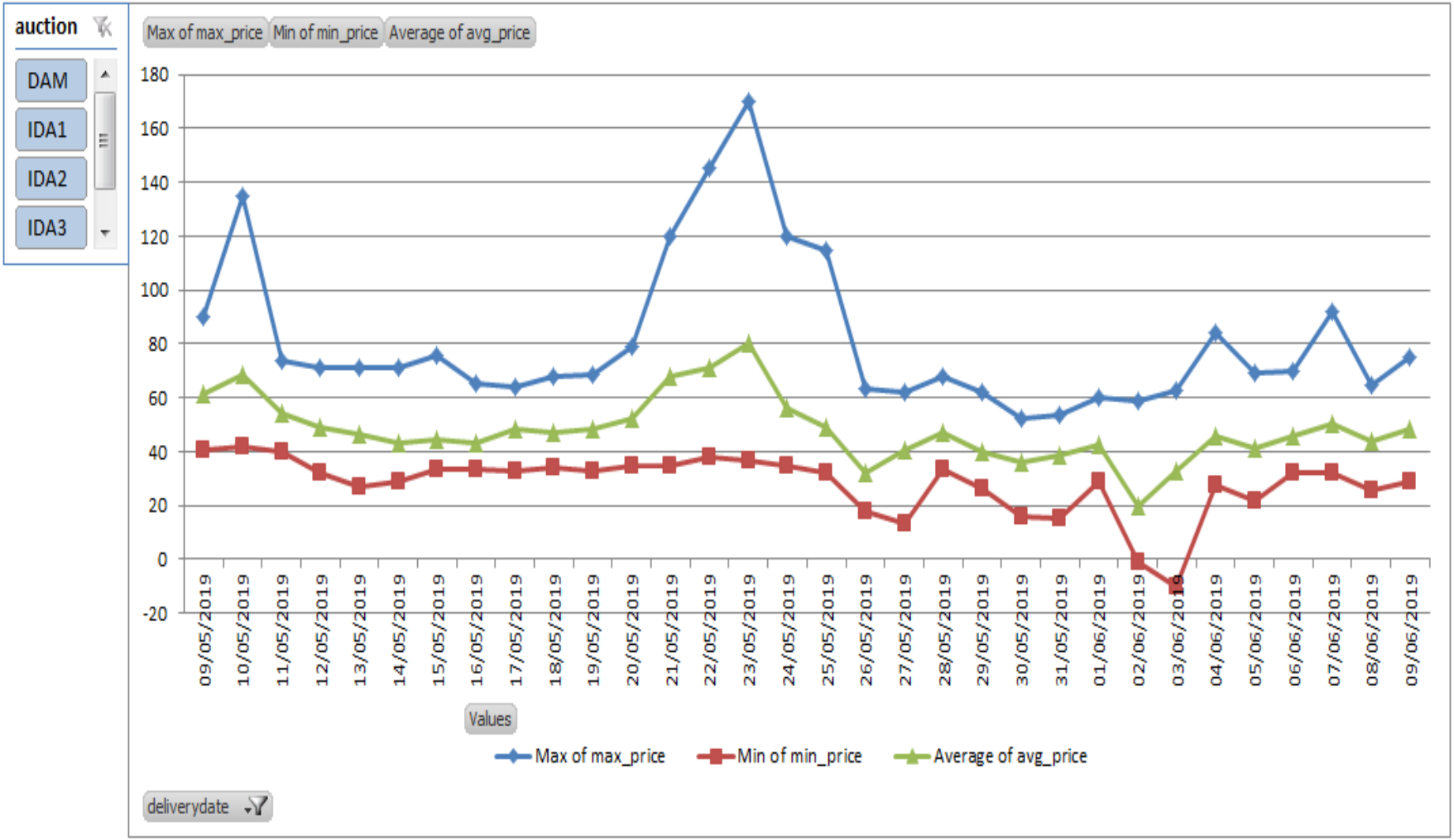
- Volumes from ex-ante (9th May – 9th June)
  - **DAM** is dominant

**Using approx. prices*

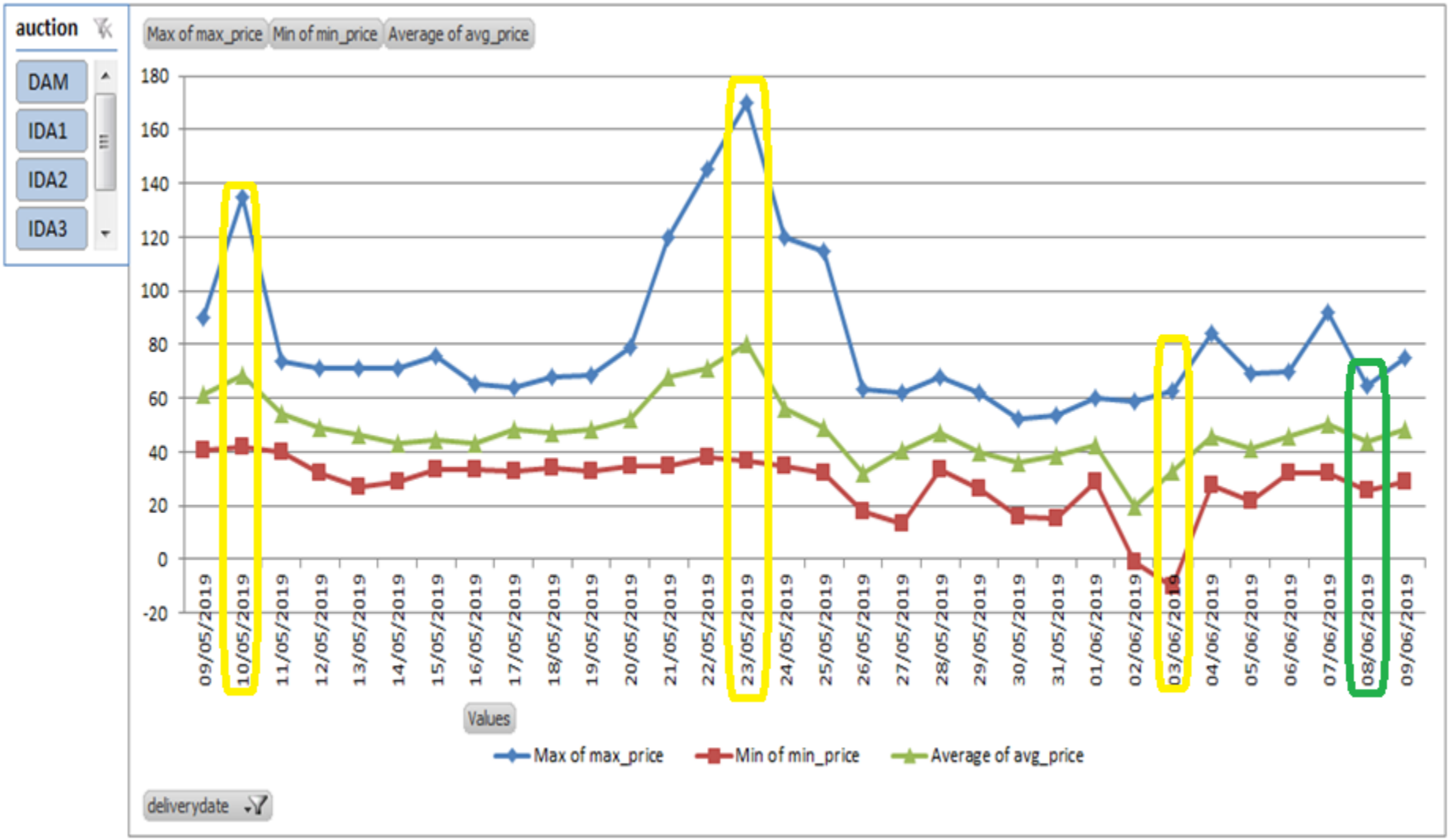
Market	Value	% of DAM
DAM	€154,829,047	
IDA1	€10,159,769	6.56%
IDA2	€4,226,771	2.73%
IDA3	€1,461,683	0.94%
IDC	€1,191,113	0.77%



Ex-Ante Auction Price Look Back



Ex-Ante Auction Price Look Back



Full View

Ex-Ante Day Ahead & Intra-day Market Analysis

Overview | Market Structure | Analysis

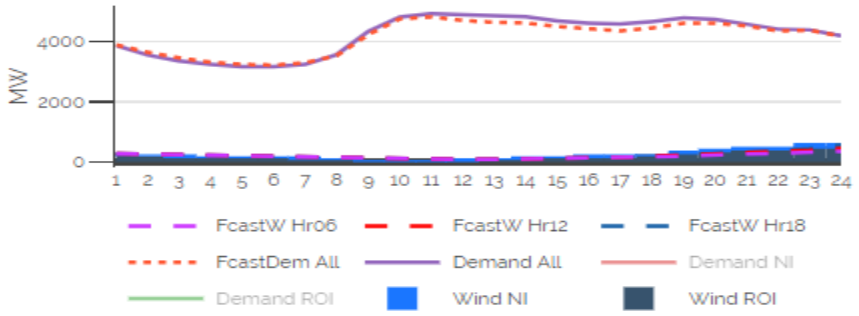
Auction Summary

2019-05-10

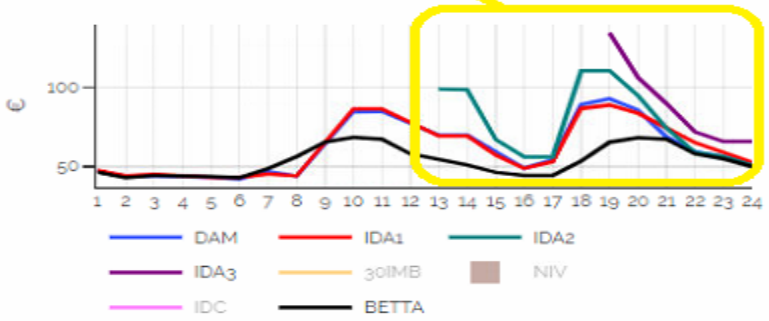
Auction Stats [Hi | Lo | Avg | MWh | €]

2019-05-10	DAM	€93.20	€42.00	€61.36	101,336	€6,218,332
2019-05-10	IDA1	€89.91	€42.72	€61.80	8,272	€511,228
2019-05-10	IDA2	€111.00	€49.00	€77.95	1,310	€102,120
2019-05-10	IDA3	€135.10	€53.78	€89.29	374	€33,395

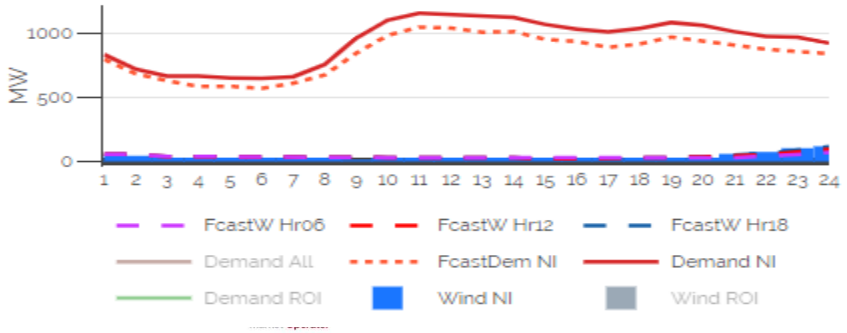
Forecast, Actual Wind v Demand - All Island



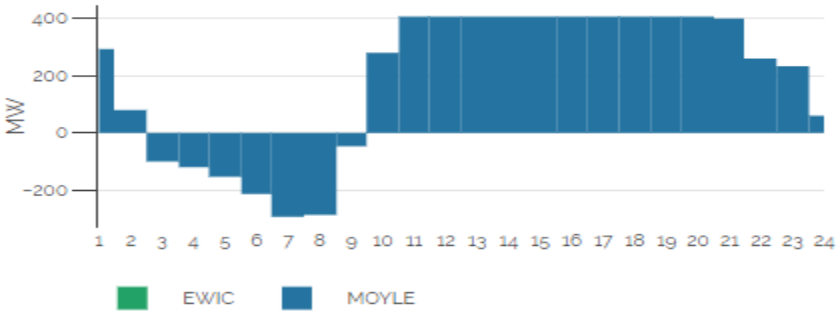
Auction Pricing



Forecast, Actual Wind v Demand - N.I.



Interconnector Flows



Full View

Ex-Ante Day Ahead & Intra-day Market Analysis

Overview | Market Structure | Analysis

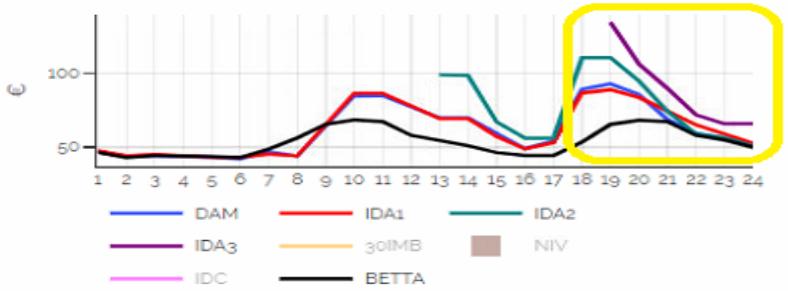
Choose Auction

DAM IDA1 IDA2 IDA3

19 20 21 22 23 24

2019-05-10 HH1

Auction Pricing



Structure

Auction Book

	€399.00	-140.00
	€349.00	-90.00
	€289.00	-40.00
	€219.00	-10.00
30.00	€135.10	
80.00	€97.11	
130.00	€81.10	

Auction Participants

DeliveryDate	auction	Participant	DeliveryHour	DeliveryInterval	unitid	ExecutedVol	area_sub_from
filter data...							
2019-05-10	IDA3	[redacted]	19	1	[redacted]	29.7	ROI-EIRGRID-IDA3

All rights reserved
Market Operator

semopx

Full View

Ex-Ante Day Ahead & Intra-day Market Analysis

Overview | Market Structure | Analysis

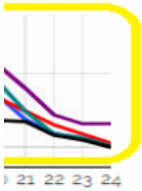
Choose Auction

DAM IDA1

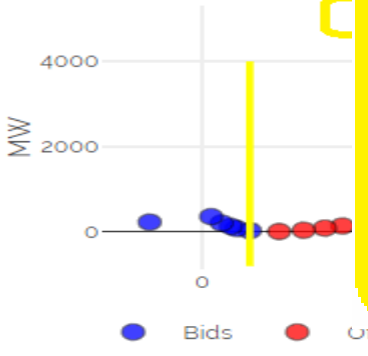
19 20 2:

2019-05-10 HH

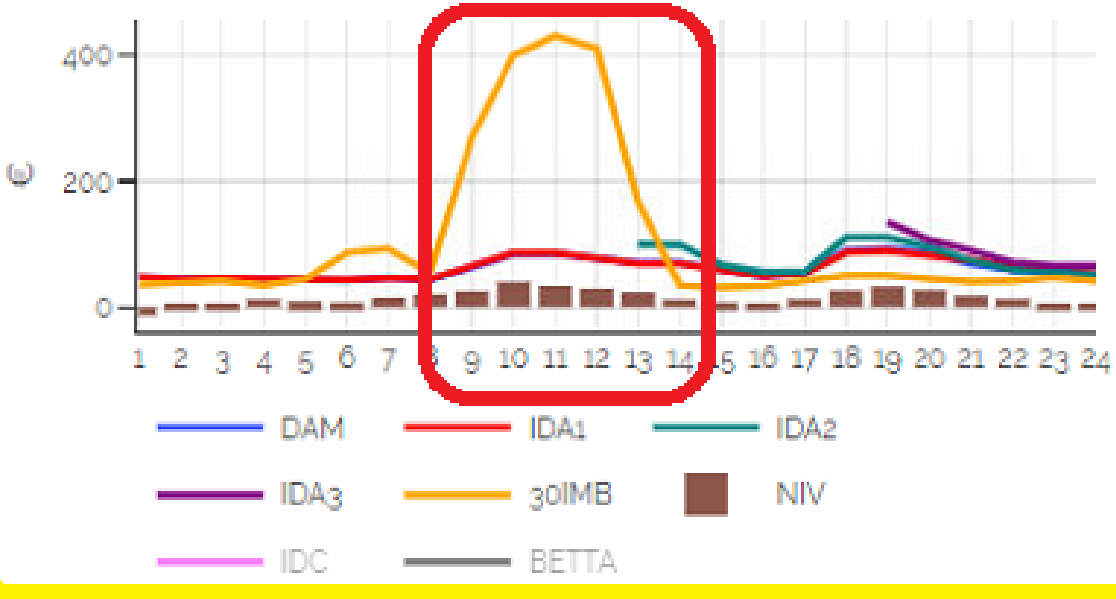
Auction Pricing

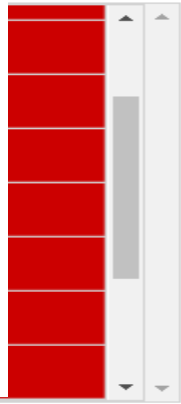


Structure



Auction Pricing





Auction Participants

DeliveryDate	auction	Participant	DeliveryHour	DeliveryInterval	unitid	ExecutedVol	area_sub_from
filter data...							
2019-05-10	IDA3	[redacted]	19	1	[redacted]	29.7	ROI-EIRGRID-IDA3

Single Electricity Market Operator

Full View

Ex-Ante Day Ahead & Intra-day Market Analysis

Overview | Market Structure | Analysis

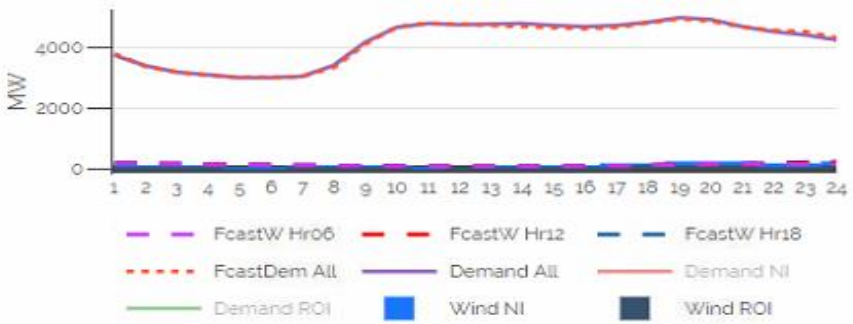
Auction Summary

2019-05-23

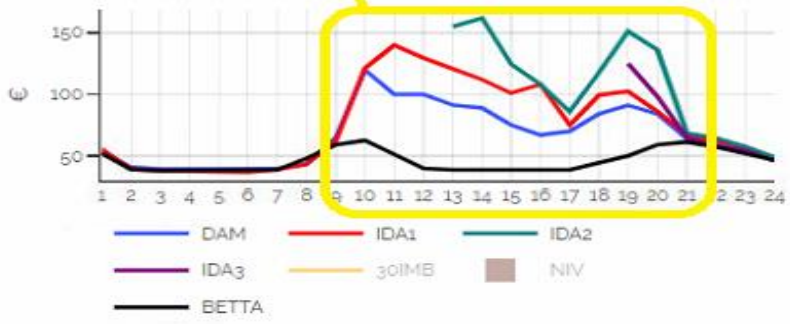
Auction Stats [Hi | Lo | Avg | MWh | €]

2019-05-23	DAM	€119.90	€38.58	€66.53	100,277	€6,671,616
2019-05-23	IDA1	€140.00	€36.72	€75.81	5,660	€429,102
2019-05-23	IDA2	€170.00	€47.68	€106.67	1,914	€204,130
2019-05-23	IDA3	€129.00	€42.00	€74.45	359	€26,728

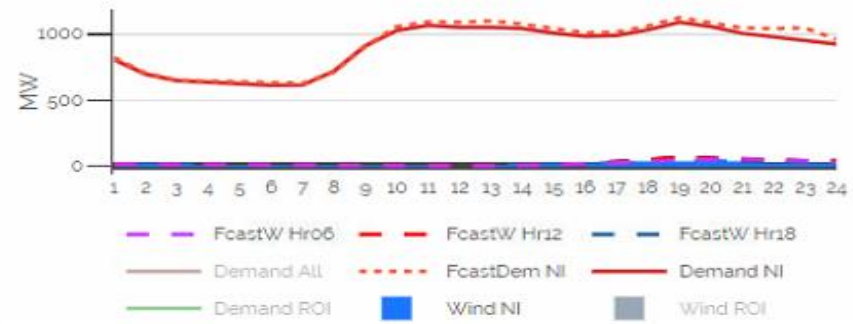
Forecast, Actual Wind v Demand - All Island



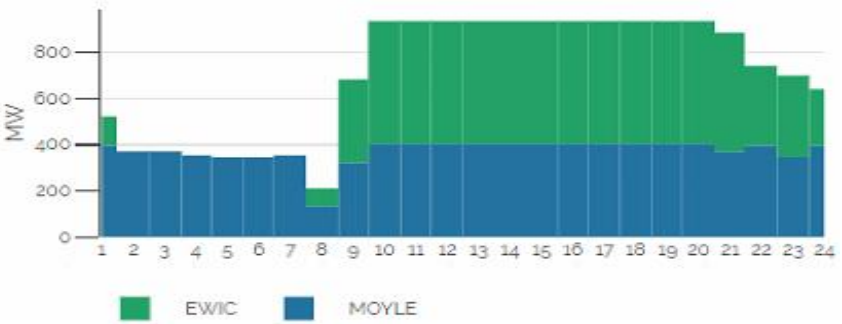
Auction Pricing



Forecast, Actual Wind v Demand - N.I.



Interconnector Flows



Full View

Ex-Ante Day Ahead & Intra-day Market Analysis

Overview | Market Structure | Analysis

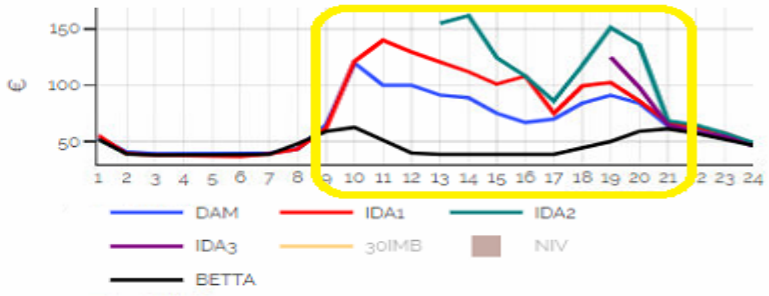
Choose Auction

DAM IDA1 IDA2 IDA3

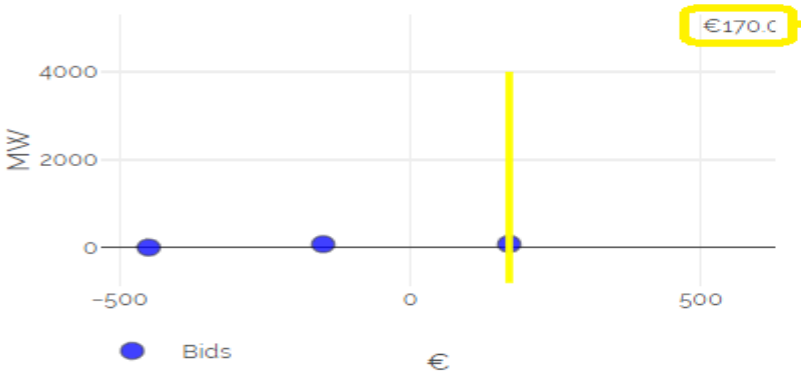
13 14 15 16 17 18 19 20 21 22 23 24

2019-05-23 HH2

Historical Prices



Structure



Auction Book

Bids	Price	Offers
85.00	€170.00	
80.00	€-150.00	
5.00	€-450.00	

Auction Participants

DeliveryDate	auction	Participant	DeliveryHour	DeliveryInterval	unitid	ExecutedVol	area_sub_from
2019-05-23	IDA2	[redacted]	14	2	[redacted]	33.9	ROI-EIRGRID-IDA2
2019-05-23	IDA2	[redacted]	14	2	[redacted]	8.4	ROI-EIRGRID-IDA2

Full View

Ex-Ante Day Ahead & Intra-day Market Analysis

Overview | Market Structure | Analysis

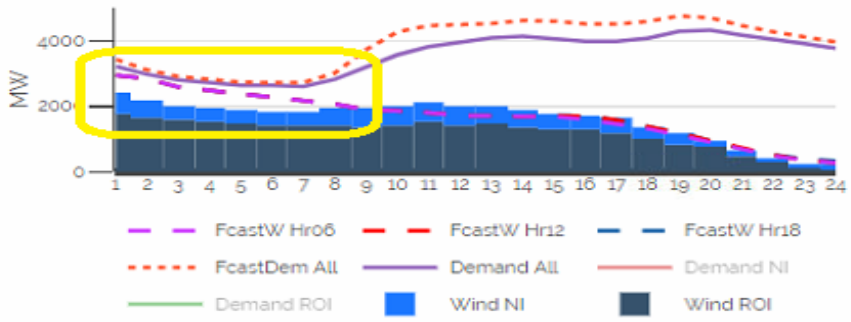
Auction Summary

2019-06-03

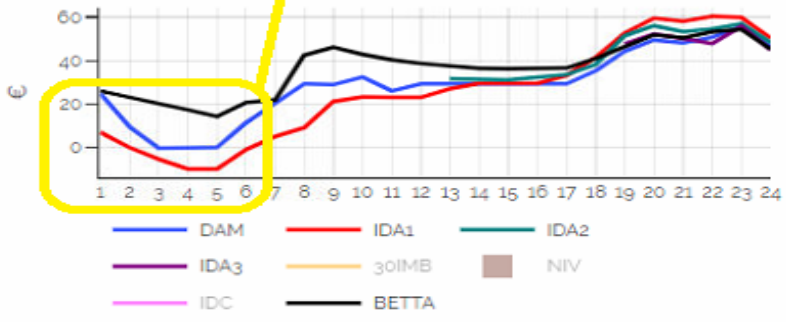
Auction Stats [Hi | Lo | Avg | MWh | €]

2019-06-03	DAM	€55.62	€-0.35	€28.64	99,738	€2,856,737
2019-06-03	IDA1	€62.59	€-10.00	€25.64	10,798	€276,873
2019-06-03	IDA2	€58.65	€29.67	€43.20	3,899	€168,421
2019-06-03	IDA3	€56.00	€43.00	€49.76	632	€31,427

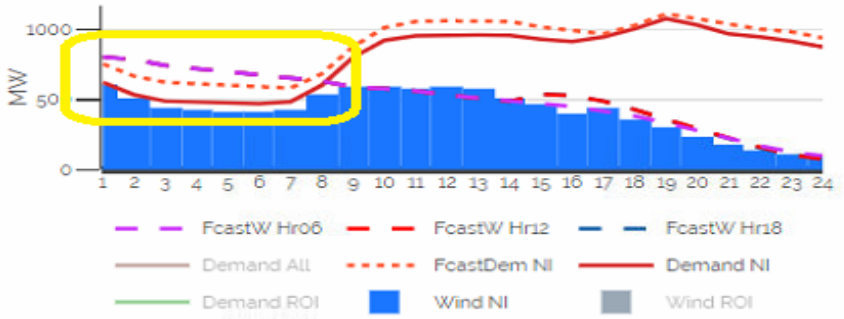
Forecast, Actual Wind v Demand - All Island



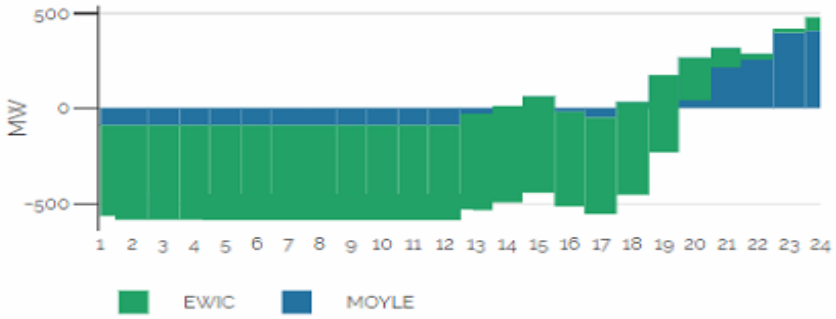
Auction Pricing



Forecast, Actual Wind v Demand - N.I.



Interconnector Flows



Full View

Ex-Ante Day Ahead & Intra-day Market Analysis

Overview | Market Structure | Analysis

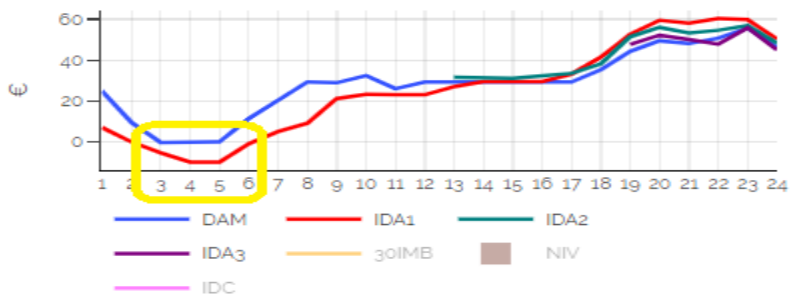
Choose Auction

DAM IDA1 IDA2 IDA3

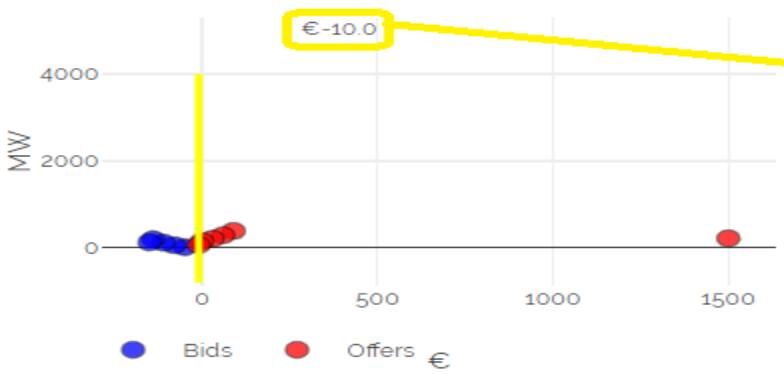
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24

2019-06-03 HH2

Historical Prices



Structure



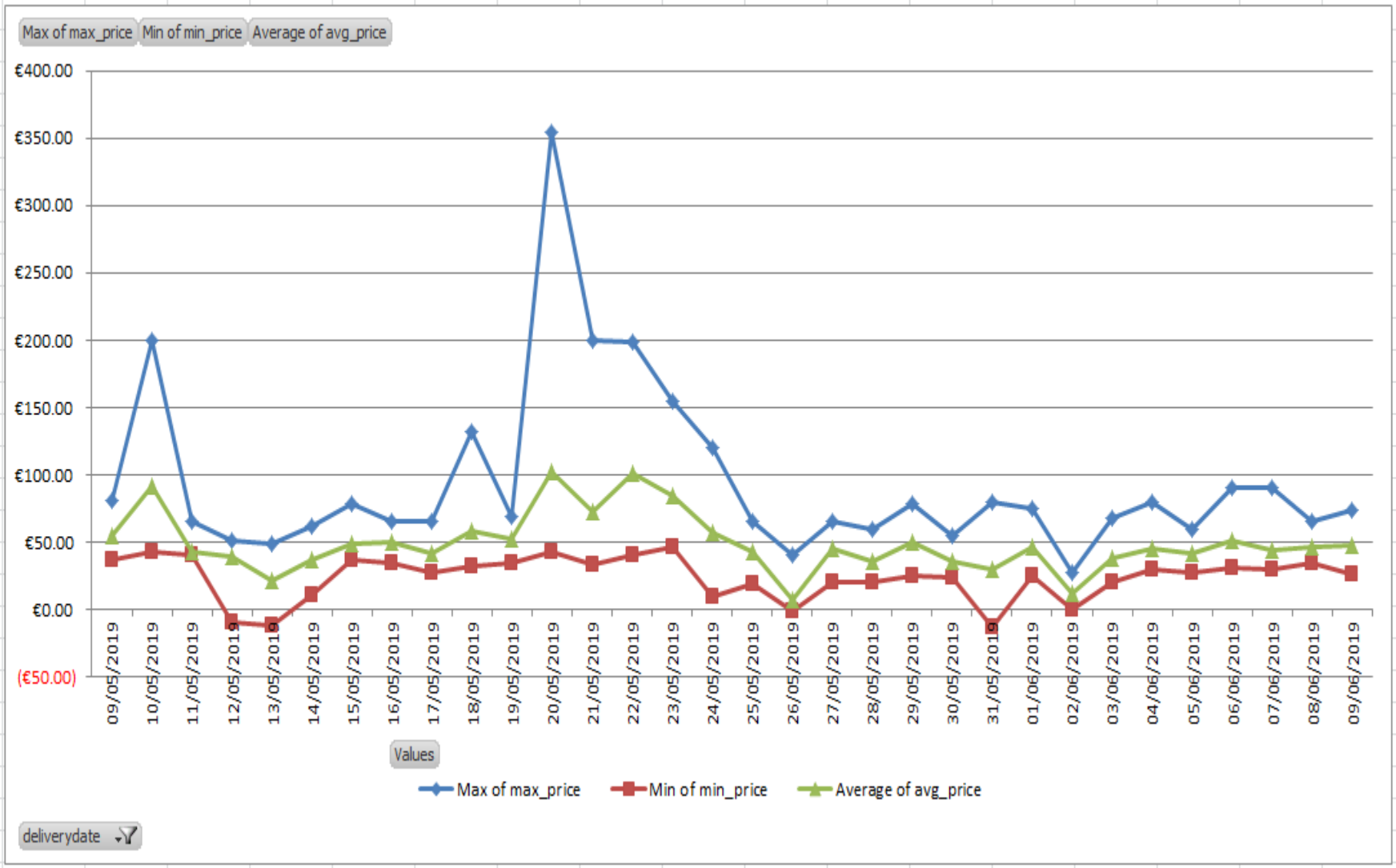
Auction Book

	€29.65	-210.00
	€-0.35	-155.00
	€-10.00	-65.00
15.00	€-50.00	
60.00	€-80.00	
120.00	€-110.00	
200.00	€-140.00	

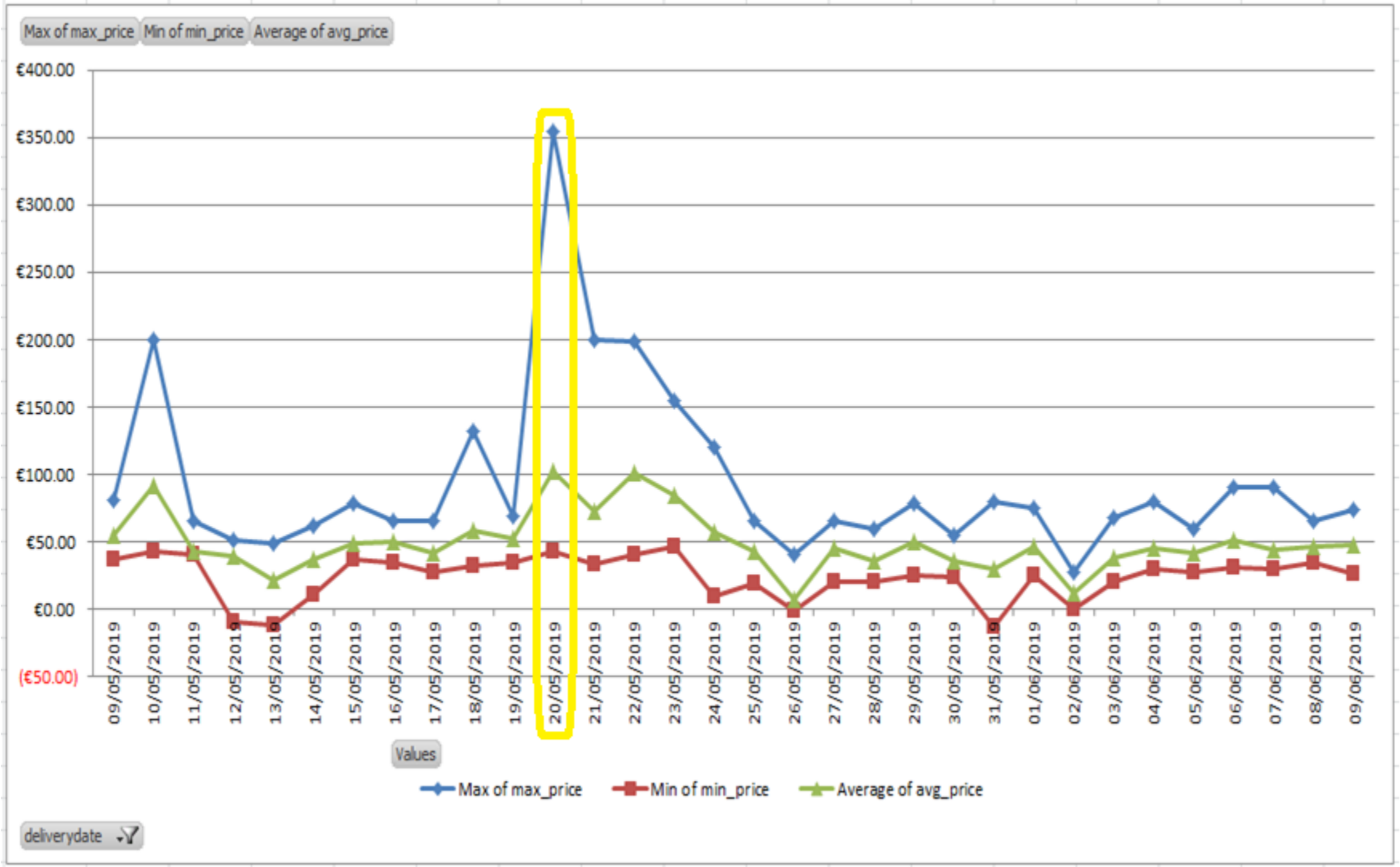
Auction Participants

DeliveryDate	auction	Participant	DeliveryHour	DeliveryInterval	unitid	ExecutedVo	area_sub_from
filter data...							
2019-06-03	IDA1	[redacted]	4	2	[redacted]	-53.2	ROI-EIRGRID-IDA1

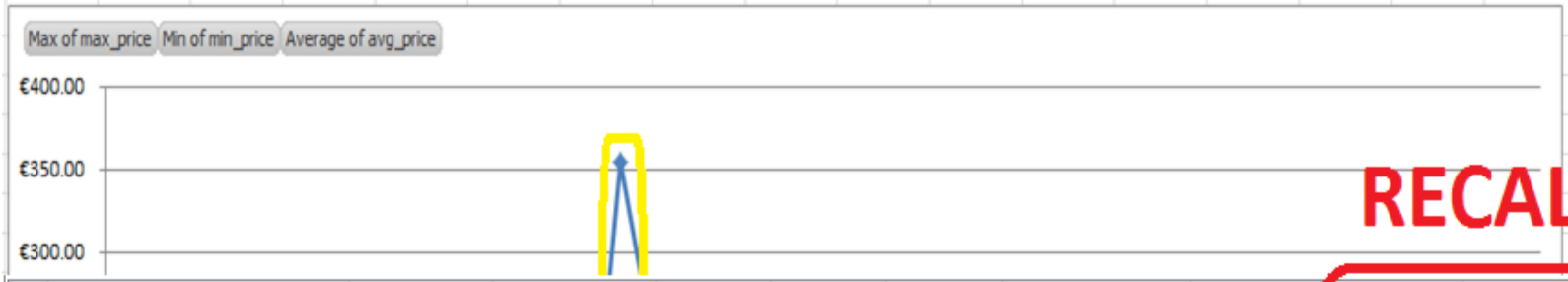
Ex-Ante IDC Price Look Back



Ex-Ante IDC Price Look Back



Ex-Ante IDC Price Look Back



RECALLED!

	isinCod	deliveryhour	deliveryinterval	participant	balGrp	stlDate	tranTim	ordrBuyCod	tradMtchQty	tradMtchPrc	taking	trantypcod
1	20190520 11:00-20190520 11:30	14	1	[redacted]		2019-05-20	10:09:06.625+02:00	B	3	180	Y	
2	20190520 11:00-20190520 11:30	14	1			2019-05-20	10:09:06.625+02:00	S	3	180	N	
3	20190520 11:00-20190520 11:30	14	1			2019-05-20	10:09:06.625+02:00	B	5	205	Y	
4	20190520 11:00-20190520 11:30	14	1			2019-05-20	10:09:06.625+02:00	S	5	205	N	
5	20190520 11:00-20190520 11:30	14	1			2019-05-20	10:09:06.625+02:00	B	2	355	Y	
6	20190520 11:00-20190520 11:30	14	1			2019-05-20	10:09:06.625+02:00	S	2	355	N	
7	20190520 11:00-20190520 11:30	14	1			2019-05-20	10:10:02.983+02:00	B	3	180	Y	R
8	20190520 11:00-20190520 11:30	14	1			2019-05-20	10:10:02.983+02:00	S	3	180	N	R
9	20190520 11:00-20190520 11:30	14	1			2019-05-20	10:10:02.984+02:00	B	5	205	Y	R
10	20190520 11:00-20190520 11:30	14	1			2019-05-20	10:10:02.984+02:00	S	5	205	N	R
11	20190520 11:00-20190520 11:30	14	1			2019-05-20	10:10:02.984+02:00	B	2	355	Y	R
12	20190520 11:00-20190520 11:30	14	1			2019-05-20	10:10:02.984+02:00	S	2	355	N	R
13	20190520 11:00-20190520 11:30	14	1			2019-05-20	10:55:33.558+02:00	B	0.2	43.2	N	
14	20190520 11:00-20190520 11:30	14	1			2019-05-20	10:55:33.558+02:00	S	0.2	43.2	Y	
15	20190520 11:00-20190520 11:30	14	1			2019-05-20	10:59:26.843+02:00	B	0.4	50	Y	
16	20190520 11:00-20190520 11:30	14	1			2019-05-20	10:59:26.843+02:00	S	0.4	50	N	
17	20190520 11:30-20190520 12:00	14	2			2019-05-20	11:21:11.528+02:00	B	0.6	50	Y	
18	20190520 11:30-20190520 12:00	14	2			2019-05-20	11:21:11.528+02:00	S	0.6	50	N	

European Market De-coupling Incident June 7th

semo px

Full View

Ex-Ante Day Ahead & Intra-day Market Analysis

Overview | Market Structure | Analysis

Auction Summary

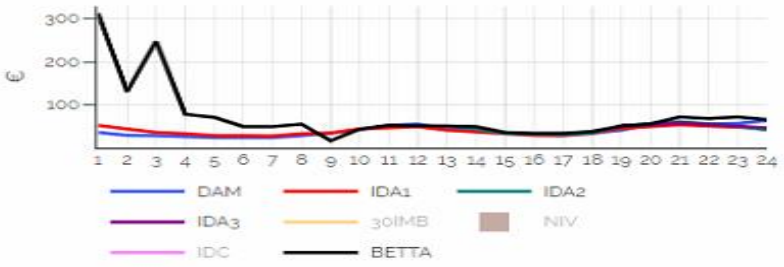
2019-06-08

Auction Stats [Hi | Lo | Avg | MWh | €]

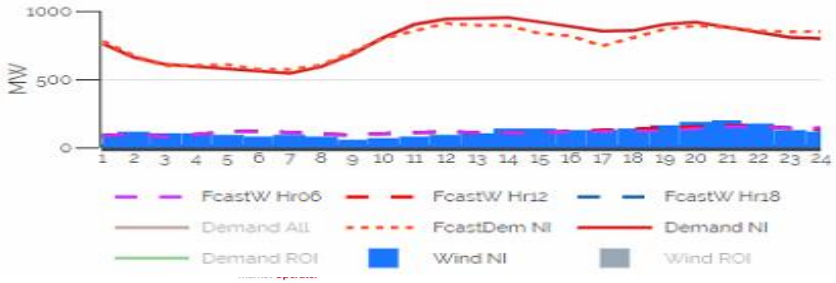
2019-06-08	DAM	€65.00	€25.54	€40.76	91,375	€3,724,110
2019-06-08	IDA1	€55.65	€28.90	€41.19	8,607	€354,485
2019-06-08	IDA2	€62.42	€31.96	€46.32	2,065	€95,641
2019-06-08	IDA3	€61.00	€46.00	€54.07	606	€32,786

Forecast, Actual Wind v Demand – All Island

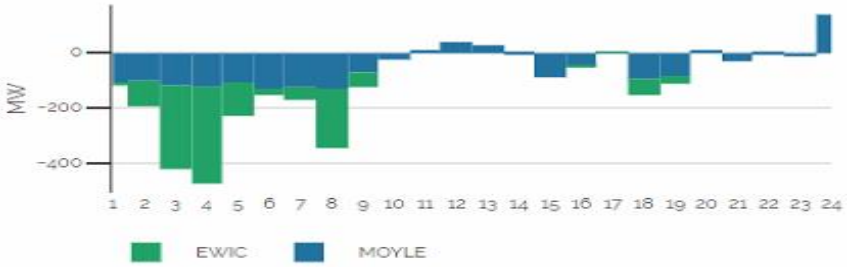
Auction Pricing



Forecast, Actual Wind v Demand – N.I.



Interconnector Flows



European Market De-coupling Incident June 7th

semo px

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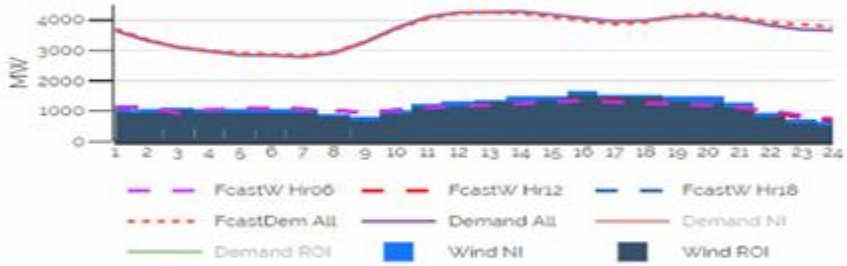
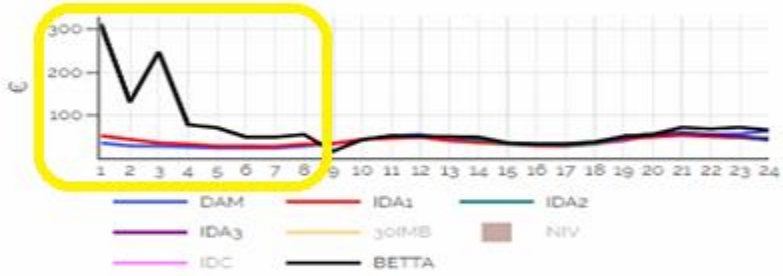
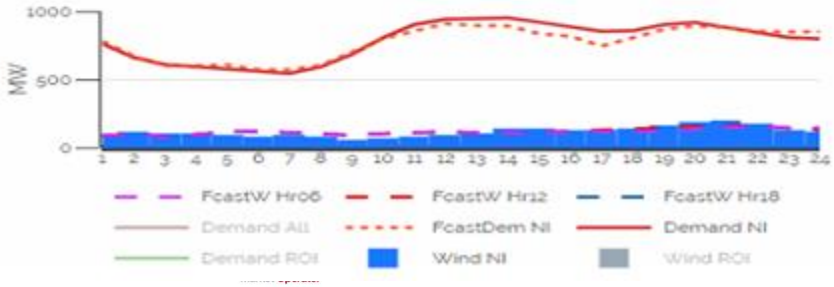


Auction Pricing

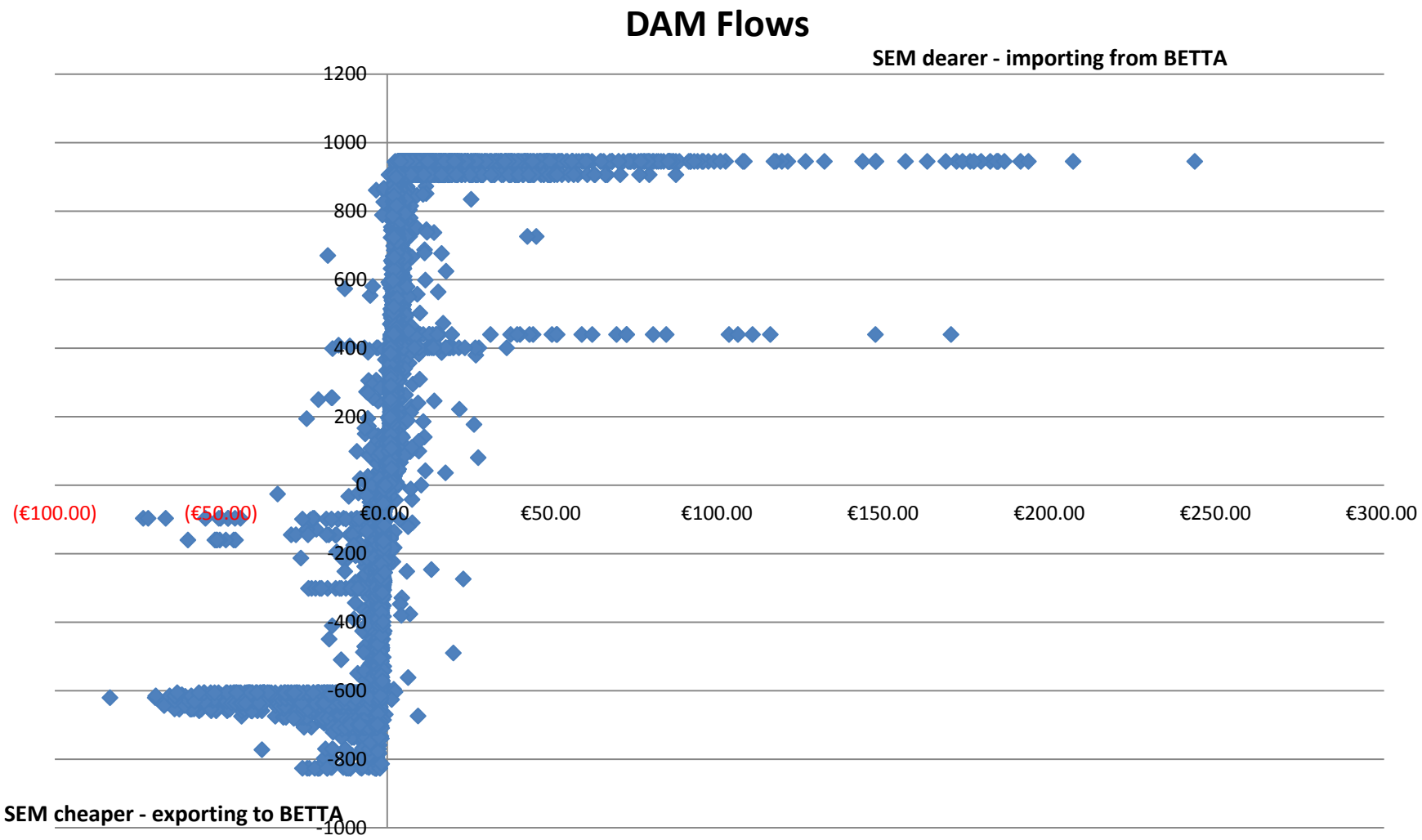


Forecast, Actual Wind v Demand – N.I.

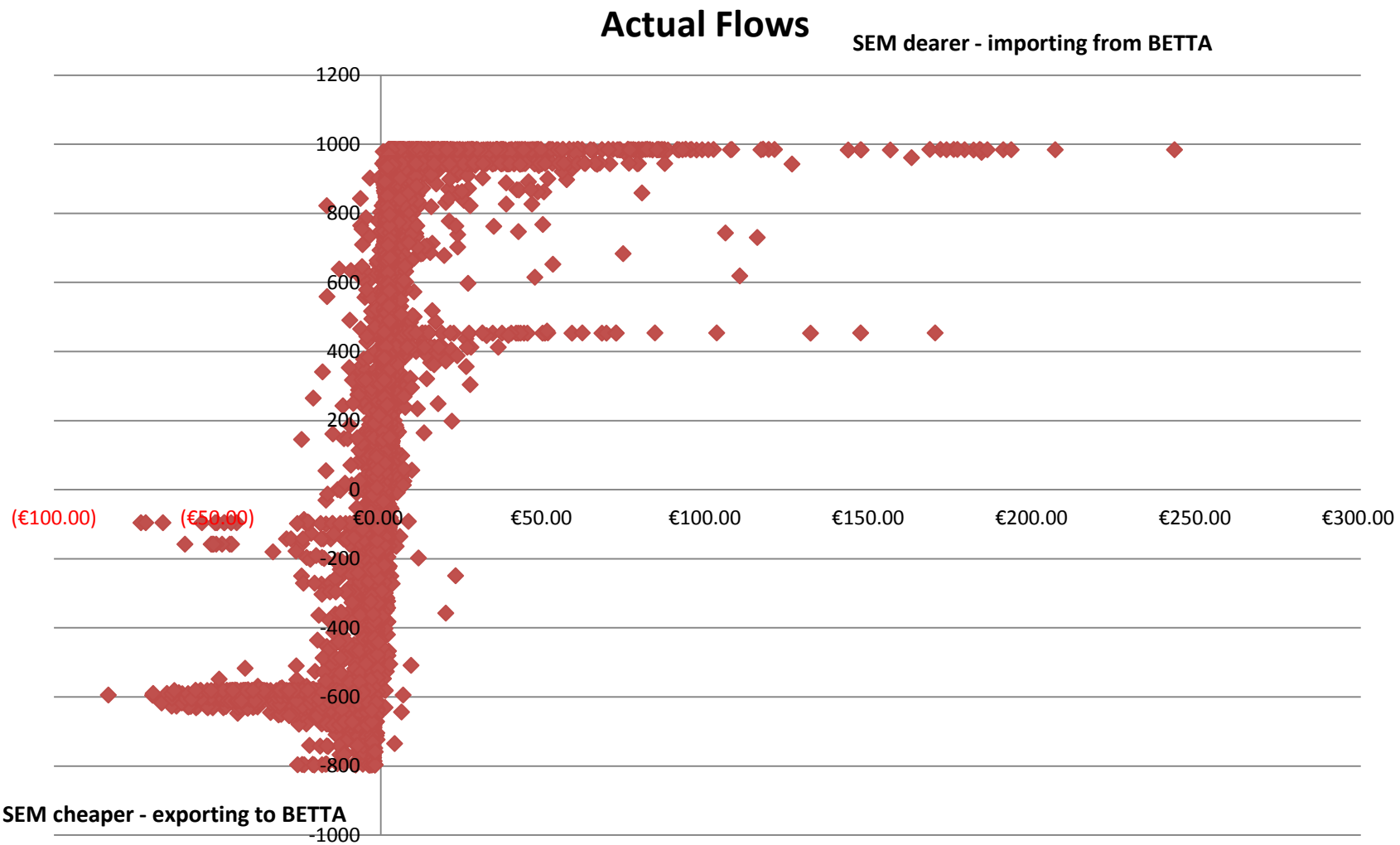


Interconnector Flows

Interconnector Flows Re-visited



Interconnector Flows Re-visited



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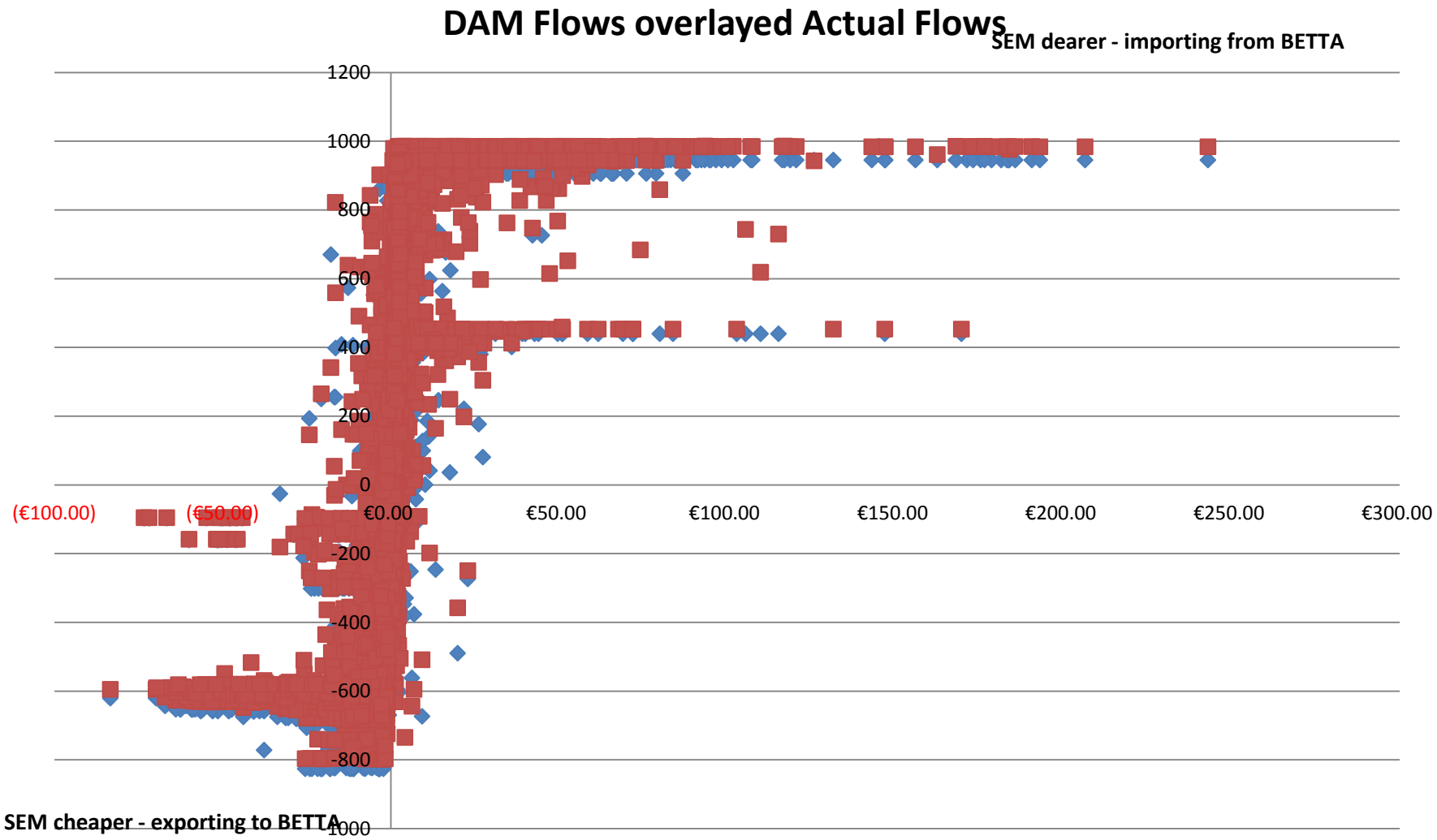


Ex-Ante Market Analysis

- In Summary

✓ SEMOpx markets are able to successfully mitigate issues seen in European Market De-Coupling events, by using our fall back processes

✓ SEMOpx markets are consistently performing

✓ Processes are working!

ETS Release Schedule

ETS Version	Date	Content	Client type	Impact
V3.3.1	18/06/2019	Functionality improvements for API services. Safety settings for order submission. Improvement of member exclusion process. .	MO and Trader client	No impact on output files
V3.3.2	*September 2019	Introduction of unique trade and trader ID	MO and Trader client	Format of the market results file and the bid file will change. Impact on Market Participants.
V3.4	*End of 2019	Introduction of block bid submission graph in the trader GUI Trading Session Automation	MO and Trader client	Impact analysis will be in the course of 2019

*Date to be Confirmed

M7 Release Schedule

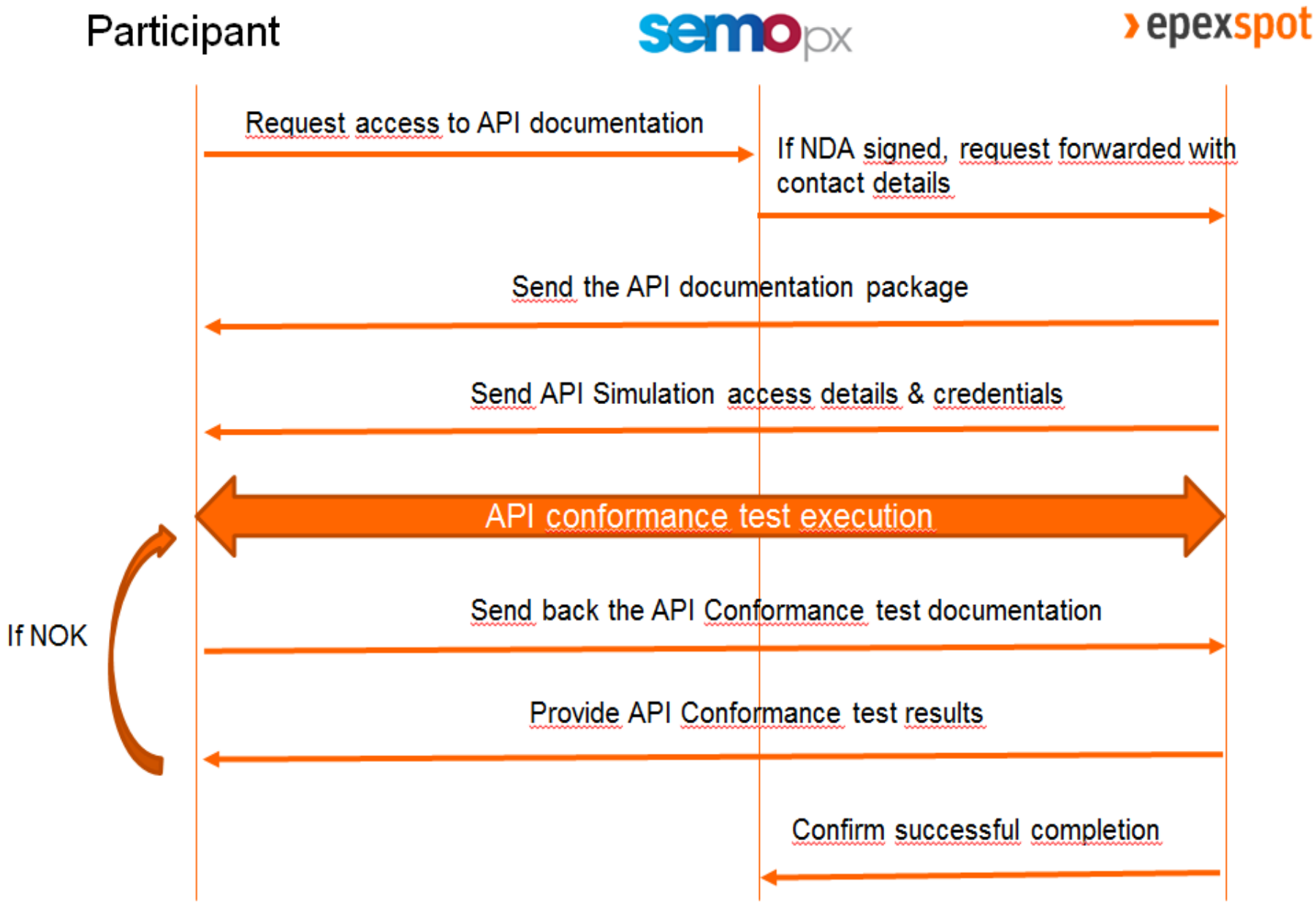
M7 Version	Date	Content	Client type	Impact
V6.7	*Early Q3 2019	SEMOpx members should be advised, that the only impact for SEMOpx members is a password policy change	MO and Trader client	No impact on output files Passwords will expire **every 90 days** Passwords must be 12 characters Members can reset them any time before expiry via the ComTrader login screen to reset the 90 day countdown. Email will be sent 10 days before expiration to remind each user. If a password expires, an email with a reset link will be sent.

*Date to be Confirmed

ETS API Conformance Testing Update

- Simulation environments 1&2 made available to perform testing in advance of ETS 3.3.1
- Additional test day of 17/06/19 was added
- Successful passes for all members – Some will be *contacted to advise of some enhancements that could be made to API configurations
- All API connections tested will work with new version of ETS 3.3.1

*Only contacted in event of a API recommendations from EPEX

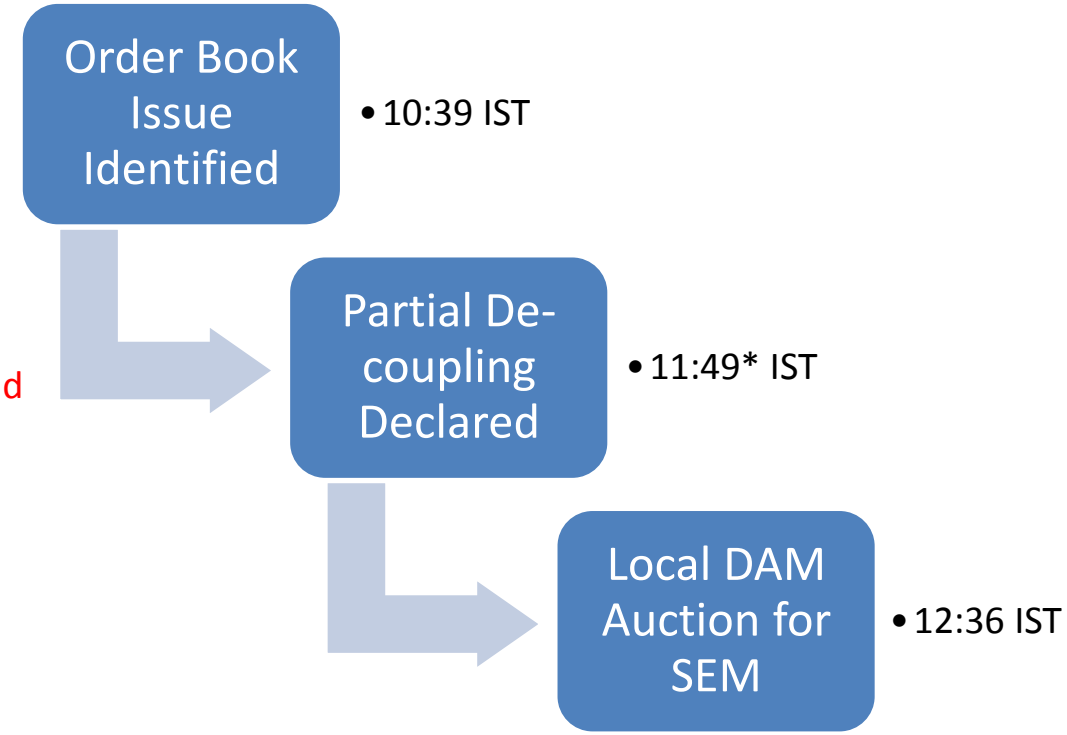

Participant
Request access to API documentation
If NDA signed, request forwarded with contact details
Send the API documentation package
Send API Simulation access details & credentials
API conformance test execution
If NOK
Send back the API Conformance test documentation
Provide API Conformance test results
Confirm successful completion

Partial De-coupling Event 07/06/2019

Technical issue in EPEX SPOT ETS system resulting in Order Book submission failure (SEMOpx Order Books not impacted) This was a local issue with EPEX Markets

Impacted multiple market areas due to Order Book issues that caused server locks several times

- France-Belgium
- France-Germany
- Germany-Austria
- Germany-Denmark
- Germany-Netherlands
- Great Britain-Netherlands
- Great Britain-Belgium
- Great Britain -France
- Great Britain -Ireland/Northern Ireland
- Great Britain 1- Great Britain 2
- Italy-France
- Italy-Austria
- Netherlands-Belgium
- Norway-Netherlands
- Slovenia-Austria
- Spain-France
- Sweden-Germany



*9 Minute delay to agreed procedure due to attempts to remain coupled

De-coupling Summary of Events

- Since its launch in February 2014, more than 5 years ago, the Day-Ahead Multi Regional Coupling (MRC) has been operating successfully.
- On the 7th June an issue occurred which prevented the EPEX CWE and EPEX GB order books from being sent to the common coupling system.
- The incident was caused by an internal IT issue at EPEX and was not caused by the common market coupling algorithm.
- The issue could not be fixed in time and at 11:50 IST the market was informed about the partial decoupling of EPEX CWE, EPEX GB and consequently, SEMOpx
- This triggered the execution of the agreed fallback procedures.
- Common coupling system and procedures worked as expected, ensuring the coupling of the remaining part of MRC.

https://www.semopx.com/documents/general-publications/JSC_Communication-note-incident-07.06.2019_final.pdf

System patch deployed on 07/06/2019 @ 18:30 IST to resolve issue

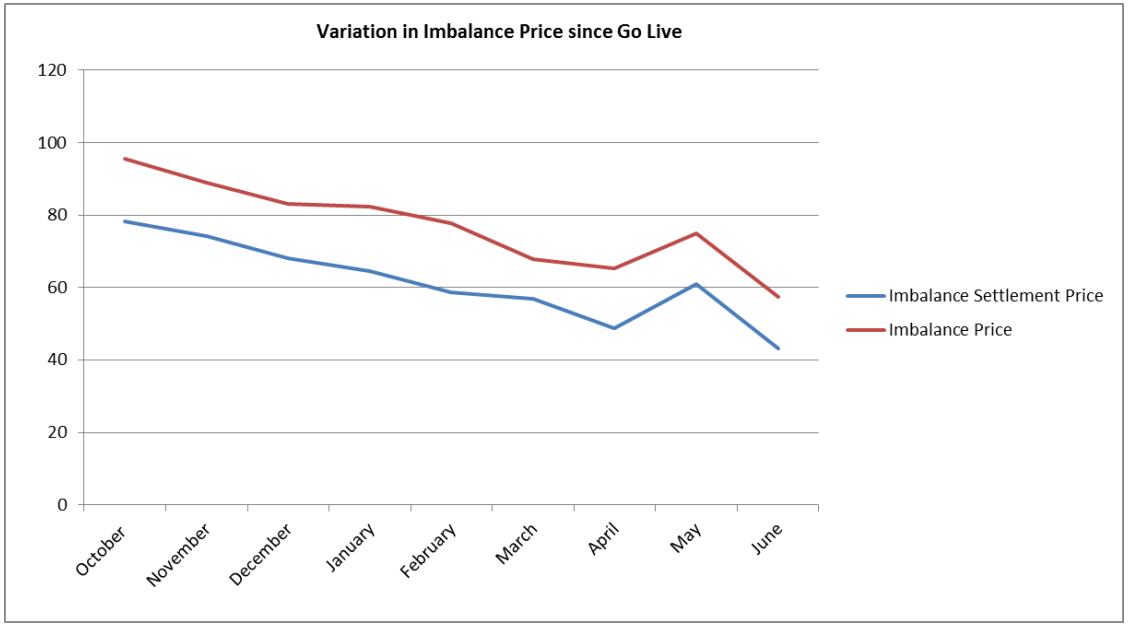
Fallback Processes for SEMOpx

- All Fallback processes worked as designed
- Local DAM completed within agreed timeframes
- All communications as sent at agreed times to members
- Capacity for DAM transferred to IDA1

Agenda

Item	Presenter
Welcome	**Anne Fitzgerald**
General System Failure	Anne Fitzgerald
Known Issues Update	Eoin Farrell
Ex-Ante Market	Liam McAllister, Michael Atcheson
Balancing Market	**Rory Cafferky**
Settlements	Sean O'Rourke, John O'Dea, John Tracey
Disputes & Repricing Update	Julie McGee
Brexit Update	Michael Kelly
Market Participant Roadmap	Mark Needham
Query Management	Anne Fitzgerald
Q&A	

Balancing Market: Imbalance Price



*Excludes high prices on the 24th of January

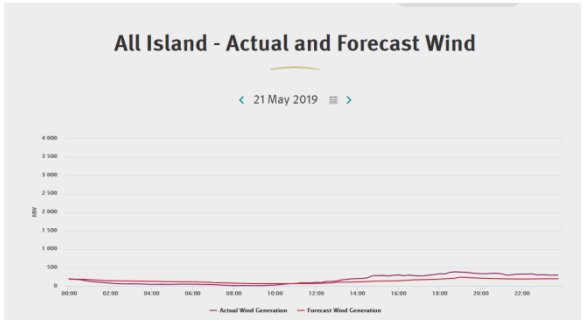
May 11th to June 18th

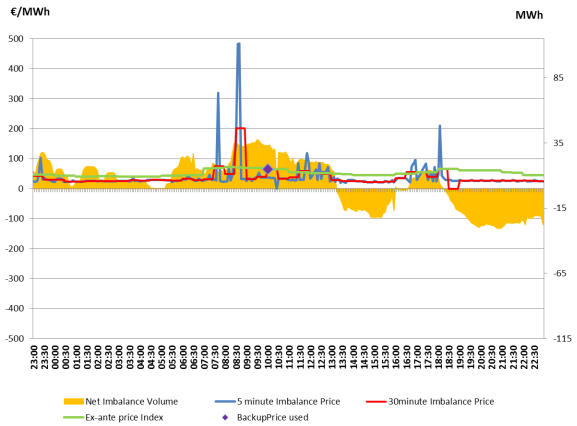
	5 Minute	30 Minute
No of Prices Available	10,443 /10,994	1,733 /1824
No of Backup Prices Used	NA	103
Minimum Price €	-€451.06	-€219.60
Max Price €	€491.98	€482.09
Standard Deviation	71.04	55.87
Rolling Average €	€38.85	€39.02
Average Imbalance Price YTD	€58.08	€57.96

5.01% 4.99%

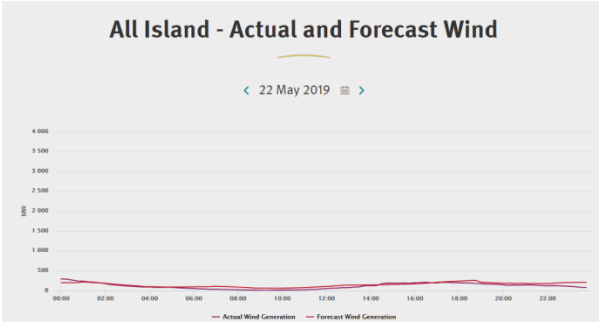
Balancing Market: Imbalance Price

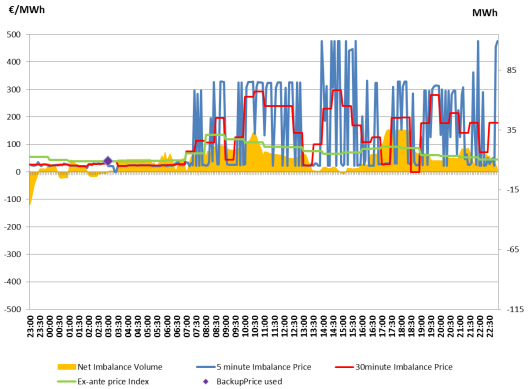
21st of May





22nd of May





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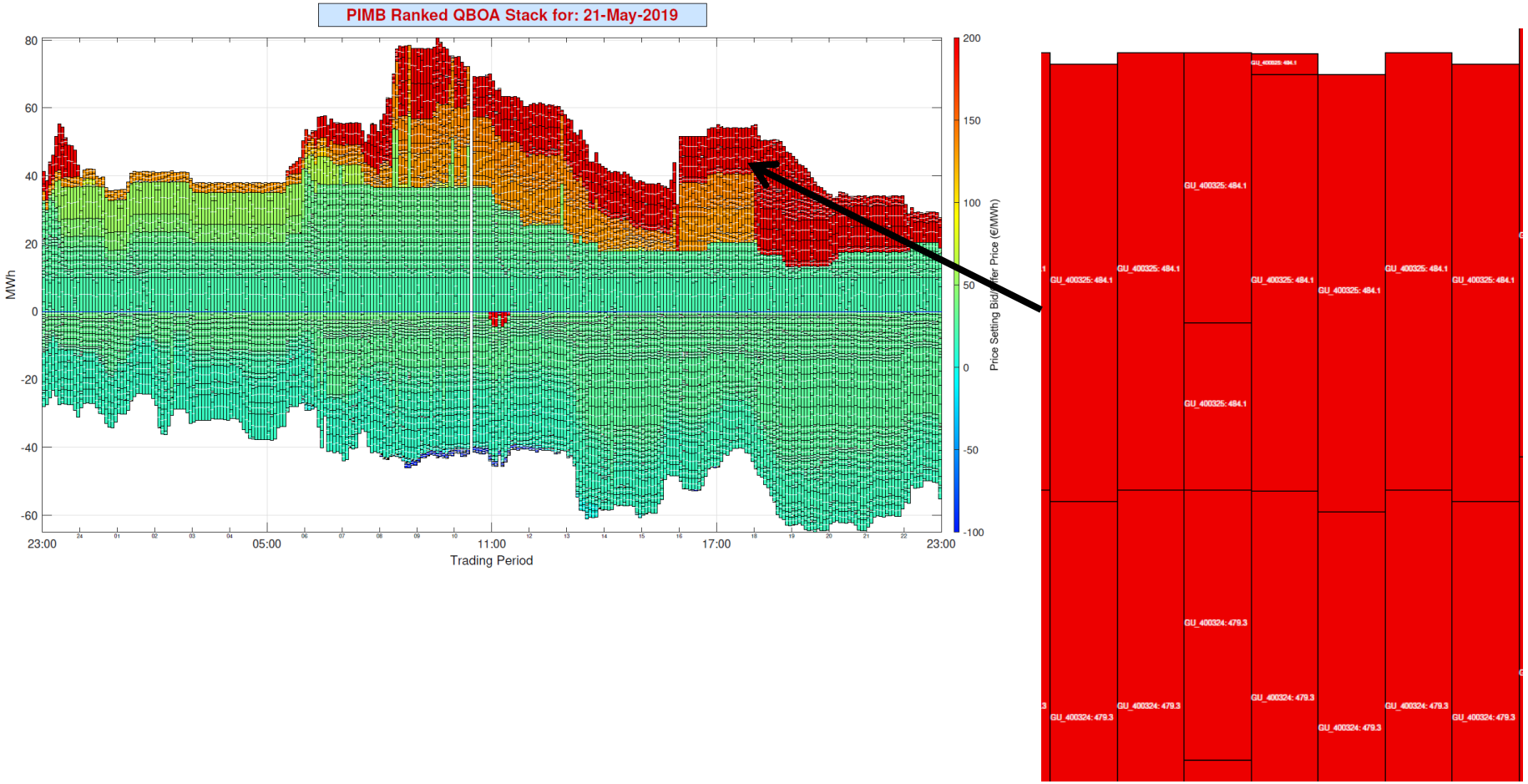

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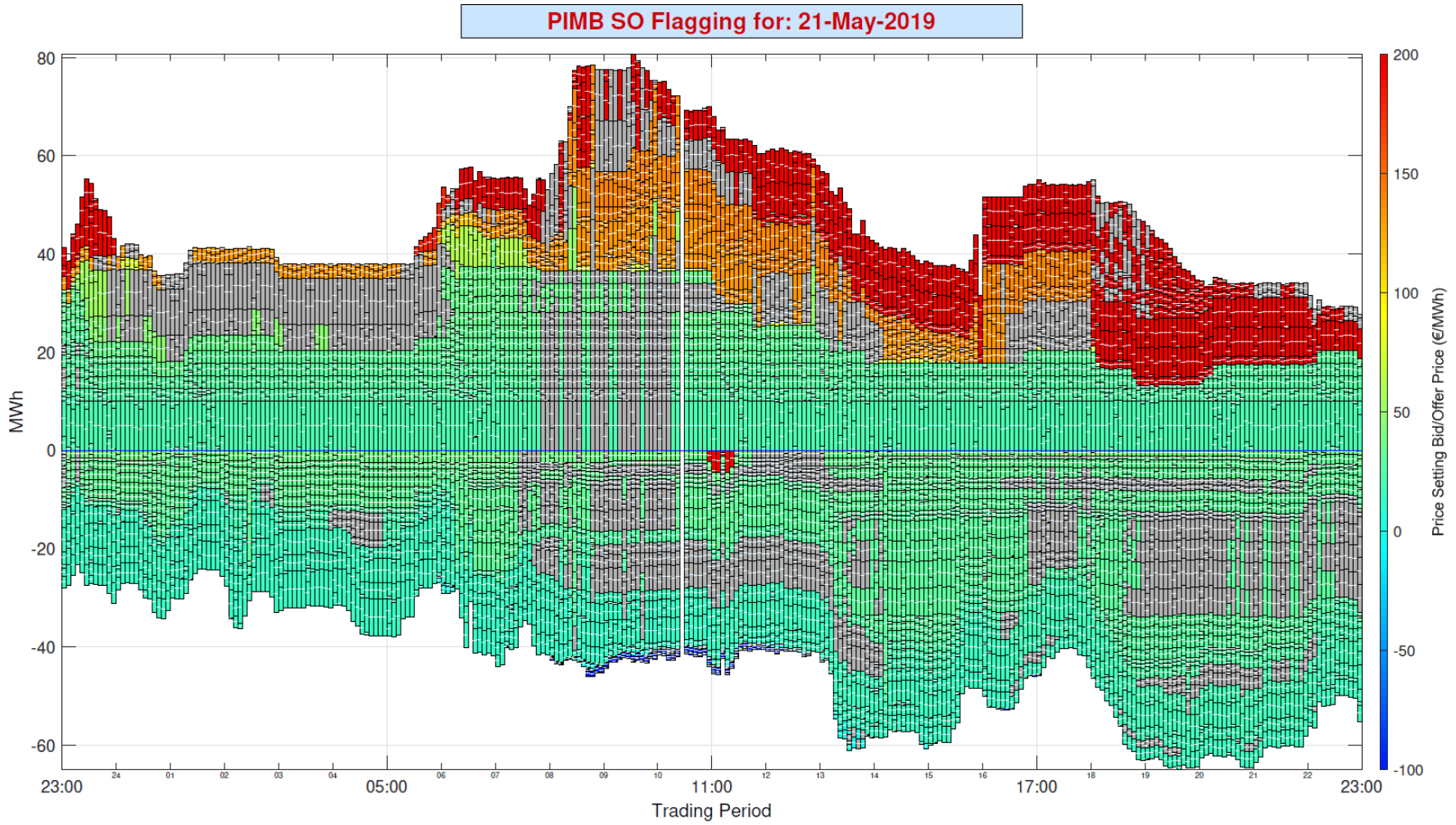

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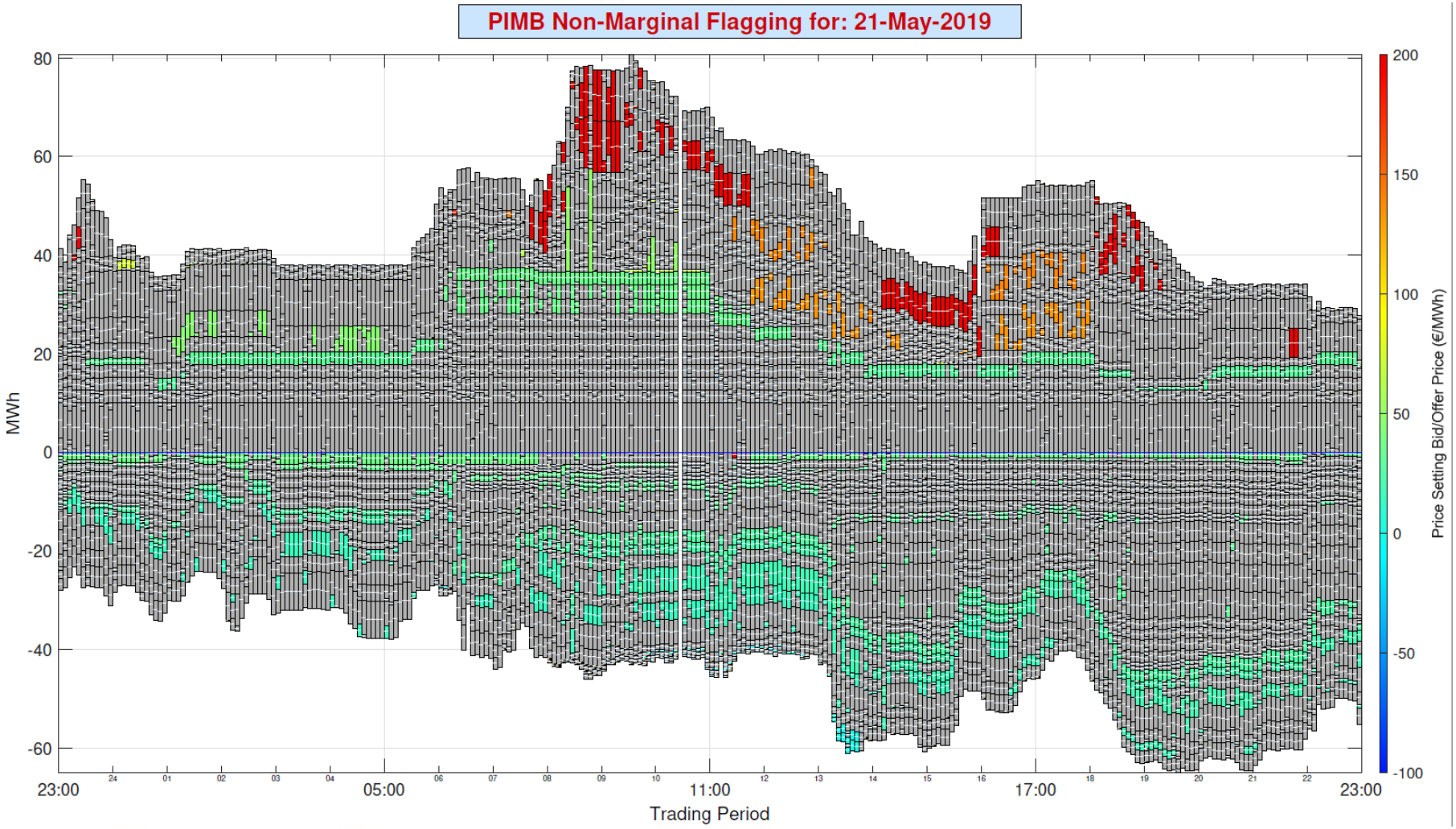

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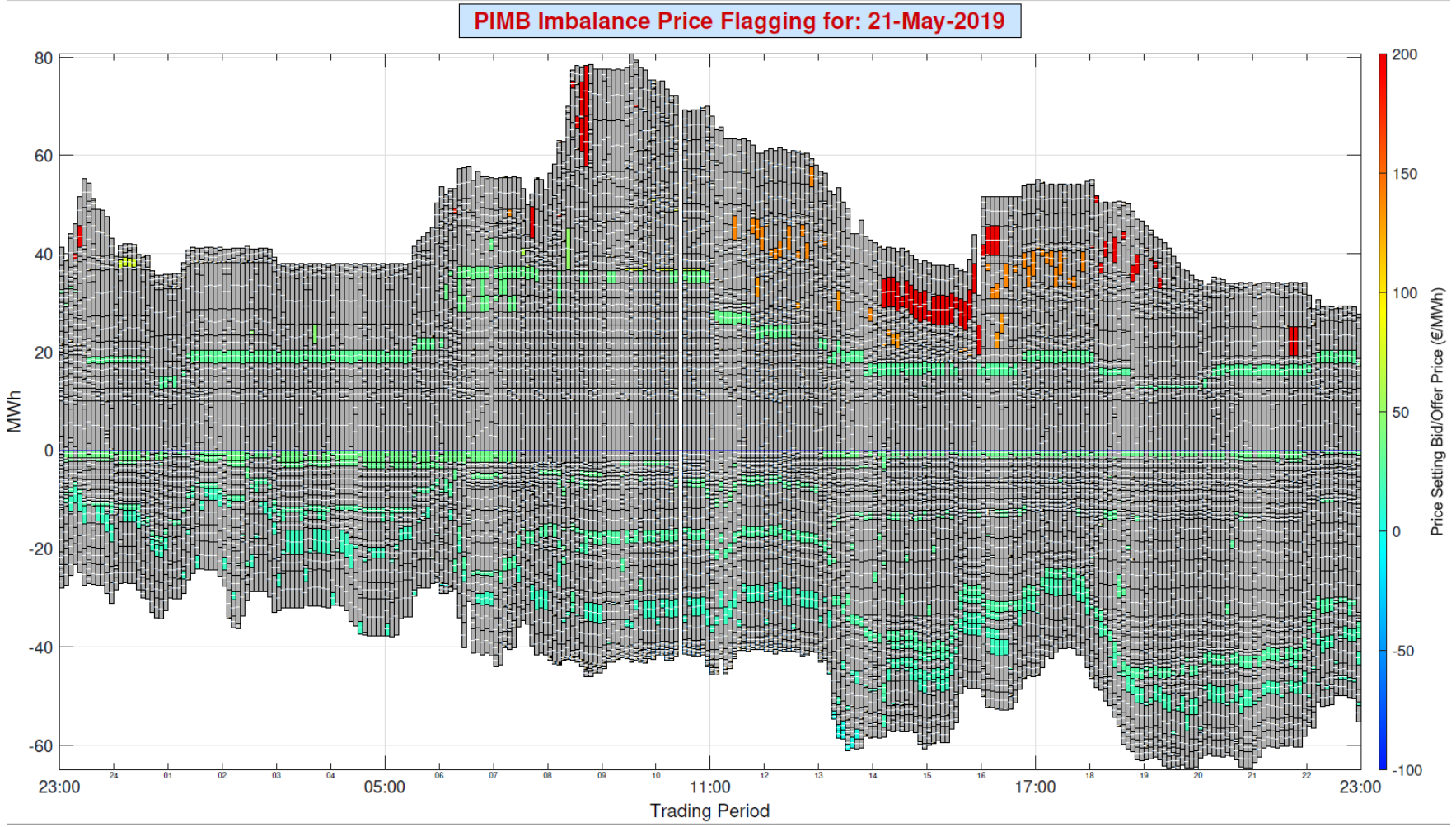

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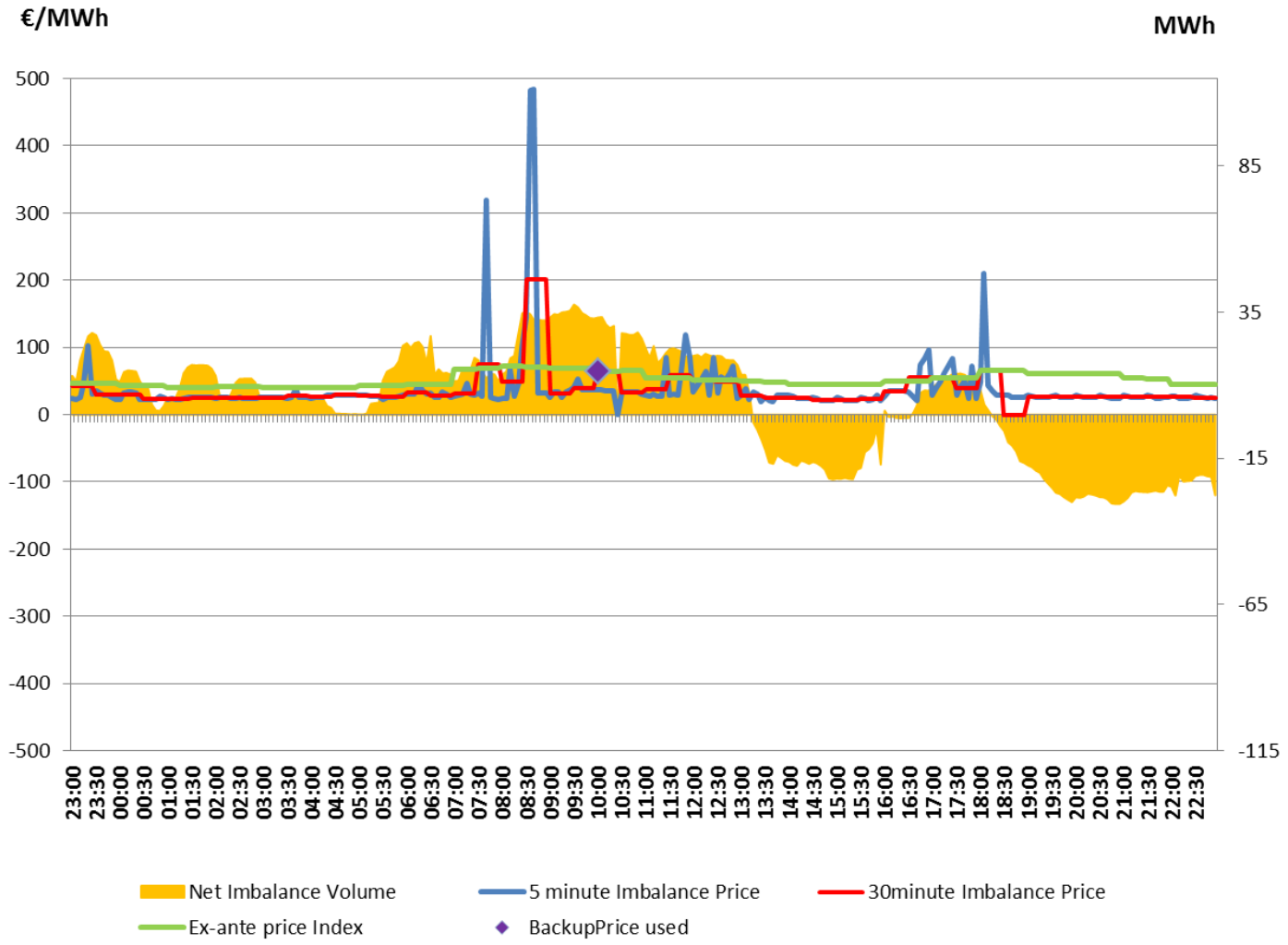

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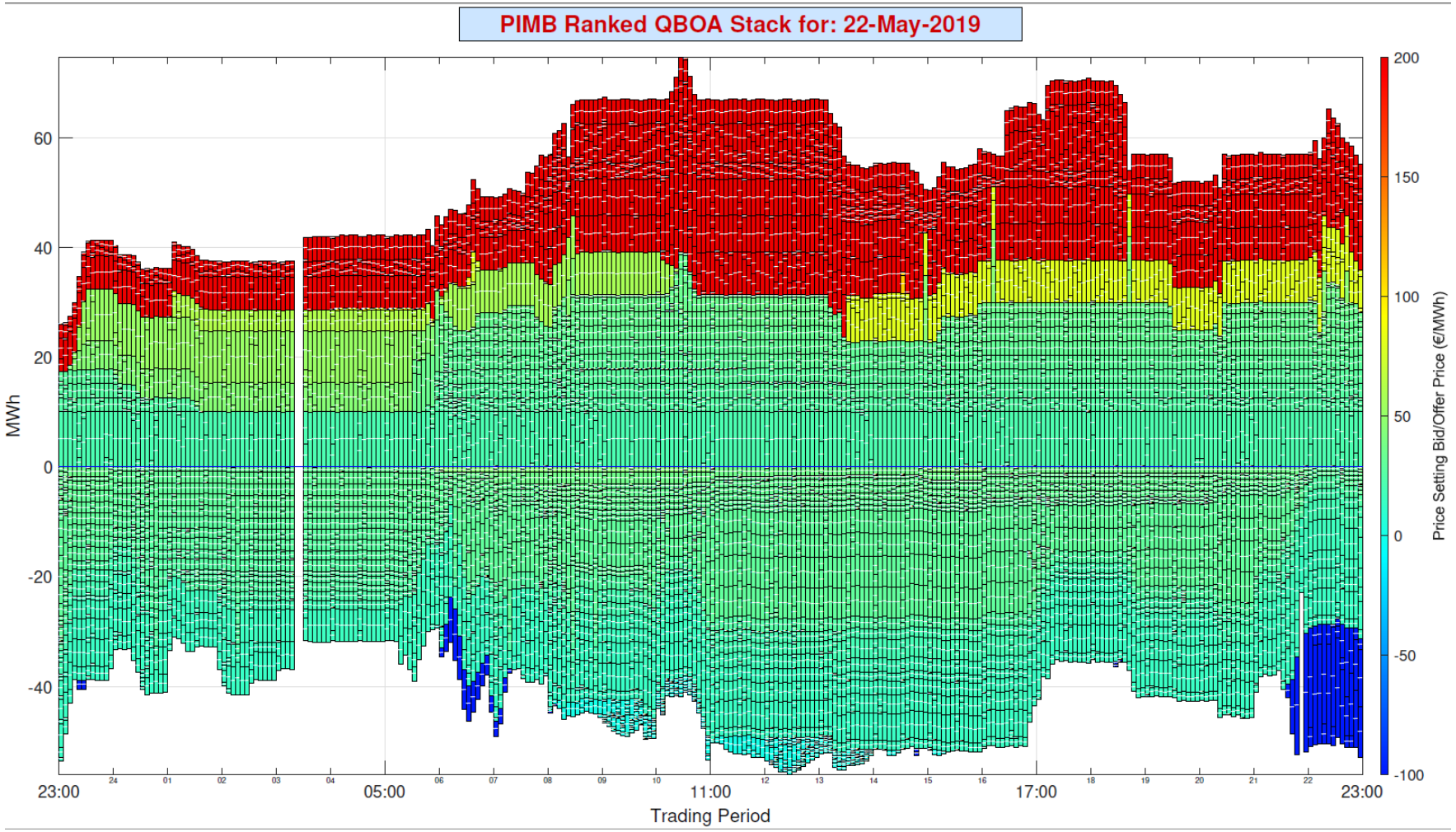

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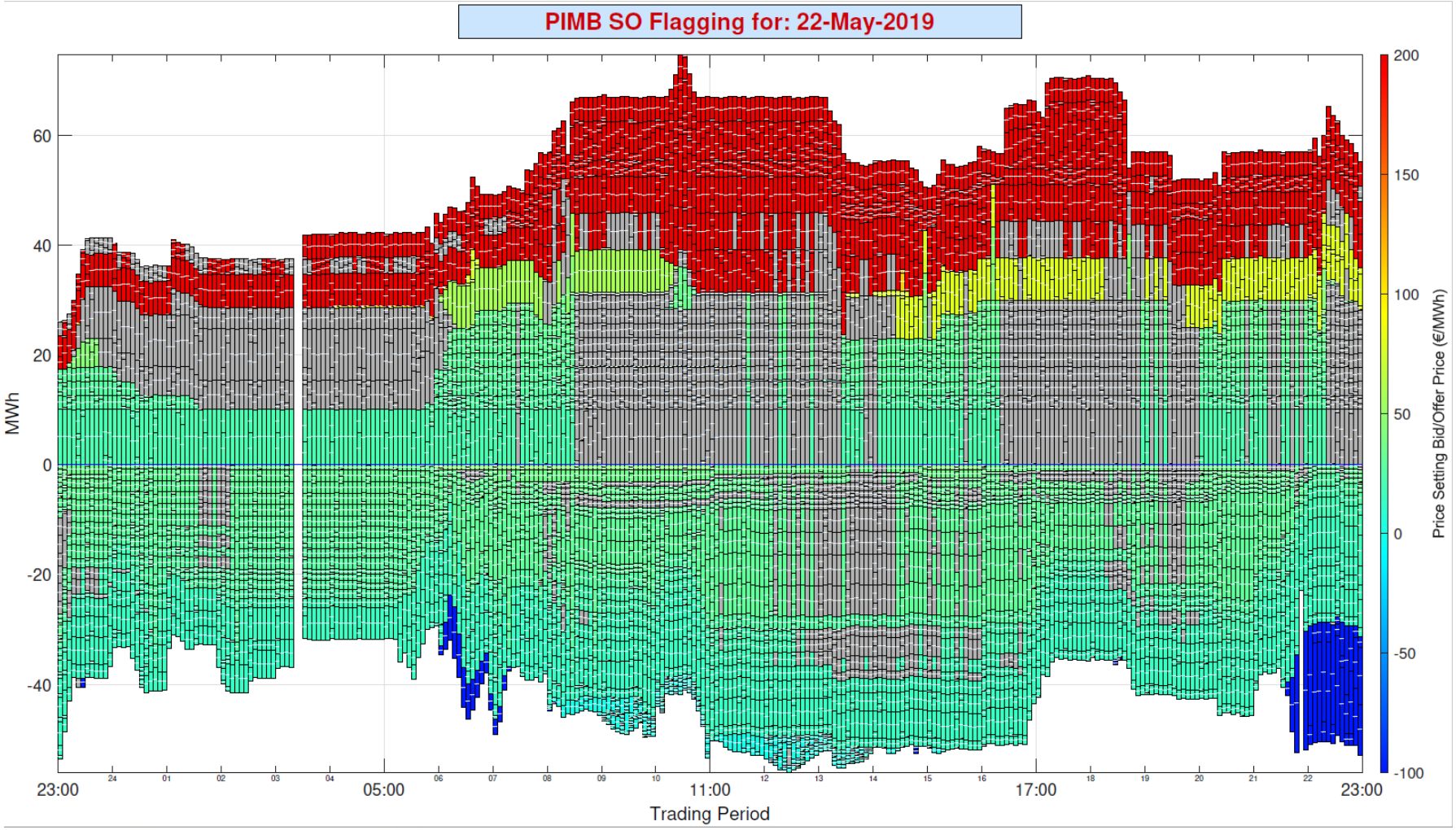
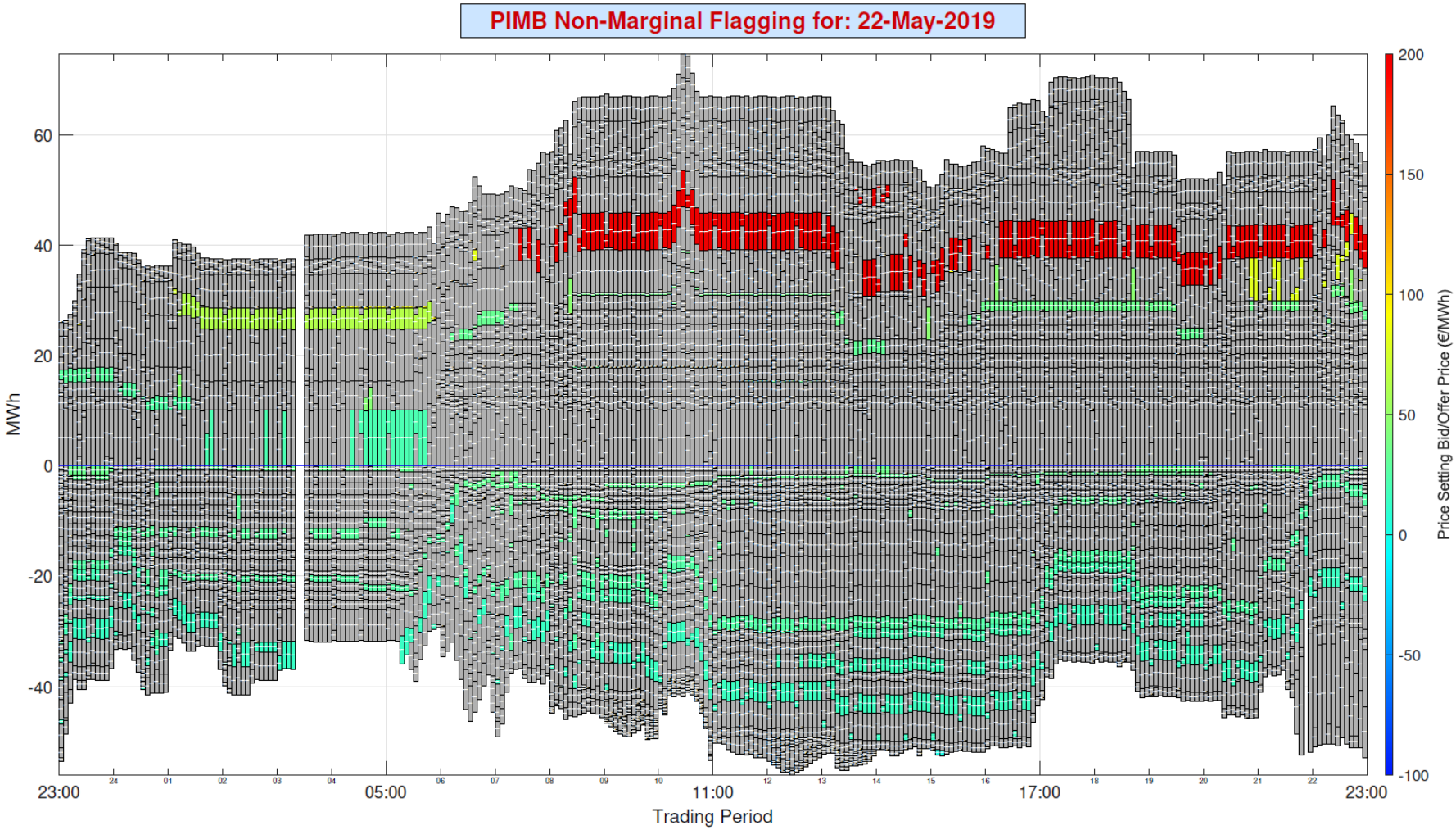


EIRGRID semo SONI
Single Electricity Market Operator

Balancing Market: Imbalance Price



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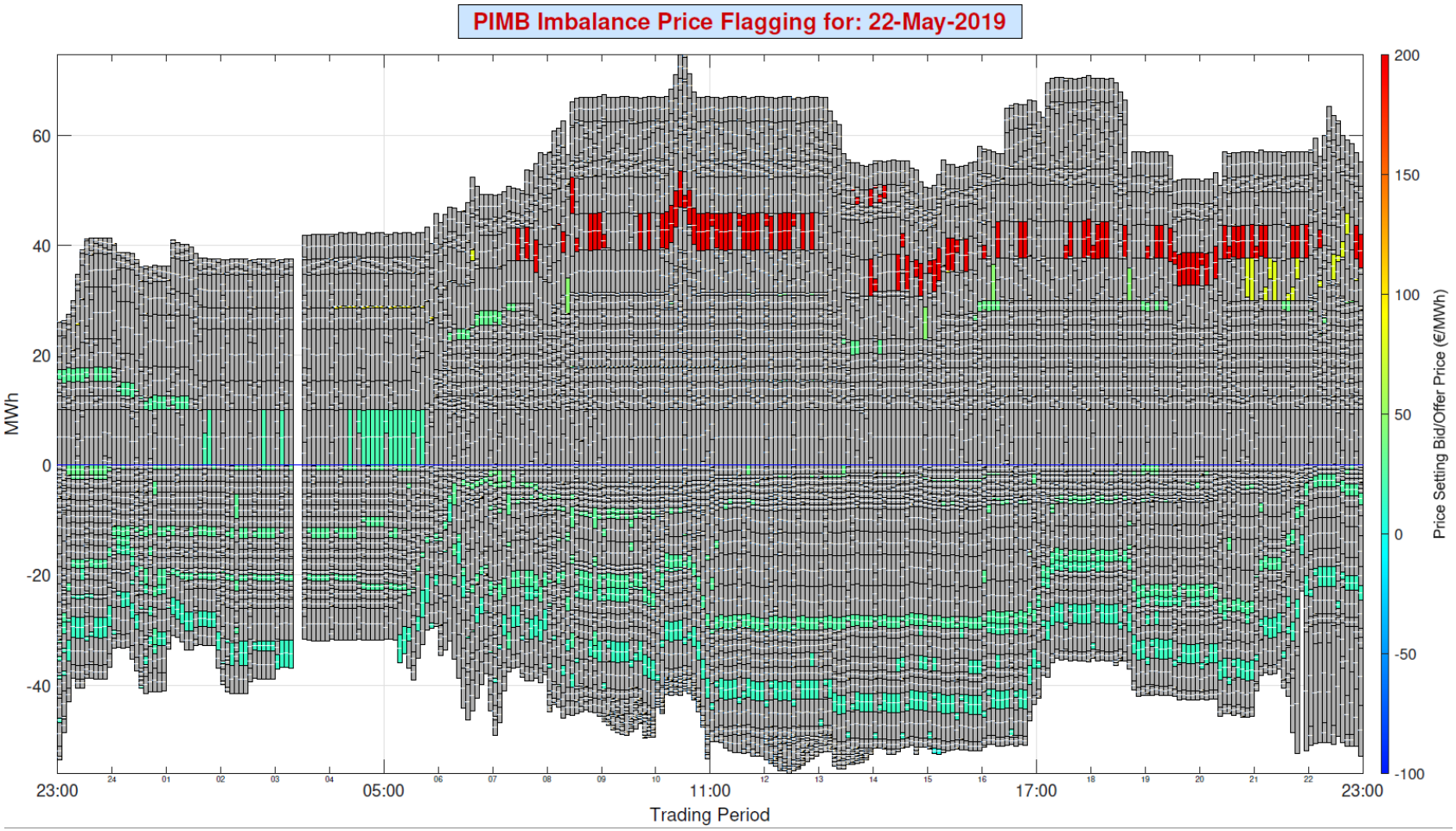

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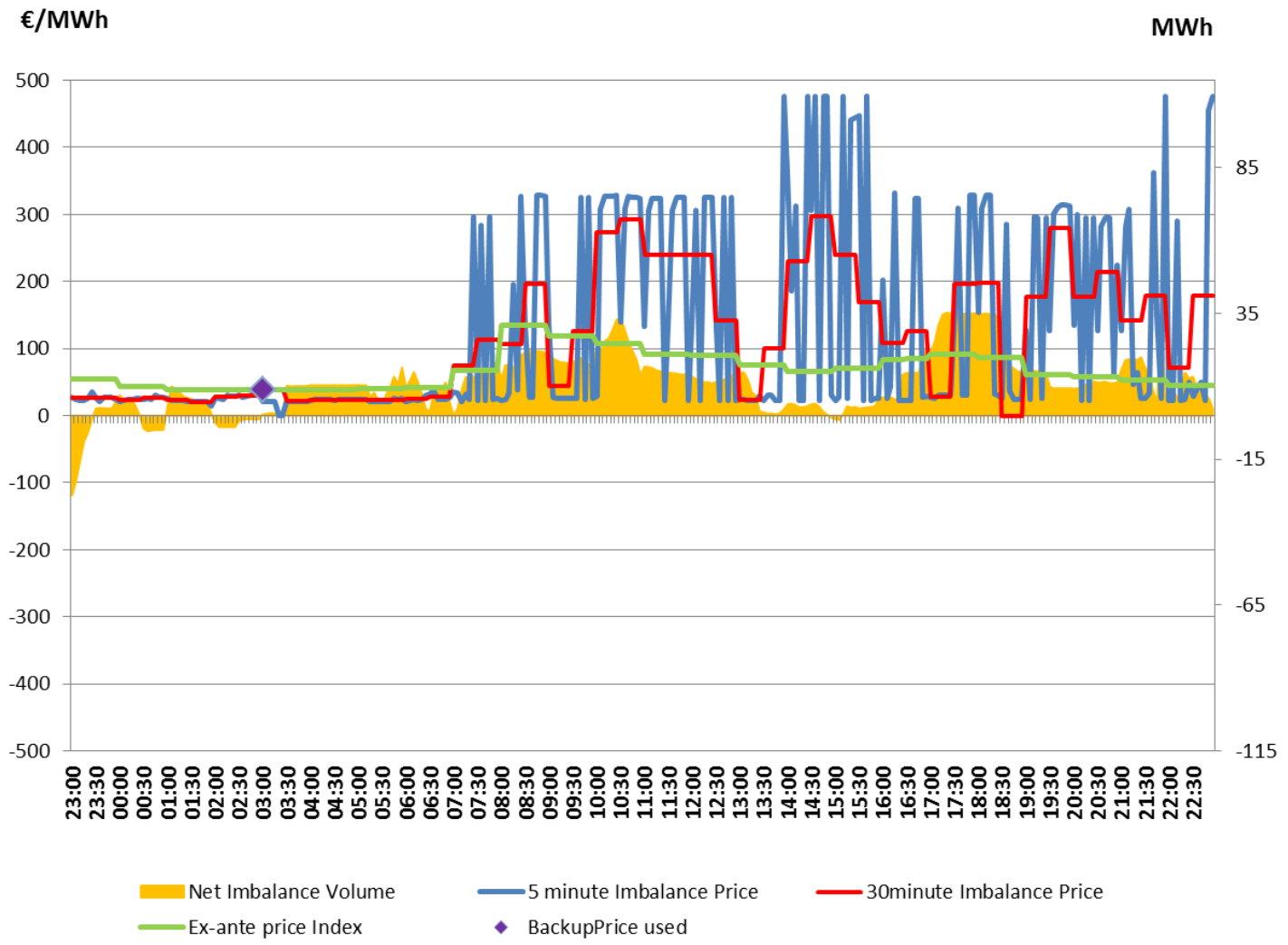

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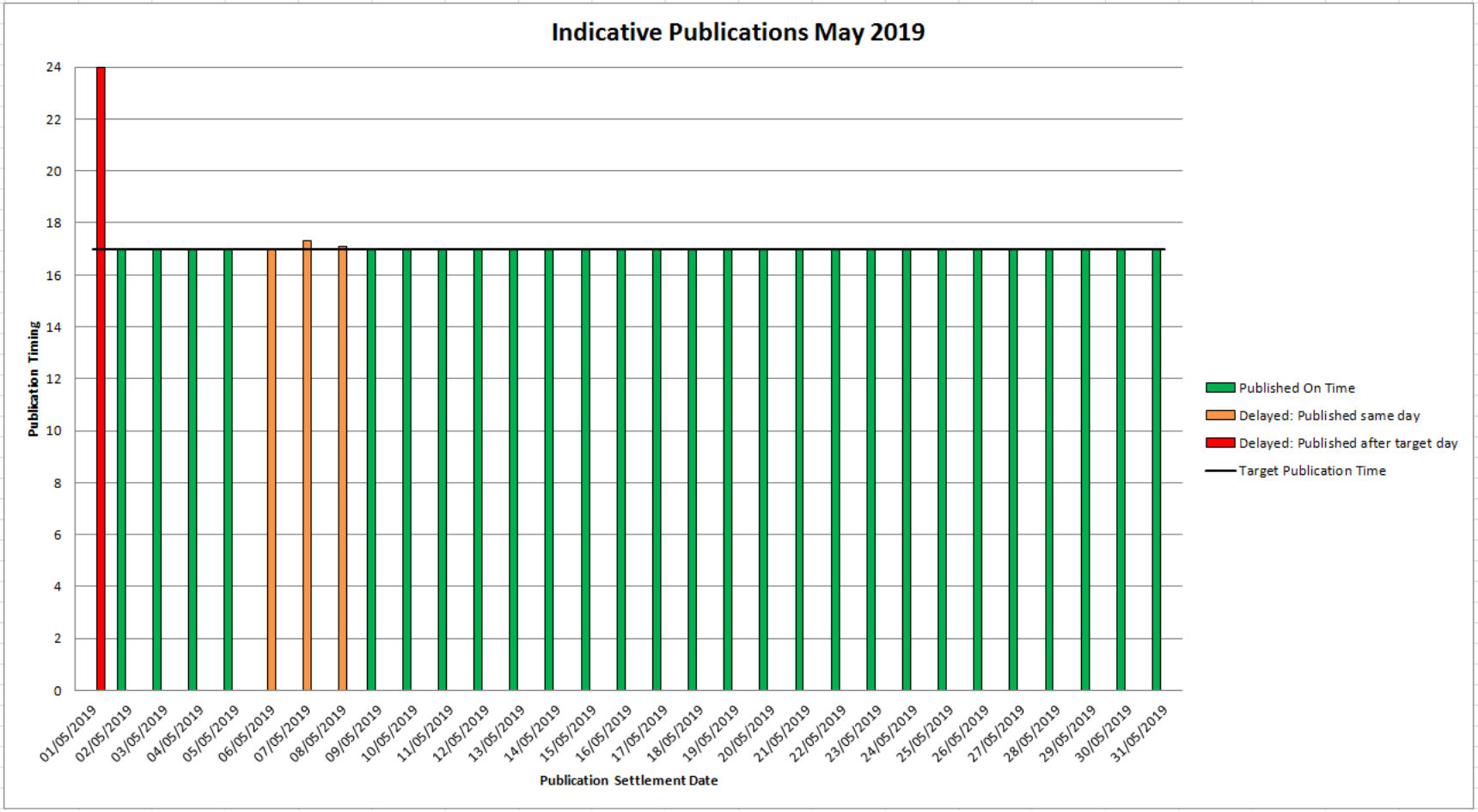
Disputes & Repricing Update	Julie McGee
Brexit Update	Michael Kelly
Market Participant Roadmap	Mark Needham
Query Management	Anne Fitzgerald
Q&A	

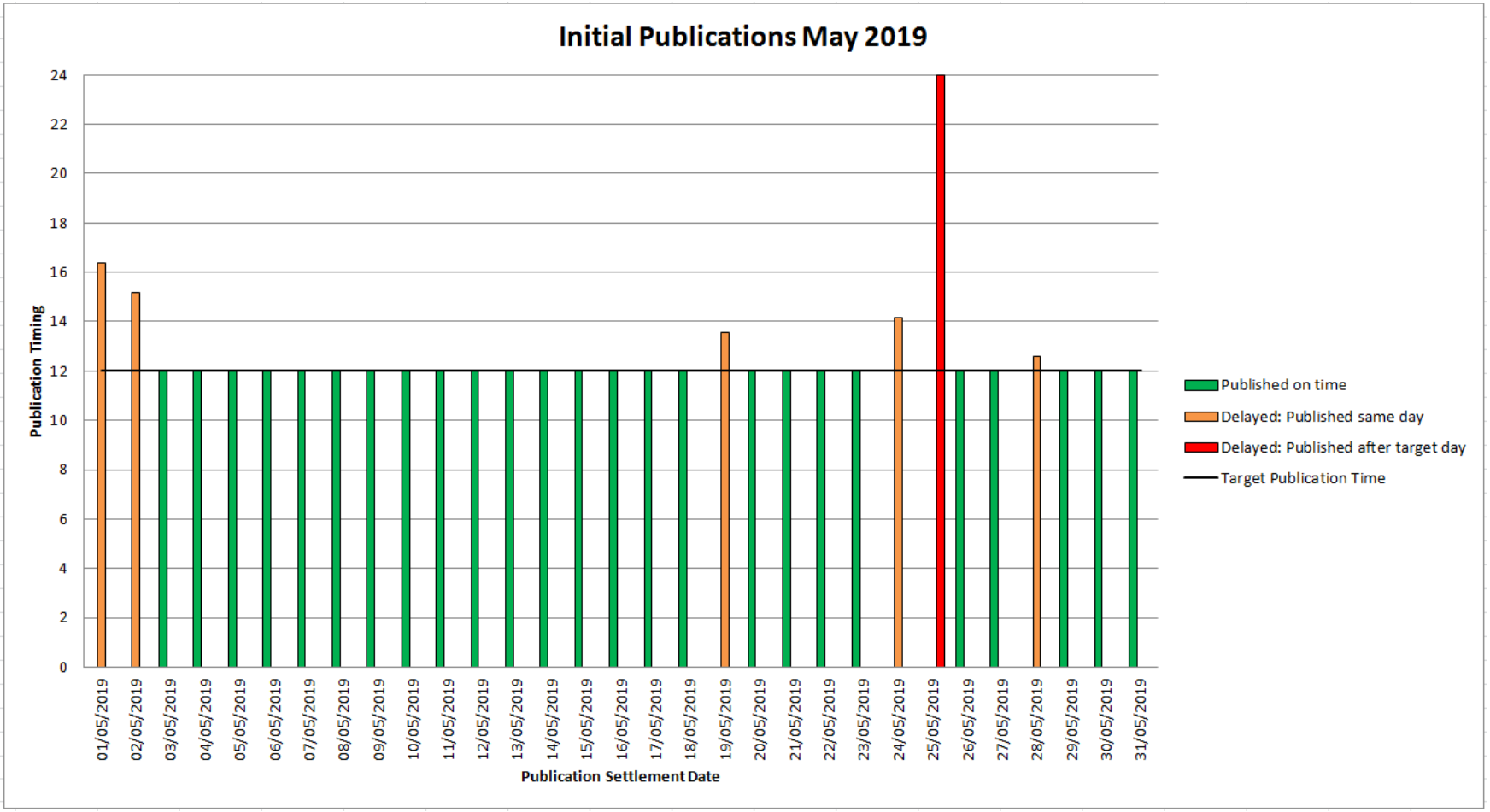
Settlements : May 2019 data key process updates

Settlement Dates	Run Category	Run Type	Runs to complete	On Time	Delayed – Same Day publication	Delayed > 1 Day
1st – 31st	Settlements	Indicative	31	27	3	1
1st – 31st	Settlements	Initial	31	25	5	1
1st – 31st	Settlement Documents	Weekly	4	4	-	-
1st – 31st	Credit Reports	Daily	66	63	-	-
1st – 31st	Payments In	Weekly	4	4	-	-
1st – 31st	Payments Out	Weekly	4	4	-	-

Settlements: May 2019 Indicative settlements



Settlements: May 2019 Initial settlements



Key issues impacting publication June 2019 timelines

Key Date (s)	Issue	Impact to schedule timelines	Issue Status
Wednesday 12th	General System Failure	• Caused delays to the Indicative runs of the 11th / 12th & 13th June • Caused delays to the Initials of the 6th /7th /8th & 9th June • Settlement Documents for the Billing period of the 2nd - 8th published late afternoon on the 14th June	Systems back up & running allowing Settlements to continue.
Monday 10th	Registration of new unit set effective June 12th set-up in application with incorrect file type	• Caused continued delays to indicative run of the 12th meaning subsequent runs of the 13th -17th also delayed	Unit details corrected & tested. Backlog of indicatives to be processed.

Key points:

- **Increase of additional** catch-up days in June due to the backlog of runs caused by above event
- **Additional pro-active analysis** continues re: "Incorrect IPQBOA values (KIR ID: 5893)" – impact to processing timelines to perform required analysis

Resettlement Update

June 20th 2019

EIRGRID GROUP

Overview – Resettlement Drivers

(i) Modifications - Two high priority modifications relating to Fixed Cost Payments* have been deployed to production on the 11th June (See Initial Settlement 8th June):

- Mod_07_19 / CR77 - No-Load Costs
- Mod_34_18 / CR73 - Make-Whole Payments

(ii) Fixed Costs Transfer Defect - A data transfer defect resulted in low Fixed Costs* being paid to Participants from October 1, 2018 to 27 January 2019. This has accrued valid Fixed Charges of €32 million that will be paid out over 16 weeks on the commencement of M+4 on the 5th July

(iii) CFC & IP QBOA Defects – 6/8 Fixed Costs and 3 Settlement QBOA fixes deployed 11th June (See Initial Settlement 6th June). Remaining two CFC defects relate to the transfer of heat state to settlements and the recovery of saved costs (CSUR/ CNLR)

***Fixed Cost Payments or Charges** (CFC) - the differences between how a Participant would ideally run their unit to meet its ex-ante market commitments and how the unit was operated to support a secure operate power system.*

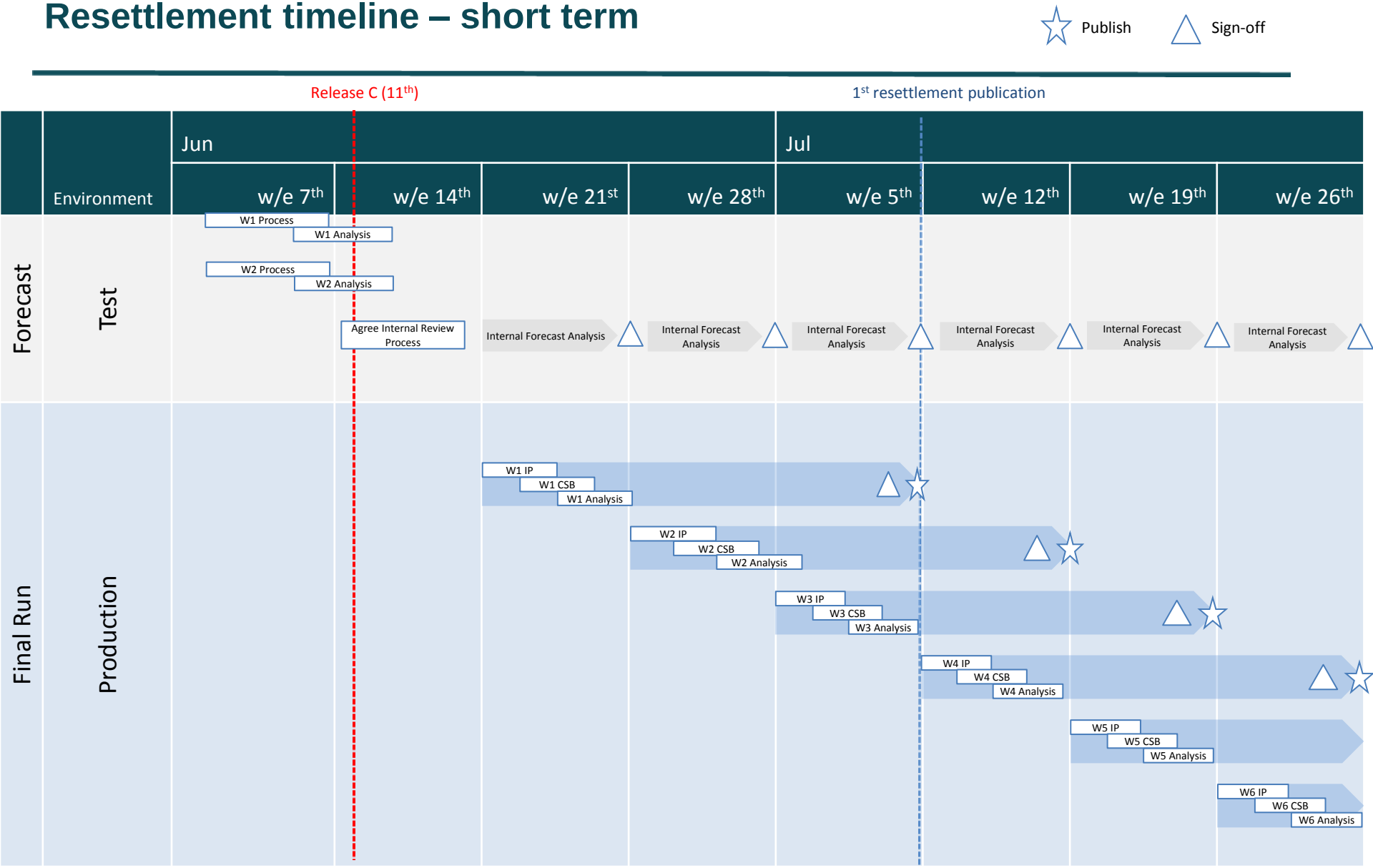
Resettlement - Processing

Planning on running a single resettlement process (Inc. accelerated catch-up):

- The priority is the large volume of formal queries/defects to be captured in first month of resettlement (October 2018).

- Simultaneous resettlement of different billing periods is not planned due to the following considerations:
  - Additional large volume of statements for actual M4 BALIMB/CRM/MO could affect participants processing ability i.e. multiple REPT_044 for simultaneous resettlement runs.
  - Cash collateral impacts of catch-up resettlement as well as actual M4 in single SD.
  - Re-running of multiple IPs for resettlement has an implication for the accuracy of initial conditions because every day leading into next.

Resettlement timeline – short term



Timeline

June 11th	System upgrades for CR73 and CR77 deployed (subject to passing test)
June – 5th July	Data preparation, loading of use cases and preliminary checks leading to Instruction Profiling (Inc. QBOA) re-runs and import into the Billing System
5th July	• Commence M+4 resettlement (Included in Settlement Documents) • Commence payment of accrued Fixed Charges from October 2018 – January 19 (Approximately €32.0m - €2.0m per week for 16 weeks) • Additional ~€500K to be payed out in CFC due to defect fixes in Release C Once rolling M4 period covers the modifications effective dates: • M4 recovery of CR 73 payments back to January 27 ❑ (Approximately €19.2m - €0.80m per week for 24 weeks) • M4 recovery of CR 77 payments back to May 3 ❑ (Approximately €6.0m €1.5m per week for 4 weeks)
September 2019	Confirm the inclusion of the increased Fixed Costs in 2018-2019 in the 2019-2020 tariff
November 2019	Commence M+13

Fixed Cost Payments or Charges - Overview

- Fixed Cost Payments or Charges:
  - Difference between Market Operations and Physical Operations can result in units incurring or saving additional fixed costs versus those incurred in a unit's ex-ante market schedule;
  - Fixed costs include additional or reduced number of starts, and additional or reduced number of Imbalance Settlement Periods where the unit is synchronised and incurring fixed costs for operating.
- Whether these charges or payments apply depends on Commercial Offer Data used in settlement:
  - If settlement is based on Simple format, fixed costs can be incorporated into those Price Quantity Pairs, with fixed costs recovered through the Imbalance and Premium Components;
  - If settlement is based on Complex format, fixed costs are explicitly stated while Price Quantity Pairs represent variable costs, therefore this side-payment mechanism is needed to recover fixed costs.
- This Payment or Charge is intended to:
  - Make the unit whole if their balancing market revenues are not sufficient to cover their additionally incurred fixed costs; and
  - To recover the unit's fixed costs which were saved.

Fixed Cost Payments or Charges - Key calculations

Fixed Cost Payments or Charges has four main formulas feeding into its calculation:

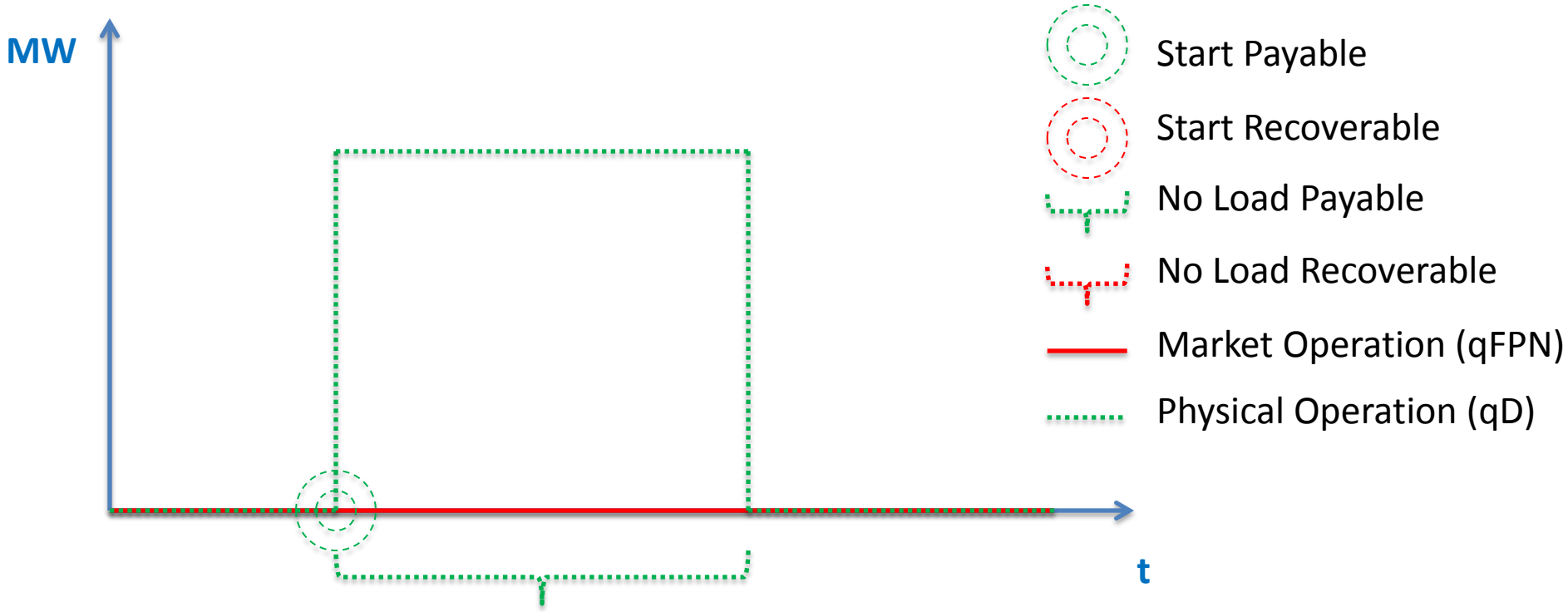
$$CFC_{ub} = \sum_{k \in b} CMWP_{uk} - \sum_{\gamma \in b} \left(CNLR_{u\gamma} + CSUR_{u\gamma}\right)$$

$$CMWP_{uk} = Max(COCMWP_{uk} - CREVMWP_{uk}, 0)$$ ← Per contiguous operating period

$$COCMWP_{uk} = \sum_{\gamma \in k} \left(CNL_{u\gamma} + CSU_{u\gamma} + \sum_{o} \sum_{i} \left(PBO_{uoi\gamma} \times \left(QAOLF_{uoi\gamma} - Max\left(QAOUNDEL_{uoi\gamma}, QAOBIAS_{uoi\gamma}, QAOTOTSOLF_{uoi\gamma}\right)\right)\right) + \sum_{o} \sum_{i} \left(PBO_{uoi\gamma} \times \left(QABLF_{uoi\gamma} - Min\left(QABUNDEL_{uoi\gamma}, QABBIAS_{uoi\gamma}, QABNFLF_{uoi\gamma}, QABTOTSOLF_{uoi\gamma}\right)\right)\right)\right)$$

$$CREVMWP_{uk} = \sum_{\gamma \in k} \left(\sum_{o} \sum_{i} \left(Max\left(PBO_{uoi\gamma}, PIMB_{\gamma}\right) \times \left(QAOLF_{uoi\gamma} - Max\left(QAOOPOLF_{uoi\gamma}, QAOBIAS_{uoi\gamma}, QAOUNDEL_{uoi\gamma}, QAOTOTSOLF_{uoi\gamma}\right)\right)\right) + \sum_{o} \sum_{i} \left(Min\left(PBO_{uoi\gamma}, PIMB_{\gamma}\right) \times \left(QABLF_{uoi\gamma} - Min\left(QABBPOLF_{uoi\gamma}, QABBIAS_{uoi\gamma}, QABUNDEL_{uoi\gamma}, QABNFLF_{uoi\gamma}, QABCURLLF_{uoi\gamma}, QABTOTSOLF_{uoi\gamma}\right)\right)\right) + CAOOPO_{u\gamma} + CABBPO_{u\gamma} + CCURL_{u\gamma}\right)$$

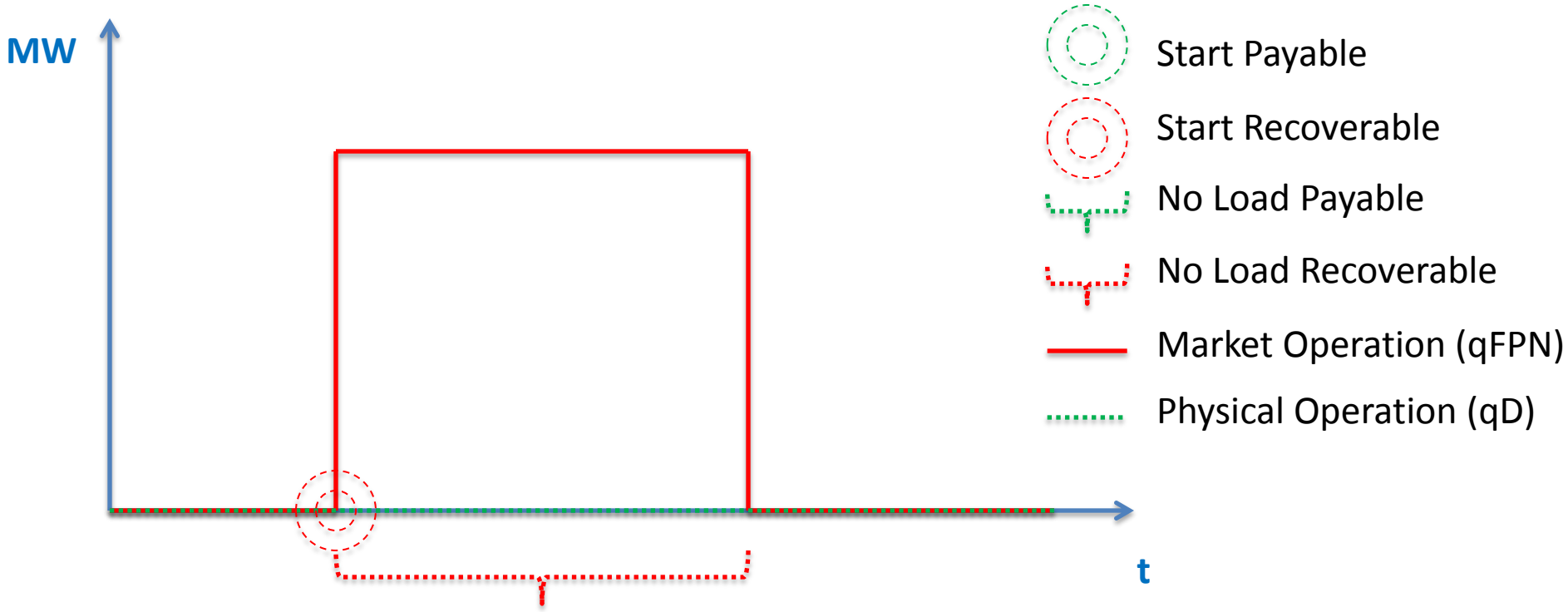
Fixed Cost Payments or Charges - Scenarios



Pure Commitment (when Complex COD applies):

- Start cost payable;
- No-load costs payable for entire commitment period.

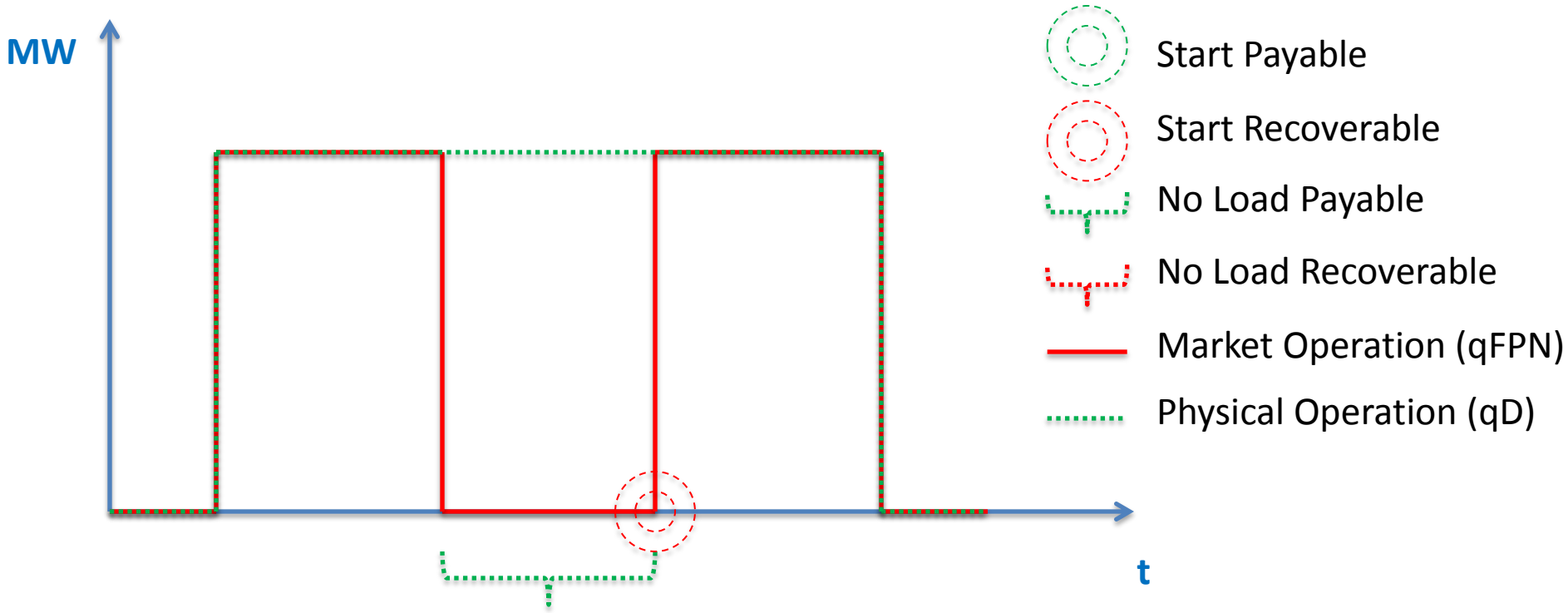
Fixed Cost Payments or Charges - Scenarios



Pure Decommitment (when Complex COD applies):

- Start cost recoverable;
- No-load costs recoverable for whole decommitment period.

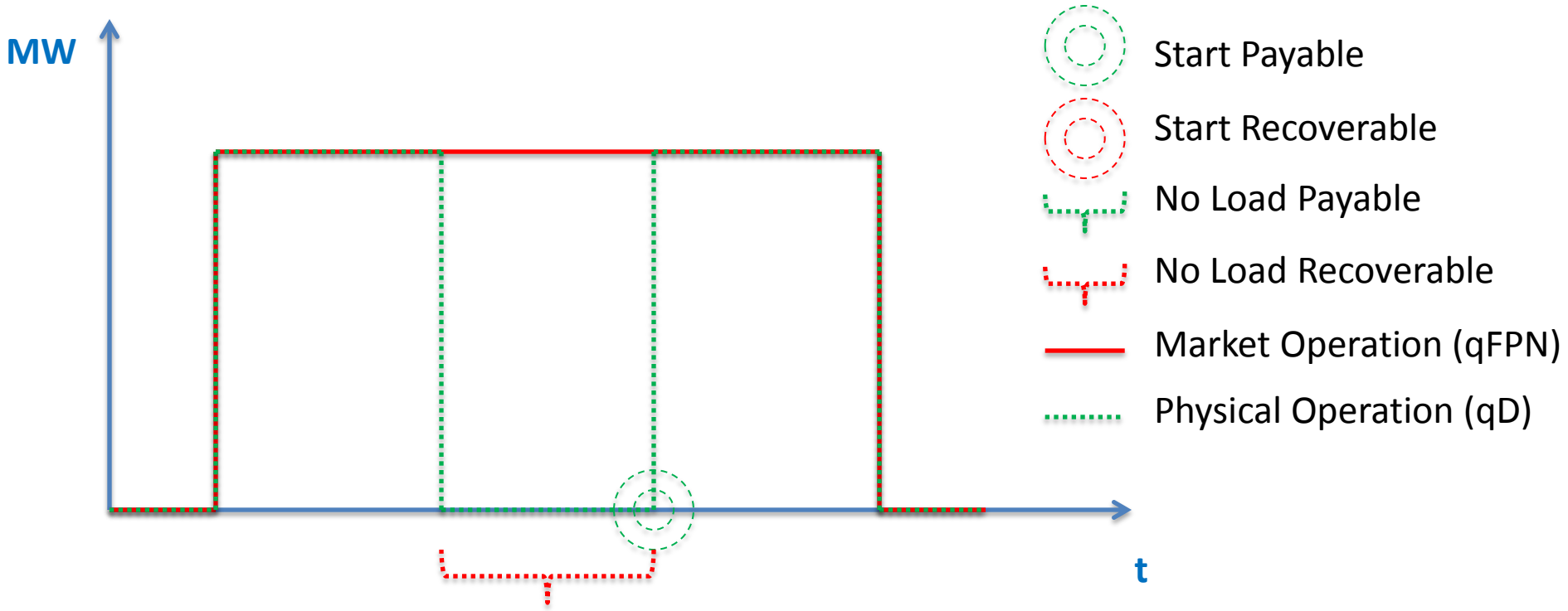
Fixed Cost Payments or Charges - Scenarios



Keep On (when Complex COD applies):

- Start cost recoverable for prevented start;
- No-load costs payable for additional commitment period.

Fixed Cost Payments or Charges - Scenarios



Two-Shift (when Complex COD applies):

- Start cost payable for additional start;
- No-load costs recoverable for reduction in commitment period.

Fixed Cost Payments or Charges - Modifications

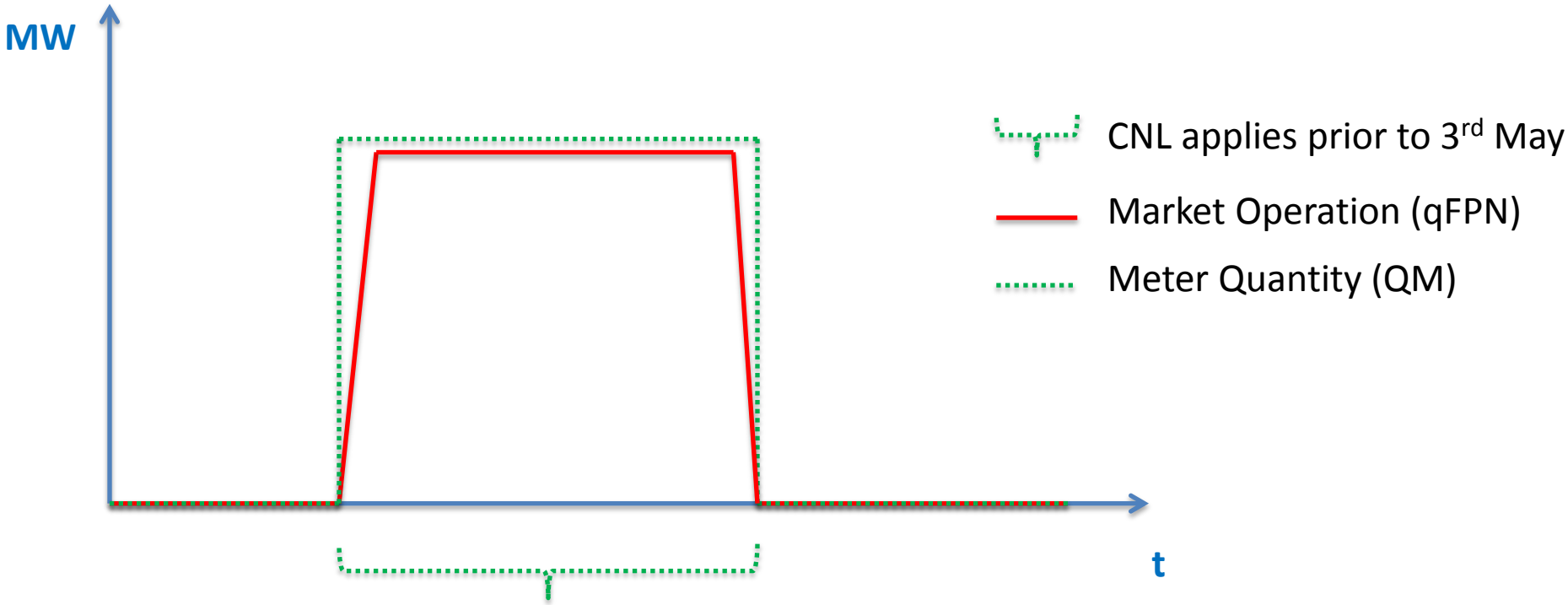
There have been two modifications made to the T&SC since go live:

- MOD_34_18 which relates to units being made whole for their negative imbalance revenue, including when the unit has no balancing market related costs (effective from 27th January 2019). Martin Kerin chaired a call with participants on how to calculate this mod on 24th May.
- MOD_07_19 which relates to an incorrect logical connector in the No Load Cost in T&SC F.11.2.3 (a) part (i) and (ii). The “and” has now changed to “or” which is effective from 3rd May 2019.

Both modifications are in production settlement system from 11th June 2019.

Fixed Cost Payments or Charges - Modifications

Example of MOD_07_19

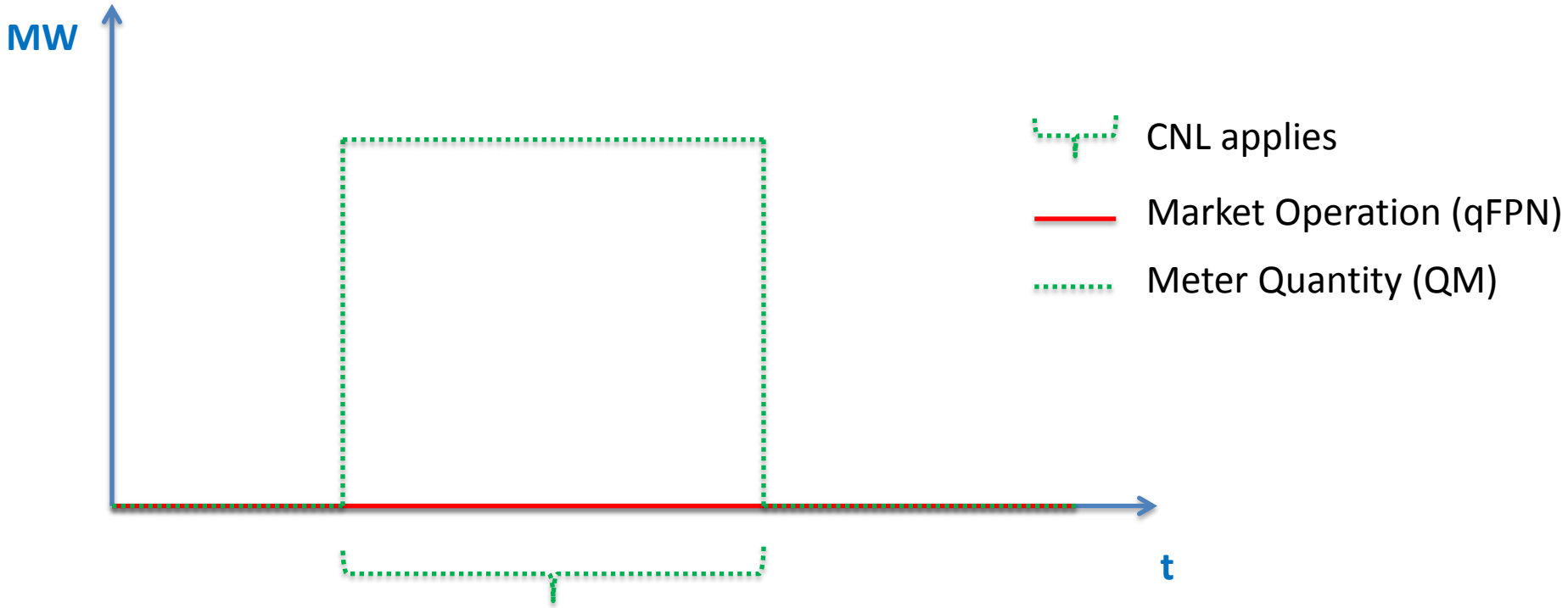


Prior to the mod if a unit had a non zero FPN value and a non zero meter value then the no load costs would have applied.

From 3rd May onwards, units will not receive no load costs in this scenario.

Fixed Cost Payments or Charges - Modifications

Example of MOD_07_19



In the example above, the unit will continue to receive no load costs when FPN equals zero and QM equals a non zero value.

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Brexit Update	Michael Kelly
Market Participant Roadmap	Mark Needham
Query Management	Anne Fitzgerald
Q&A	

Disputes and Repricing Update

1 October 2018 to 12 June 2019

ID	Issues to be resolved via repricing	Count of Days Issue Present	Dates Issue Present in Imbalance Pricing
5720	Negative Reserve Flag	8	1/10/18 to 8/10/18
5739	Exchange Rate	24	1/10/19 to 24/10/18
5737	Units being skipped in the QBOA calculations	220	1/10/18 to 26/3/19 29/4/19 to 11/6/19
5831	Cancelled Dispatch Instructions	220	1/10/18 to 26/3/19 29/4/19 to 11/6/19
5806	DESY Pump Storage Instructions	254	1/10/18 to 11/6/19
5712	Non Controllable Wind QBOAs	121	1/10/18 to 29/1/19
Rpc4	Wind DIs Datafeed Error	8	9/3/19 to 11/3/19 9/4/19 to 13/4/19
5785	COD sporadically switching between Simple and Complex	220	1/10/18 to 26/3/19 29/4/19 to 11/6/19
Rpc1	Incorrect QBOA for a Unit	8	1/10/18 to 8/10/18
Rpc2	QBOA being calculated for a Decommissioned Unit	2	1/10/18 to 2/10/18
112877	Under Test PN Validation Error	8	14/12/19; 7/1/19; 14/2/19; 15/2/19; 28/2/19; 22/3/19; 10/4/19; 17/4/19
NA	Dispatch Instruction Timing Issue	254	1/10/18 to 11/6/19
5817	Initial Conditions Being Incorrectly Applied	254	1/10/18 to 11/6/19
5929	LCLO Instruction causing QBOAs for whole 5 minute period to drop	254	1/10/18 to 11/6/19
5957	LOCL/LCLO not working across settlement day boundaries	254	1/10/18 to 11/6/19

Pricing Disputes

- All known manifest errors have been closed in Release C. The rolling dispute should cease from 12th June 2019.

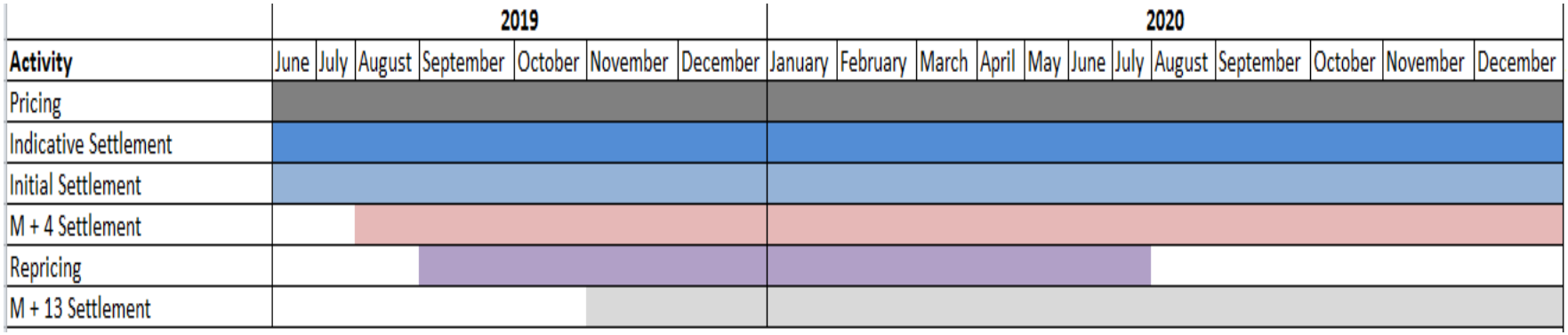
- If any new errors are detected in the pricing calculation, then we would remind Participants to follow the Pricing Dispute process; and continue to raise any anomalies identified with SEMO for investigation.

- Planned Repricing Implementation Date:
  August / September 2019* - Release D

  *Pending successful testing.

Repricing Plan

- Indicative Repricing and Resettlement Timeline below:



- Views on the timeline welcome.

- Repricing timeline assumes that parameter for the Pricing Materiality Threshold will be reduced to 0%.
  - SEMO will **not** be pursuing a Modification to the T&SC, instead SEMO intend to propose a parameters change to the Price Materiality Threshold.

- Currently the Pricing Materiality Threshold is set at 5% of Imbalance Price
  https://www.semcommittee.com/sites/semcommittee.com/files/media-files/SEM-17-046%20I-SEM%20Policy%20and%20Settlement%20%20Dispatch%20Parameters%20Decision.pdf

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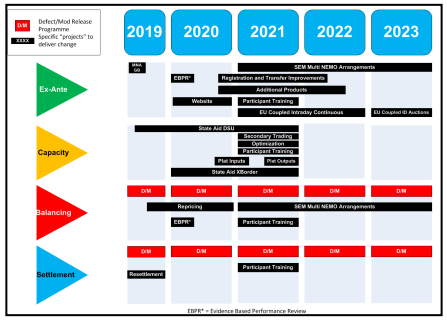
Market Development Roadmap

20th June 2019



Version: 1.0

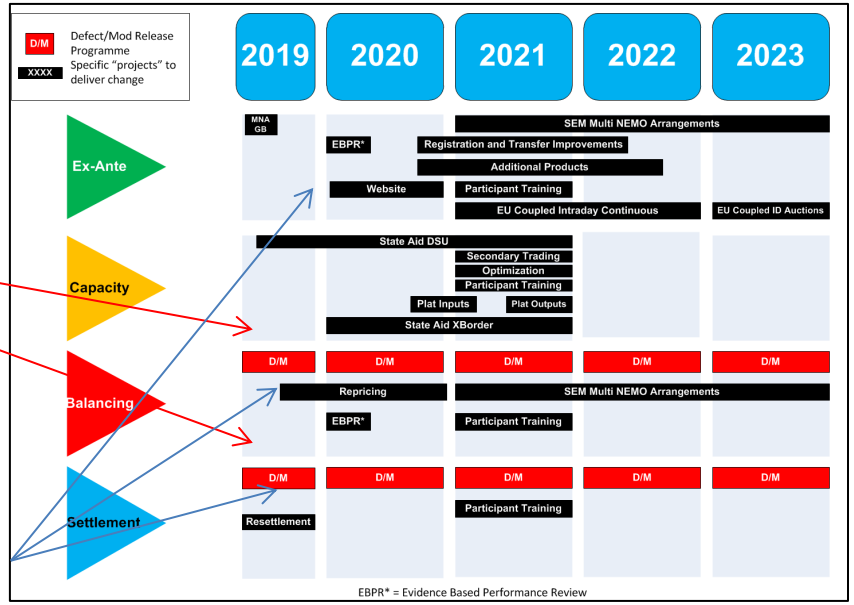
Date: June 20th 2019

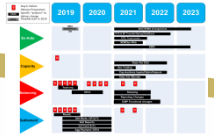
Mark Needham

EIRGRID semo Single Electricity Market Operator SONI

What is the Strategy?

- **Fixing known defects**
  - A **small number of key functional** projects that doesn't impact on defects





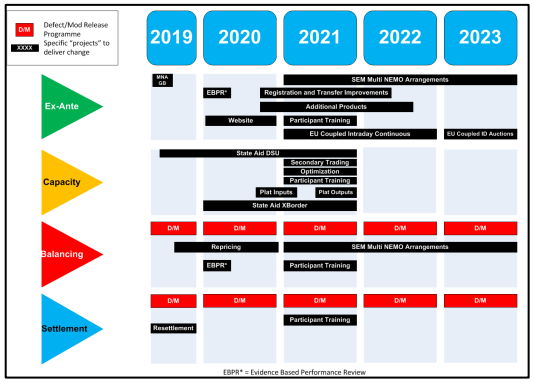
EIRGRID semo Single Electricity Market Operator SONI

Difference between MSDP & ROADMAP?

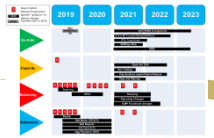
Market System Development Plan

- SEMO Based only
- 3 Years
- Includes infrastructure
- Licence Obligation
- Updated annually

Roadmap for Market Development

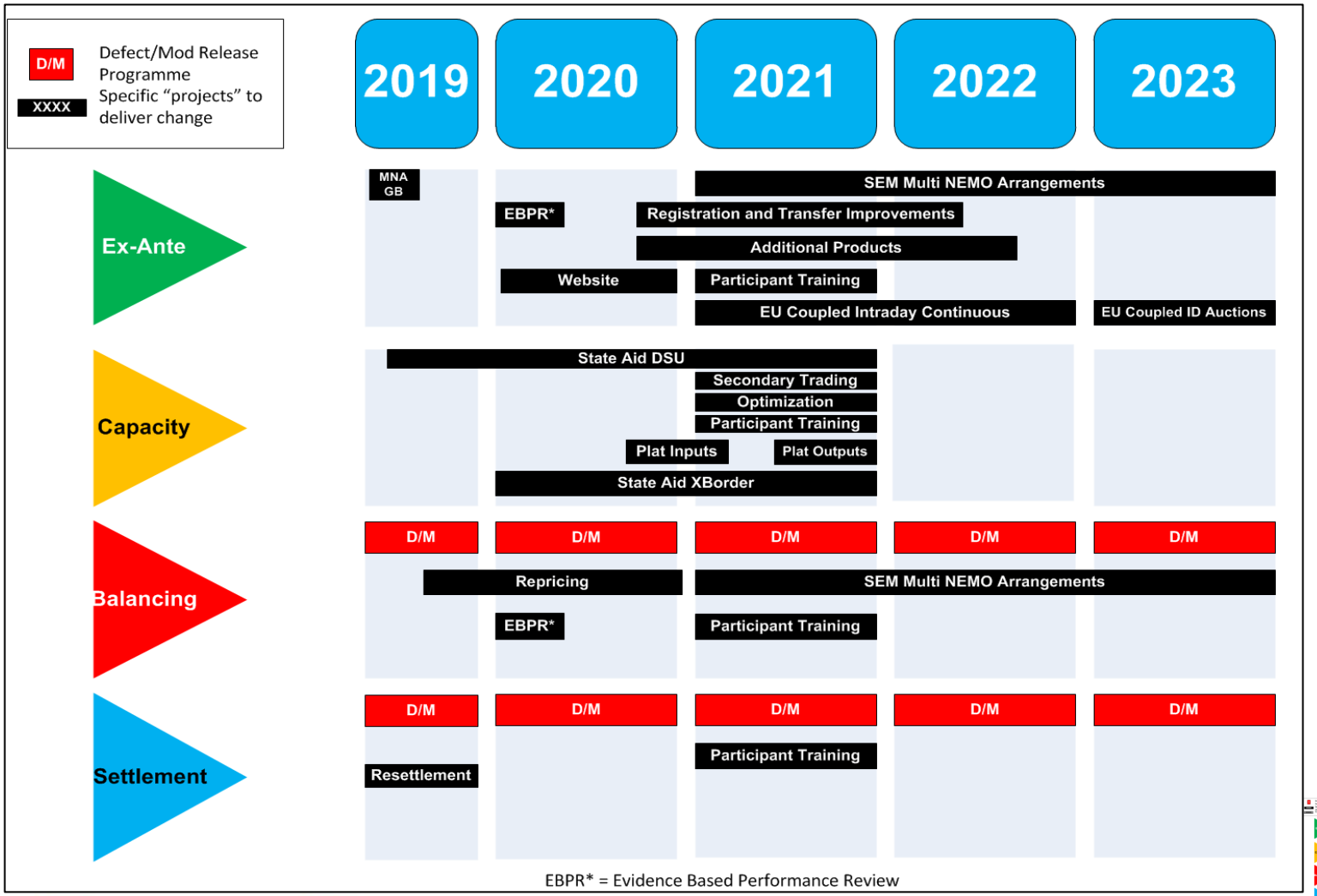


- All Markets
- 5 Years
- High Level Participant Facing
- EirGrid/SONI Initiative
- Updated every 6 months



EIRGRID semo Single Electricity Market Operator SONI

Roadmap



EIRGRID semo SONI
Single Electricity Market Operator

Next steps….

Get your feedback in by emailing **info@sem-o.com** using subject: Market Development Roadmap by **September 6th**

20/06/2019

Today's MOUG

06/09/2019

Feedback Deadline

29/11/2019

Publish Next Version of Roadmap

20/06/2019 - 06/09/2019

Market Participant Feedback

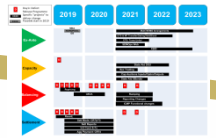
06/09/2019 - 14/11/2019

Prep for Next Roadmap

01/07/2019 01/08/2019 01/09/2019 01/10/2019 01/11/2019

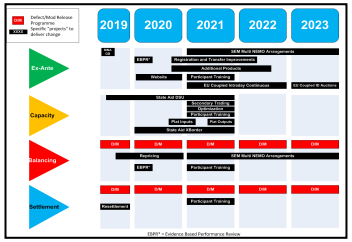
20/06/2019

29/11/2019



EIRGRID semo Single Electricity Market Operator SONI

Thank you!


2019
2020
2021
2022
2023
Ex-Ante
Capacity
Balancing
Settlement

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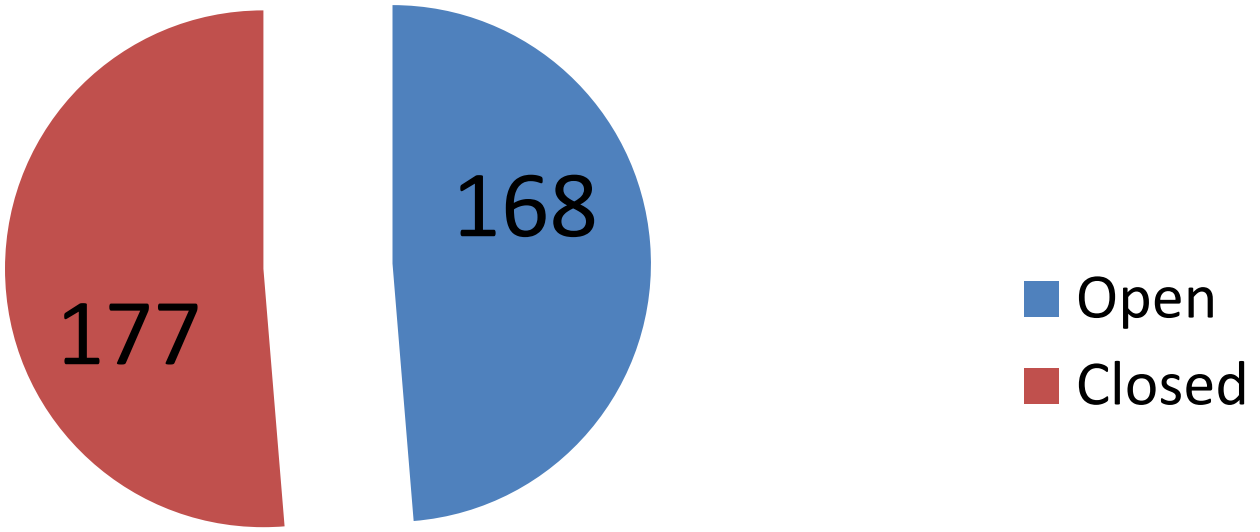
General Query Status – Overall Update



Queries Received and Resolved in May 2019

Formal Queries and Disputes – Oct 18 – May 19

Disputes:

Open: 4

Completed: 83

Rejected: 2

In total: **89**

Formal Settlement Queries:

Completed: 157

In progress: 27

In total: **184**

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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.

Fixed Cost Payments or Charges

References:

- Link to Instructor Led Training delivered in 2018
- Link to Modifications site (MOD_34_18 and MOD_07_19 are relevant for CFC)

Fixed Cost Payments or Charges - Glossary

CMWP	Make-Whole Payment
COCMWP	Make-Whole Payment Operating Cost
CREVMWP	Make-Whole Payment Revenue
PBO	Bid Offer Price
QAOLF	Loss-Adjusted Accepted Offer Quantity
QABLF	Loss-Adjusted Accepted Bid Quantity
QAOUNDEL	Undelivered Accepted Offer Quantity
QABUNDEL	Undelivered Accepted Bid Quantity
QAOTOTSOLF	Loss-Adjusted Trade Opposite TSO Accepted Offer Quantity
QABTOTSOLF	Loss-Adjusted Trade Opposite TSO Accepted Bid Quantity
QABNFLF	Loss-Adjusted Non-Firm Accepted Bid Quantity
QAOBIAS	Biased Accepted Offer Quantity
QABBIAS	Biased Accepted Bid Quantity
CAOOPO	Offer Price Only Accepted Offer Payment or Offer Price Only Accepted Offer Charge
CABBPO	Bid Price Only Accepted Bid Payment or Bid Price Only Accepted Bid Charge
CCURL	Curtailment Payment or Charge
PIMB	Imbalance Settlement Price
QABCURLLF	Loss-Adjusted Curtailment Accepted Bid Quantity
QAOOPOLF	Loss-Adjusted Offer Price Only Accepted Bid Quantity
QABBPOLF	Loss-Adjusted Bid Price Only Accepted Bid Quantity
POPO	Period of Physical Operation
POMO	Period of Market Operation
qFPN	Final Physical Notification Quantity profile