Market Operator User Group

Dublin, 11 September 2019



Agenda

Item	Presenter	
Welcome	Anne Fitzgerald	
Known Issues and Release Update	David Lee	
Ex-Ante Market	Michael Atcheson, Liam McAllister	
Balancing Market	John Ging, Rory Cafferky	
Repricing Update	Julie McGee	
Settlements	Claire Kane, Sean O'Rourke, John O'Dea	
Query Management	Claire Breslin	
Q&A		



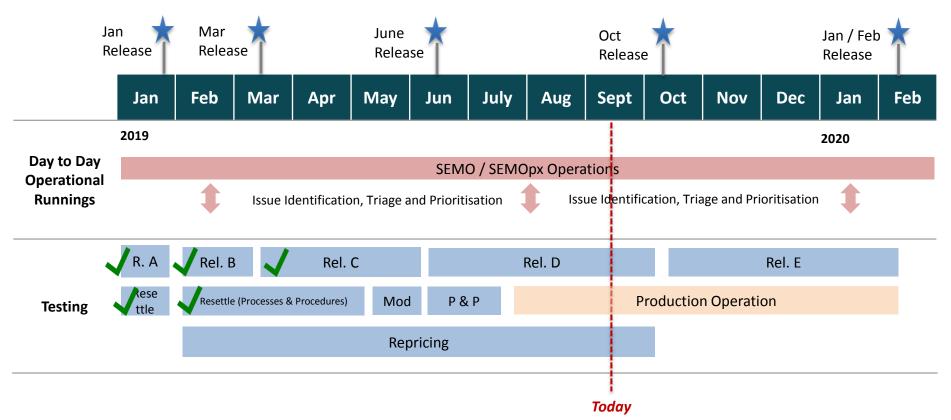
Agenda

Item	Presenter
Welcome	Anne Fitzgerald
Known Issues and Release Update	David Lee
Ex-Ante Market	Michael Atcheson, Liam McAllister
Balancing Market	John Ging, Rory Cafferky
Repricing Update	Julie McGee
Settlements	Claire Kane, Sean O'Rourke, John O'Dea
Query Management	Claire Breslin
Q&A	



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

- ABB release A deployed to production Tuesday 29th January
- ABB release B (MA 26 / CSB 1.2.2) deployed to production on 26th of March 2019
- ABB release C (MMS 1.1.8.1 / CSB 1.2.4) deployed to production 11th of June 2019
- ABB release D (MMS 1.1.9) is currently in test with target date to production ~mid October



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 29 th 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 26 th 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.

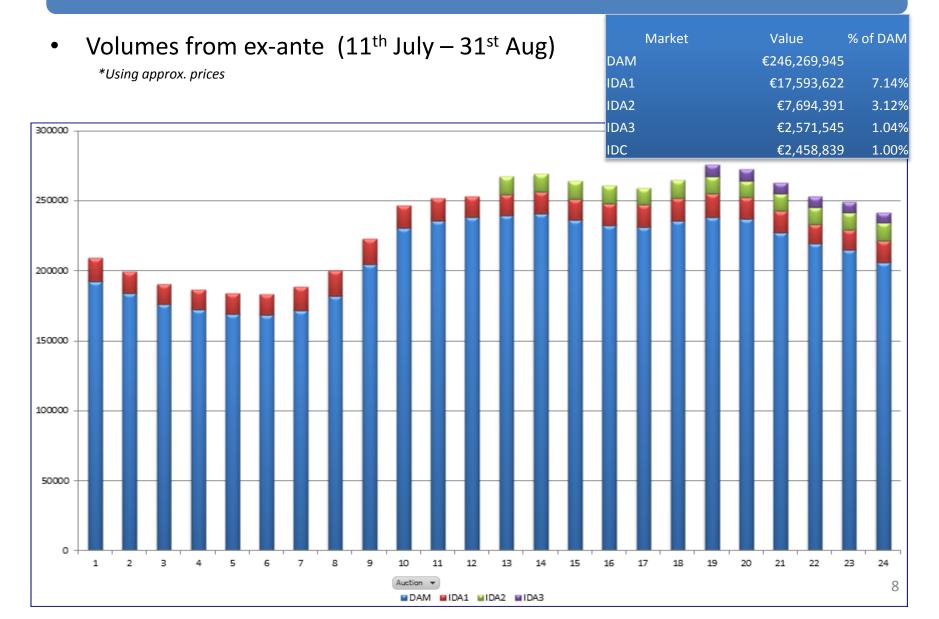
Release Bundle	Status	Known Issues Coverage	Expected Benefit
Release C	Deployed to Production 11 th of June 2019	26 Issues	 Fixes for Reports highlighted as priorities from participants Incorrect MW QTY values in REPT_078/079 CFC improvements Improvements to the QBOA function Consolidation of hotfixes
Release D	In Test	11 issues	 Improvement to CFC REPT_042 Net Interconnector schedule incorrectly calculated Repricing Functionality Access to participant reports before reg date
Release E	In Vendor Build	15 issues	 Application of DMAT in Imbalance Pricing FX rate for northern units QBOA improvements Incorrect application of LOCL/CRLO instructions REPT_082 publishing data for de registered units

Agenda

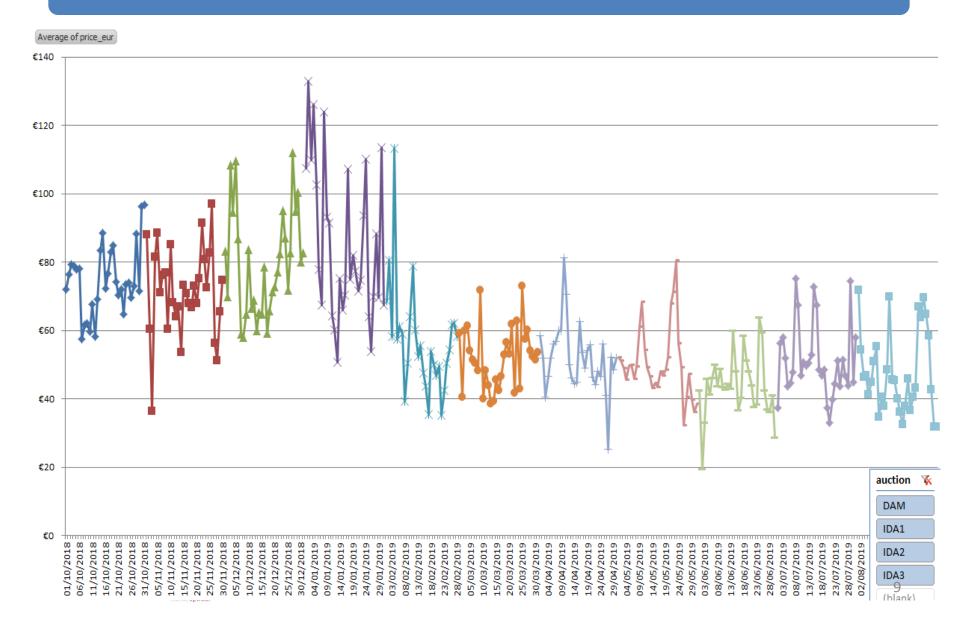
Item	Presenter
Welcome	Anne Fitzgerald
Known Issues and Release Update	David Lee
Ex-Ante Market	Michael Atcheson, Liam McAllister
Balancing Market	John Ging, Rory Cafferky
Repricing Update	Julie McGee
Settlements	Claire Kane, Sean O'Rourke, John O'Dea
Query Management	Claire Breslin
Q&A	



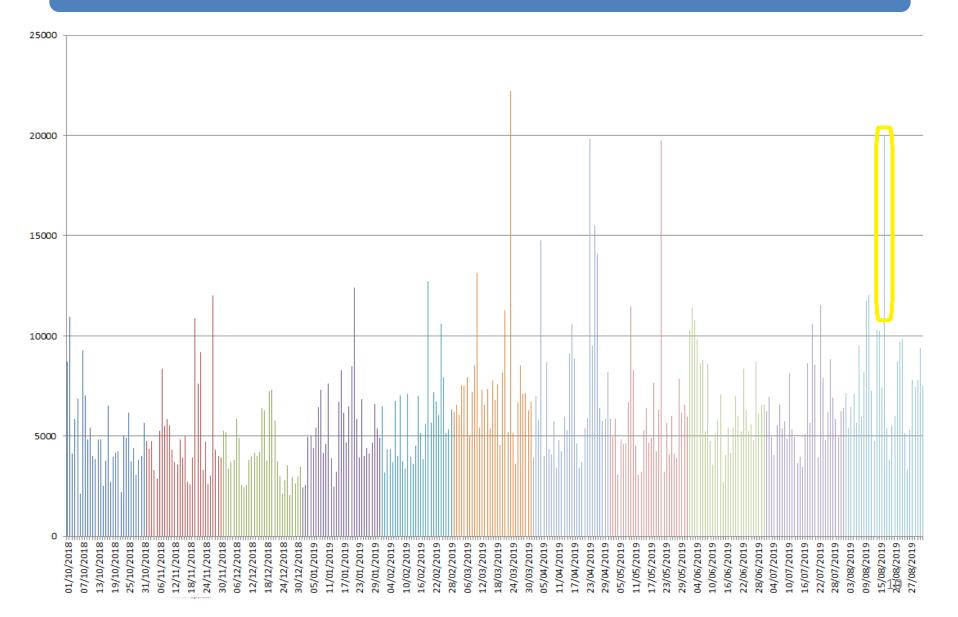
Ex-Ante Markets



Ex-Ante Auction Price Look Back - PRICES



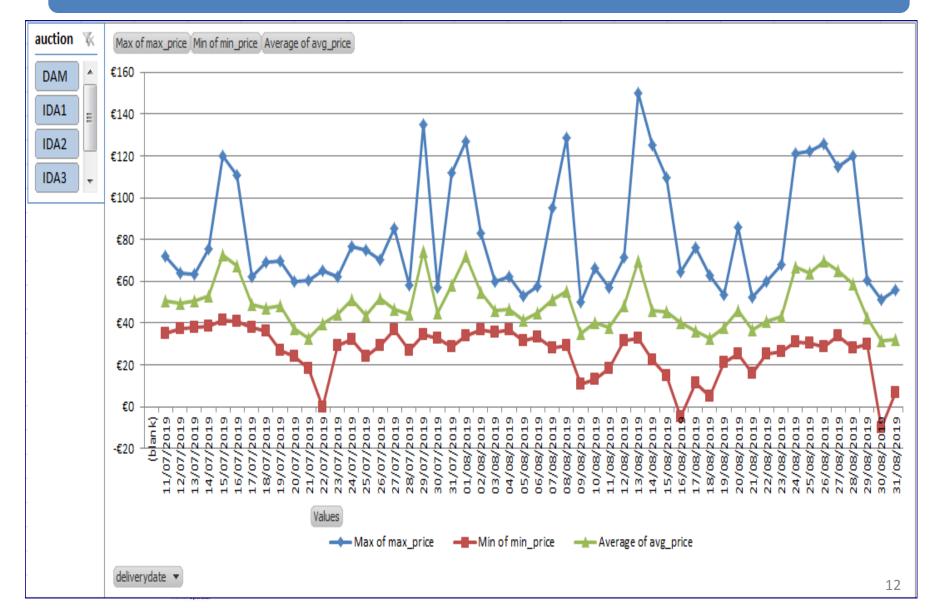
Ex-Ante Auction Price Look Back - VOLUMES



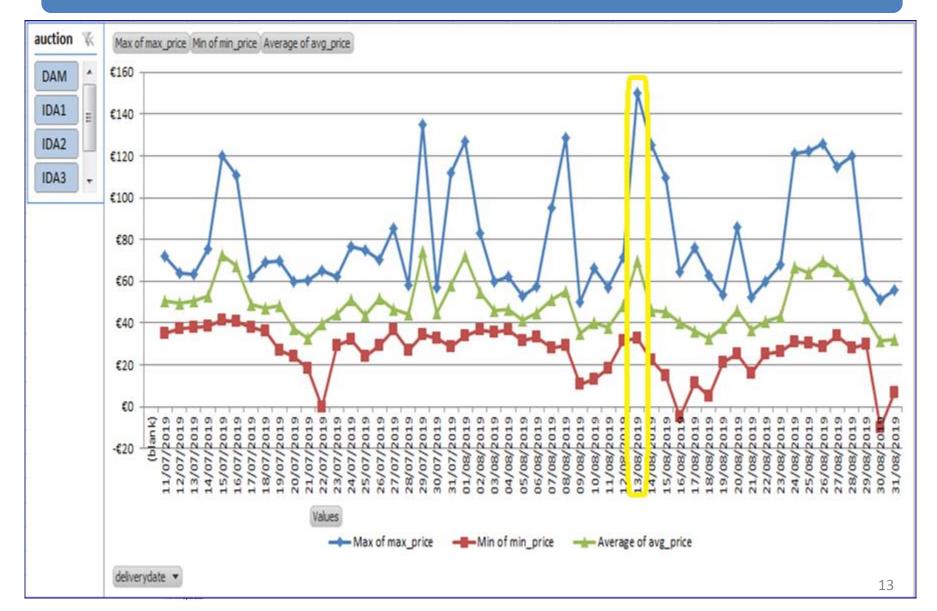
Ex-Ante Auction Price Look Back - VOLUMES

25000	semo			
	Affected Period:	15/08/2019		
20000	Status:	Open		
	Category:	European Transparency		
15000 -	Run Type:	N/A		_
	Created	15/08/2019 11:40		
10000 -	Last updated	15/08/2019 11:41		-
5000	customer-and-indu	AIT report published on the EirGrid Website under ustry/general-customer-information/outage-information 400930) is currently on forced outage with an estimated return to service time of 23:00 on the 15th August.		
01/10/2018	77/10/2018 13/10/2018 19/10/2018 31/10/2018 06/11/2018 12/11/2018 12/11/2018 30/11/2018 30/11/2018	06/12/2018 13/12/2018 13/12/2018 24/12/2018 30/12/2019 30/12/2019 11/01/2019 23/01/2019 11/01/2019 23/01/2019 16/02/2019 16/02/2019 12/02/2019 12/02/2019 12/03/2019 30/03/2019 30/03/2019 11/04/2019 30/03/2019 05/05/2019 05/05/2019 11/06/2019	22/07/2019 28/07/2019 03/08/2019 09/08/2019 15/08/2019 15/08/2019 27/08/2019	avera lond in

Ex-Ante Auction Price Look Back



Ex-Ante Auction Price Look Back



semopx

Full View

Ex-Ante Day Ahead & Intra-day Market Analysis

Overview

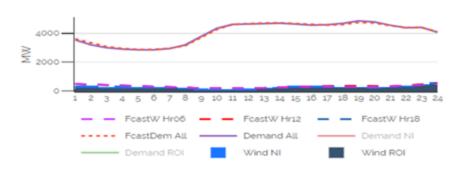
Market Structure Analysis

Auction Summary

2019-08-13

Auction	Stats	[Hi Lo	o Avg	MWh	[€]	
2019-08-13	DAM	€96.00	€32.45	€57.65	96,312	€5.552.673
2019-08-13	IDA1	€111.00	€35.59	€65.43	10,284	€672.815
2019-08-13	IDA2	€105.01	€40.83	€72.68	1.250	€90.833
2019-08-13	IDA3	€150.00	€60.83	€106.62	202	€21.559

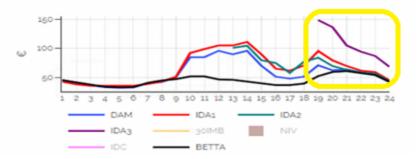
Forecast, Actual Wind v Demand - All Island



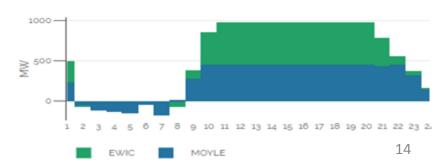
Forecast, Actual Wind v Demand - N.I.



Auction Pricing



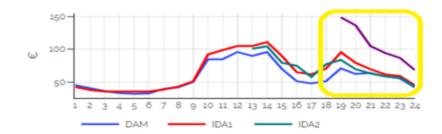
Interconnector Flows



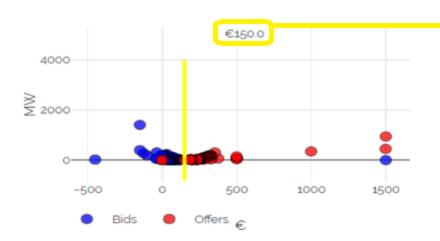
Choose Auction



Historical Prices



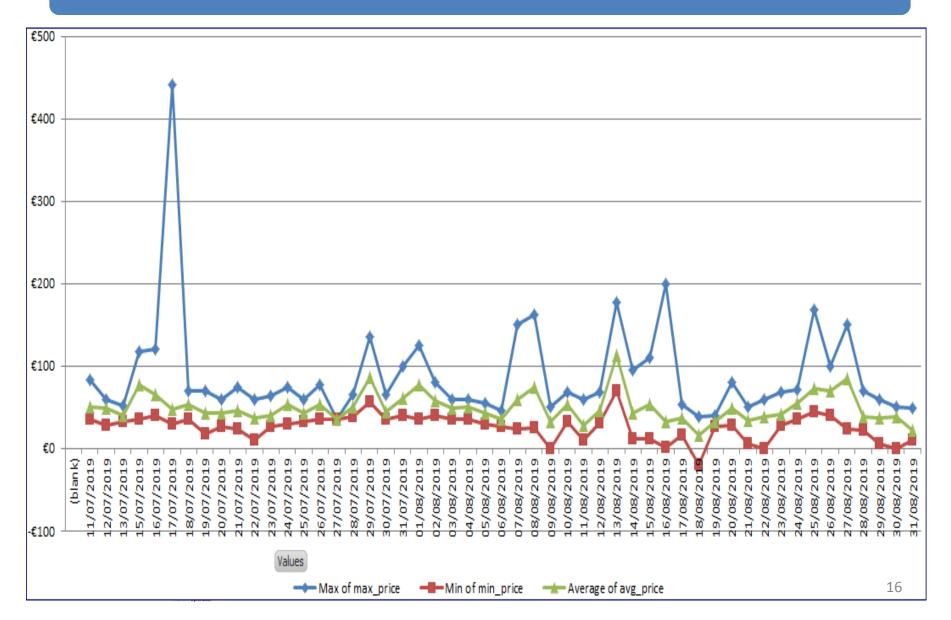
Structure



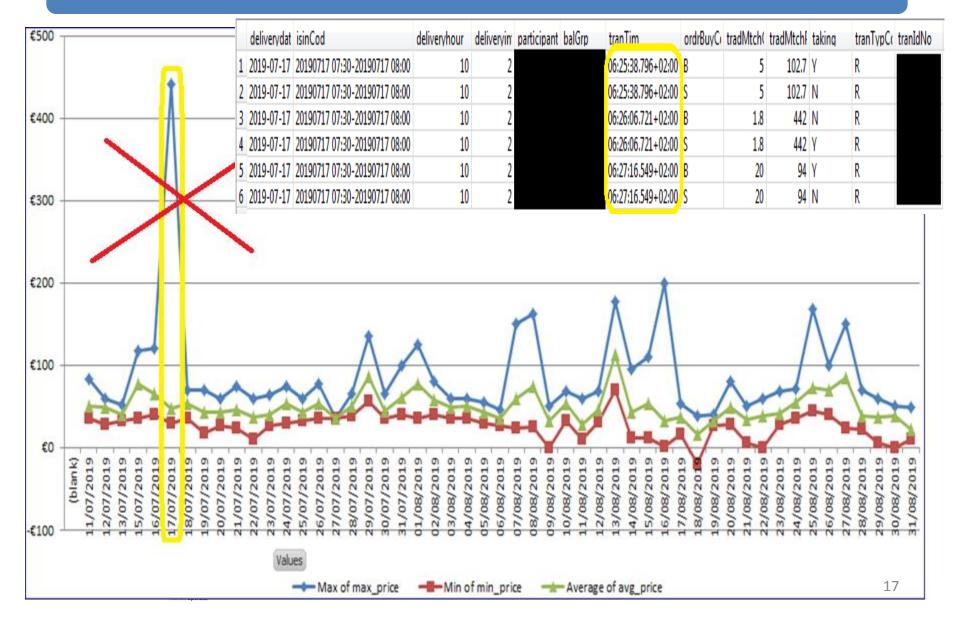
Auction Book						
Bids	Price	Offers	î			
3.30	€1,500.00	-945.40				
	€1,499.00	-450.00				
	€999.00	-350.00				
	€500.00	-80.00				
	€499.75	-50.00				
	€499.50	-50.00				
			▼ <i>▼</i>			

Auction Participan	its							
<pre> DeliveryDate </pre>	<pre>\$ auction </pre>	<pre>Participant</pre>	DeliveryHour	<pre>DeliveryInterval</pre>	<pre>unitid</pre>	↓ ExecutedVol	↓ area_sub_from	^
filter data								
2019-08-13	IDA3		19	2		2.9	ROI-EIRGRID-IDA3	
2019-08-13	IDA3		19	2		2.5	ROI-EIRGRID-IDA3	
2019-08-13	IDA3		19	2		1.7	ROI-EIRGRID-IDA3	
2019-08-13	IDA3		19	2		1.3	ROI-EIRGRID-IDA3	15
								15 🛫

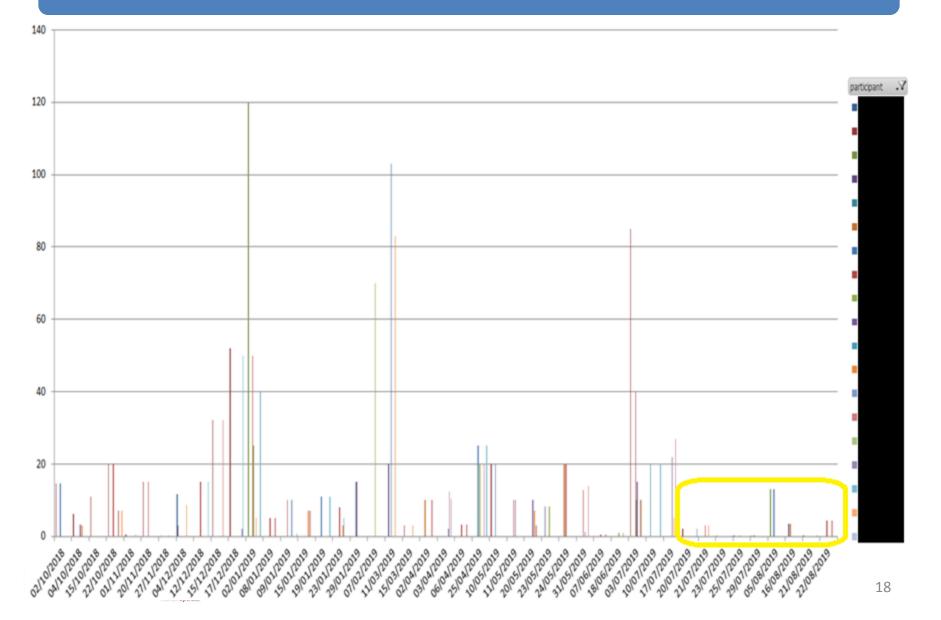
Ex-Ante IDC Price Look Back - RECALLS



Ex-Ante IDC Price Look Back - RECALLS



Ex-Ante IDC Price Look Back - RECALLS



Ex-Ante Market Analysis

• In Summary

- ✓ SEMOpx markets are orderly
- ✓ Processes are working!



ETS Release Schedule

Version	Content	Client type	Impact	Timeline
V3.3.2	 Introduction of unique trade and trader ID Start & End Date on ETS Portfolios Additonal monitoring function for MO 	MO and Trader client	Format of the market results file and the bid file will change. Impact on Market Participants. Impact on SEMOpx Auction Remit files.	19 th of November 2019 Technical Go-Live 1 st trading date 20 th of November.
V3.4	Introduction of block bid submission graph in the trader GUI Trading Session Automation	MO and Trader client	Currently no impact for SEMOpx members	End of 2019, Q1 2020.



M7 Release Schedule

Version	Content	Impact	Timeline
V6.7	No functional changes for SEMOpx	This has no impact on SEMO as only AOT products are impacted. Change in DBAG password policy, passwords will expire every 90 days. Members can reset them anytime 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. Now includes REPORT users New Comtrader 6.7.90104 available (optional for SEMOpx) but recommended to use the latest version	10th of September 18:00- 23:00 BST
V6.8		WebStart Comtrader to be discontinued due to changes in the support of Java	ТВС



Central Scenario for "No Deal" Brexit

- The SEM will continue to operate as an all-island market in the event of a 'no deal' Brexit .
- In a 'no-deal' Brexit scenario the implications for the day ahead and intraday cross border markets are:
 - Day ahead market :
 - An All island local day ahead market will continue
 - There will no longer be day ahead cross border trade
 - Intraday market:
 - Will continue as is, including cross border trade
- SEMOpx will work with relevant parties to implement new cross border arrangements, should they be needed, but this will not be available on day 1 post a 'no deal' Brexit.
- On day 1 post a 'no deal' Brexit the key difference will be the removal of the cross border day ahead auction but all other elements of the trading arrangements will remain the same.
- Further details on intended trading arrangements for the SEM under a 'no-deal' Brexit are provided in communications by the SEM Committee (the decision making authority for SEM matters) in a <u>notice to industry</u> and the Northern Ireland Utility Regulator in an <u>information note</u>. The Department for Business, Energy and Industrial Strategy has also published a <u>Technical Notice</u> to stakeholders in preparation for Brexit.



Auction Timings and Trading Periods "As is"

The table below summarises the SEMOpx auctions:

Market Name	Gate Window Closure	Delivery Periods	Market Coupling
DAM	11:00 (D-1)	23:00 – 23:00 (24 * 1 hour)	Coupled with Europe
IDA – 1	17:30 (D-1)	23:00 – 23:00 (48 * ½ hour)	Coupled with GB
IDA – 2	08:00 (D)	11:00 – 23:00 (24 * ½ hour)	Coupled with GB
IDA – 3	14:00 (D)	17:00 – 23:00 (12 * ½ hour)	Local trading only



Auction Timings and Trading Periods "To Be"

On Day One

The table below summarises the SEMOpx auctions:

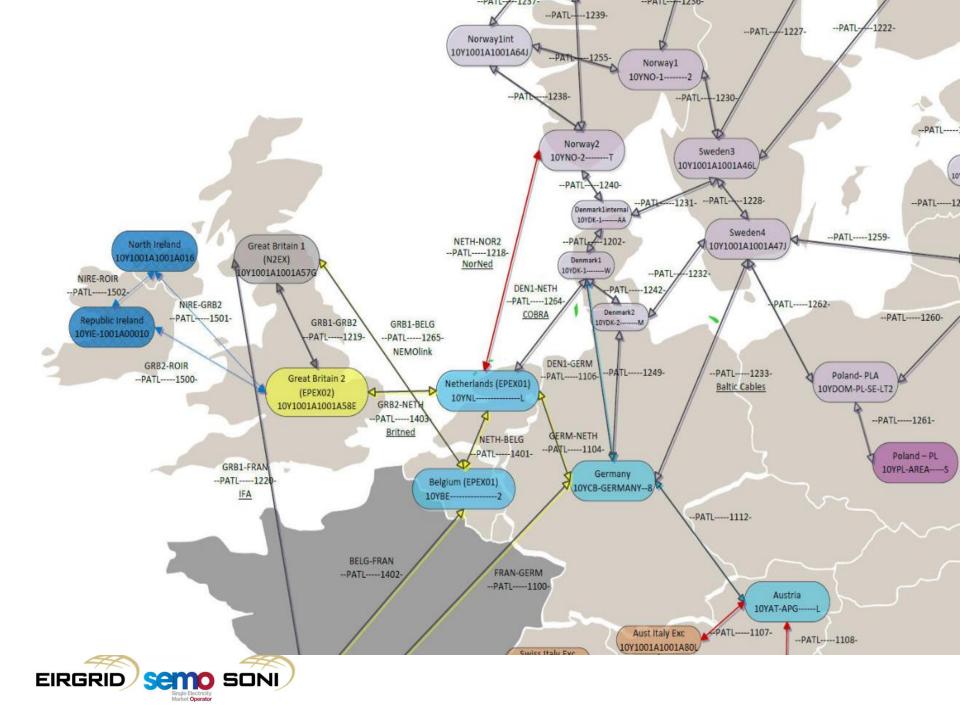
	Market Name	Gate Window Closure	Delivery Periods	Market Coupling				
IC Capacity Transfers	DAM Local	11:00 (D-1)	23:00 – 23:00 (24 * 1 hour)	Isolated Local Auction with Zero IC capacity				
from DAM to IDAs	IDA – 1	17:30 (D-1)	23:00 – 23:00 (48 * ½ hour)	Coupled with GB				
	IDA – 2	08:00 (D)	11:00 – 23:00 (24 * ½ hour)	Coupled with GB				
	IDA – 3	14:00 (D)	17:00 – 23:00 (12 * ½ hour)	Local trading only				



SEMOpx Service Implications

- No functional changes to trading in Auctions or Continuous
- Products and result publication timings remain unchanged
- Post Coupling services (ECC Physical and Financial Settlement) remain unchanged
- Technical implementation will consist of:
 - 1. an interim solution with no MRC topology changes but no DAM coupling
 - 2. An enduring solution with permanent MRC topology changes and no DAM coupling





Phased Technical Solution for DAM

Context: In case of no-deal Brexit, the **two GB bidding zones** will be excluded from the MRC topology. **Proposed Plan**

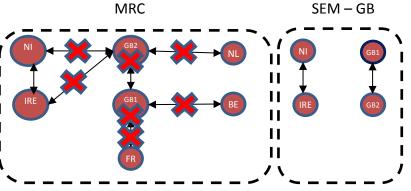
- An Interim Solution allows flexibility to retain existing DAM coupling should a no-deal Brexit be avoided.
- A move to the MRC agreed **Enduring Solution** (in approximately 6-8 weeks) after the Brexit date (currently 31/10/2019) has passed.

Interim Solution : Back Up Procedures

GB & IE/NI bidding zones will be decoupled from the MRC topology. EPEX will run both bidding zones as a Local Auction in Back up Mode.

Enduring Solution: Two separate local auctions GB/IE&NI

GB bidding zones are excluded from the MRC topology. SEMOpx and EPEX launch two separate local auctions.



Schema representation applicable for both scenarios

Note: During both phases the SEM Ex-Ante markets will operate in the same way i.e. no coupling in the DAM, it is only the underlying technical solution that will change.



Agenda

Item	Presenter							
Welcome	Anne Fitzgerald							
Known Issues and Release Update	David Lee							
Ex-Ante Market	Michael Atcheson, Liam McAllister							
Balancing Market	John Ging, Rory Cafferky							
Repricing Update	Julie McGee							
Settlements	Claire Kane, Sean O'Rourke, John O'Dea							
Query Management	Claire Breslin							
Q&A								



Data issues impacting on System Operations

1. Submission of PNs that are outside of Real-Time availabilities submitted via EDIL, e.g.:

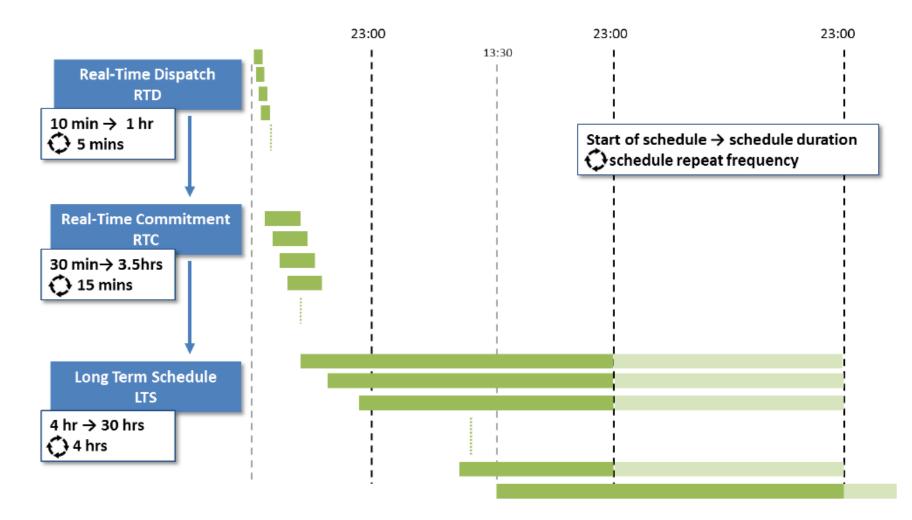
- PN < Lower Operating Limit (LOL)
- PN > Higher Operating Limit (HOL)
- PN within unit forbidden zone
- PN with no EDIL and/or MPI availability
- PN for retired units or units on long term outage Default data
- 2. Failure to update MPI with revised availability (to match EDIL) Submission of invalid COD data for selected TOD set, e.g.:
 - Commercial Offered Data for CCGT mode when unit is in OCGT mode
- 3. Failure to update MPI with revised availability (to match EDIL)
 - Typically post tripping or during outages
 - Ambient conditions
 - Rounding to nearest Integer
- 4. Combined submissions for "Units under Test" and non-test units
 - Treated as a single transaction which must be approved within short timeframes

5. Tertiary fuel

• Submission of availability on Tertiary fuel not accounted for in Market Design

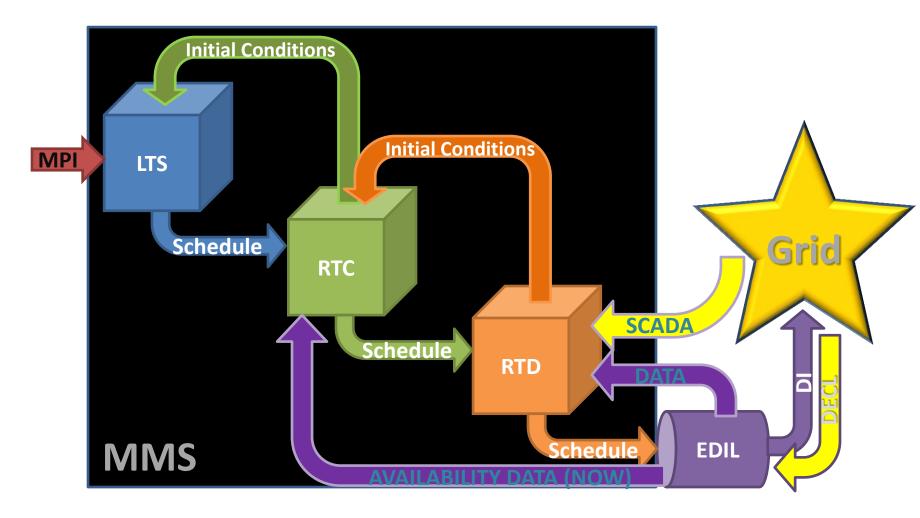


Scheduler periodicity and horizons





MMS Data Flows – Forecasts for long term horizons





Obligations to declare availability

- Real Time Declared Availability (per EDIL)
- Forecast Availability (per MPI)
- EirGrid Grid Code and SONI Grid Code (SDC1 SCHEDULING AND DISPATCH CODE) SDC1.4.1 states:
 - The Availability Notice shall state the Availability of the relevant CDGU, Controllable PPM, Interconnector, Demand Side Unit or Pumped Storage Plant Demand as the case may be, (including, in the case of a CCGT Installation, the Availability of each of the CCGT Units within it) for each Imbalance Settlement Period in the time up to and including the end of the relevant Trading Day (subject to revision under SDC1.4.3.6).
 - This shall be submitted not later than the **Gate Closure 1** each day (i.e. 13:30 on TD-1)

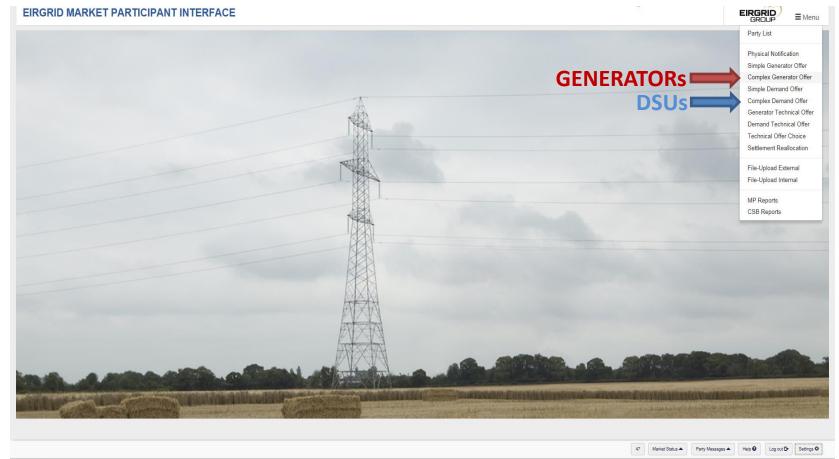
Clarification on DSU forecast availability

- A <u>Note for Participants on FNDDS Calculation Methodology</u> which was published in November 2018.
 - "DSUs only declare availability (forecast and real-time) for which the SOs can schedule to, while ensuring Distribution System Operator (DSO) and Distribution Network Operator (DNO) congestion restrictions are still observed. This entails submitting Physical Notifications, forecast availability and declared availability prior to Balancing Market gate closure, and in real-time operation, reflecting DSO / DNO Instruction Sets. SOs schedule and dispatch DSUs up to their declared availability only (DSU availability which reflects for DSO / DNO instruction sets)."



Tutorial – Updating availability per MPI

<u>https://mms.sem-o.com/mpi/</u>



https://int.grid.ie/mpi/#/complexGenOffer



95% -

Generators – Step 1: Header data

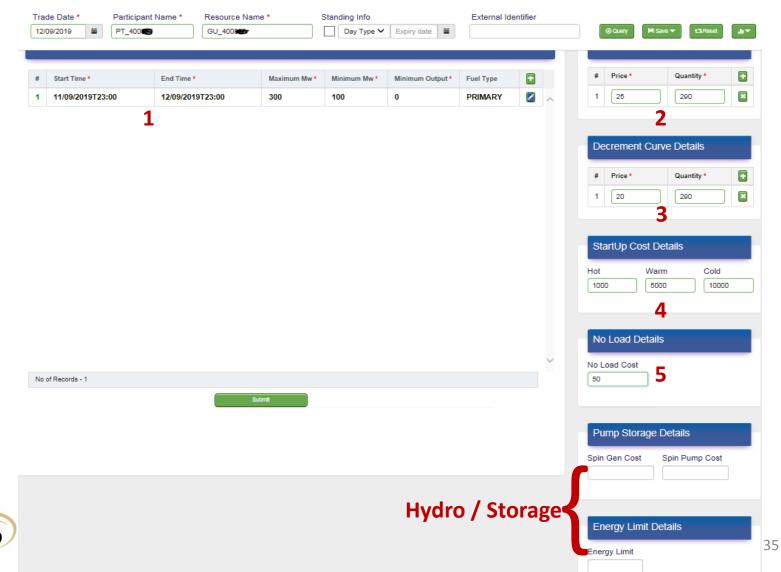
EIRGRID

	cipant Name * Resour		Standing Info	Expiry date.	External Id	entifier	😔 Query 🛛 🖁	I Save 🔻 🚺 t 🕽 Reset	
nterval Details		-					Increment Cu	rve Details	
# Start Time *	End Time *	Maximum Mw*	Minimum Mw *	Minimum Output *	Fuel Type	Ð	# Price *	Quantity *	
						^			
							Decrement C	urve Details	
							# Price *	Quantity *	
							StartUp Cost		
							Hot W	arm Cold	
							No Load Deta	ils	
							No Load Cost		
						~			
No of Records - 0		Submit							
							Pump Storage	e Details	
							Spin Gen Cost	Spin Pump Cost	: ר
									_
							Energy Limit I	Dotails	
							Energy Limit		

Generators – Step 2: Data entry (per BCoP)

COMPLEX GENERATOR OFFER

EIRGRI



Generators – Step 3: Reflect Actual Output

	COMPLEX GENERATOR OFFER														
	_	ade Date *	Participant					Standing Info							
	12	/09/2019	PT_400	•	GU_400		Day Type 🗸	Explry date.				(B) Cuery	H Save **	12Reset	41 T
	Me	essages (1)													
	-													_	
	#	Type		Message Successfully pr	ocessed the Gen	eratorOfferDiv	2								
							3								
	Int	Interval Details													_
	Int											Increment	t Curve Det	ans	
	=	Start Time *		End Time *		Maximum Mw*	Minimum Mw*	Minimum Output •	Fuel Type			# Price *	Qu	antity *	
· Ampliante 1	1			12/09/2019		300	100	0	PRIMARY		^	1 20	2	80	×
• Ambients 1	2			12/09/2019		310	100	0	PRIMARY			2 25	3	00	
• • • • • • •	4	12/09/2019112:3		12/09/2019		300	100	0				3 30	3	20	×
 Outages 	-	12032013110.			-				- rumrett -						
												Decremen	nt Curve De	etails	
 Restrictions 												# Price *	Gu	antity *	
												1 18		80	
												2 20			
												3 22		20	
															_
												StartUp C	ost Details		
												Hot	Warm	Cold	
												1000	5000	10000	
											~	No Load I	Details		
	No	of Records - 4										No Load Cos	t		_
					54	bmit						50			
						2									
						2						Pump Sto	rage Detai	s	
												Spin Gen Co		Pump Cost	
												opin Gen Co		ump cost	
A															
EIRGRID												Energy Li	mit Details		36
												Energy Limit	_		

DSUs – Step 1: Header data

EIRGRID

	ipant Name * Resour	ce Name *	Standing Info	Expiry date.	External Ident	bher	🛛 Query 📕 Save 🔻	tlReset
Interval Details						Increment C	urve Details	
# Start Time *	End Time *	Maximum Mw*	Minimum Mw*	Minimum Output •		# Price*	Quantity *	
					^	Decrement C	Curve Details	
						# Price*	Quantity *	
						Shutdown C	nst Details	
						Value		•
					~			

DSUs – Step 2: Data entry (per BCoP)

COMPLEX DEMAND OFFER

EIRGRID

	Participant Name *	Resource Nar	ne *	Standing Info		Exte	rnal Identif	fier			_
09/2019	PT_400	DSU_401		Day Type 🗸	Expiry date.					Guery H Save ▼	tilRese
erval Details										rve Details	
rvai Details								inc	rement Cu	ive Details	
Start Time *	End Time *		Maximum Mw*	Minimum Mw*	Minimum Output •			#	Price *	Quantity *	
11/09/2019T23:0	12/09/20	19T23:00	8	1	0	×	~	1	-50	1	
	1							2	-40	2	
	-							3	-30	3	
								4	-20	4	
								5	-10	5	
								6	0	6	×
								7	10	7	-
								8	20	8	
								9	30	9	*
								10	40	10	
								#	Price *	Quantity *	
								1	-55	1	
f Records - 1							~	2	-45	2	-
		8	ubmit					3	-35	3	-
								4	-25	4 3	-
								5	-15	5	
								6	-5	6	-
								7	5	7	-
								8	15	8	×
								9	25	9	×
								10	35	10	-
								Sh	utdown Co	st Details	
								Value		-	
								10		4	

10

DSUs – Step 3: Reflect Actual Output

COMPLEX DEMAND OFFER

	_	de Date * Particips 09/2019 E PT_400		source Name * SU_401	Standing Info	 Expiry date. 	Exte	rnal Ider	ntifier		O Query R Save	• tiRes	et
	Inte	erval Details							In	crement C	urve Details		
Ambients	#	Start Time *	End Time *	Maximum Mv	* Minimum Mw*	Minimum Output •			#	Price *	Quantity *		
Amplents	1	11/09/2019T23:00	12/09/2019T01:3	80 8	1	0		~	1	-50	1		
Outeree	2	12/09/2019T01:30	12/09/2019T07:3	30 10	1	0			2	-40	2		
Outages	3	12/09/2019T07:30	12/09/2019T11:	5	1	0			3	-30	3		
	4	12/09/2019T11:30	12/09/2019T17:3	80 4	1	0			4	-20	4		
Restrictions	5	12/09/2019T17:30	12/09/2019T23:0	9 01	1	0			5	-10			
Constraints									6	0	6		
constraints									7	10	7		
									8	20	8		





	Decrement Curve Details									
# F	Price *	Quantity *								
1 [-55	1	*							
2 [-45	2	*							
3 (-35	3	×							
4 [-25	4	*							
5 (-15	5	×							
6 (-5	6	*							
7 (5	7	×							
8 (15	8	*							
9 (25	9	*							
10 (35	10	*							

9

10

* *

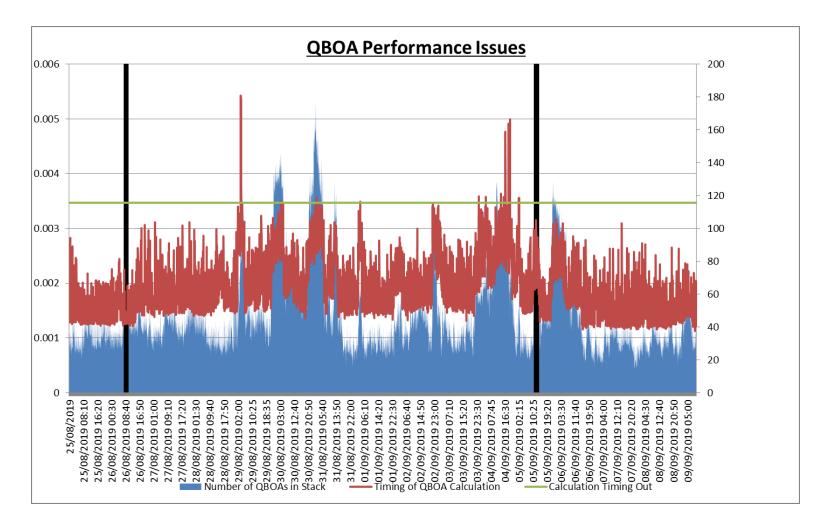
9 30

10 40

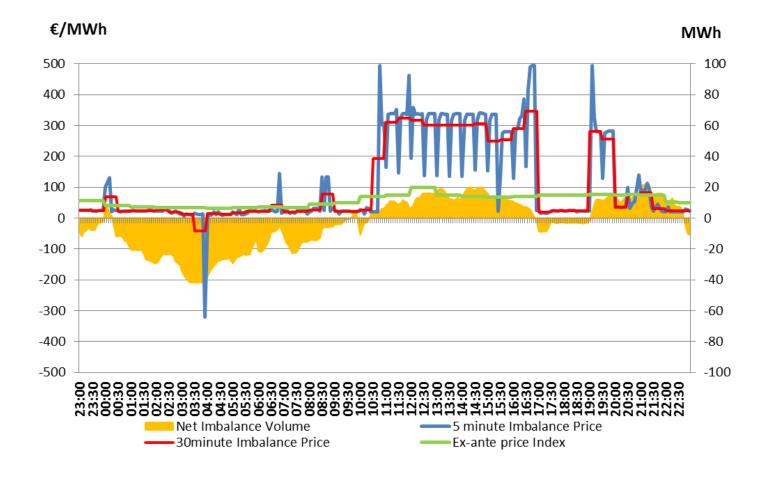
Shutdown Cost Details

Value 10

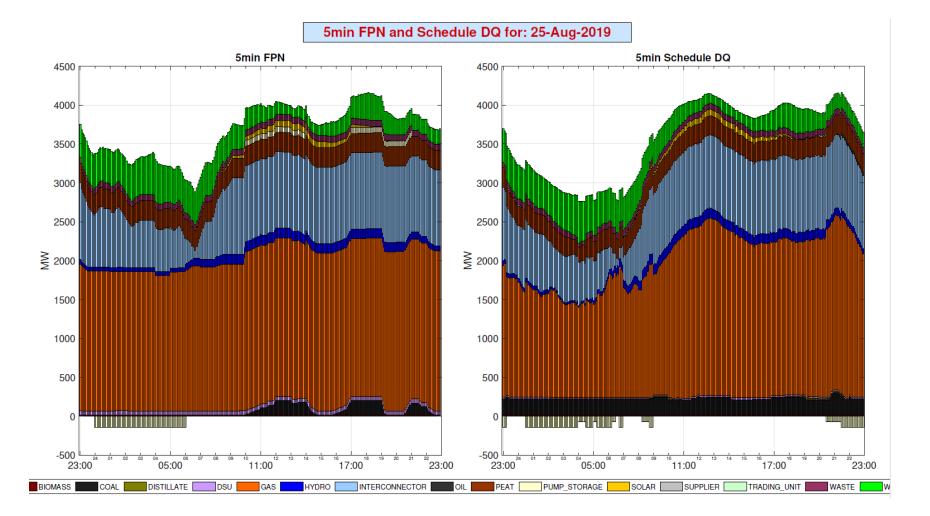
Imbalance Price Performance issue



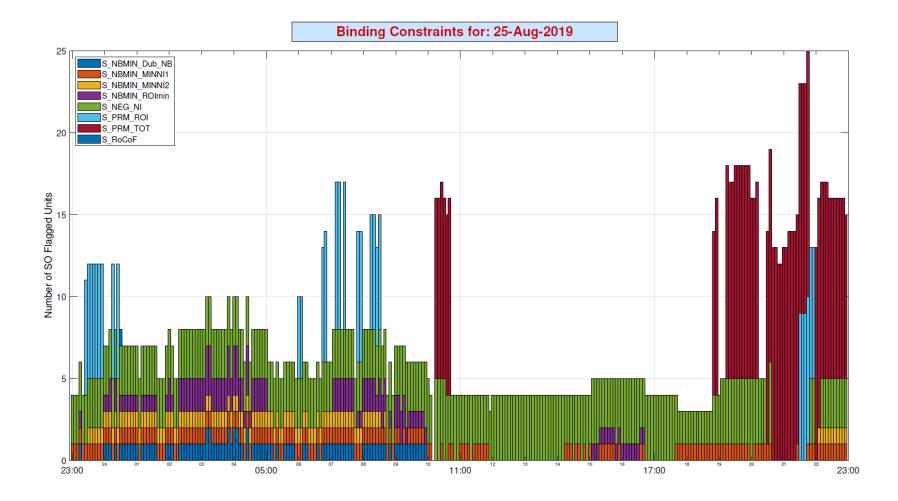






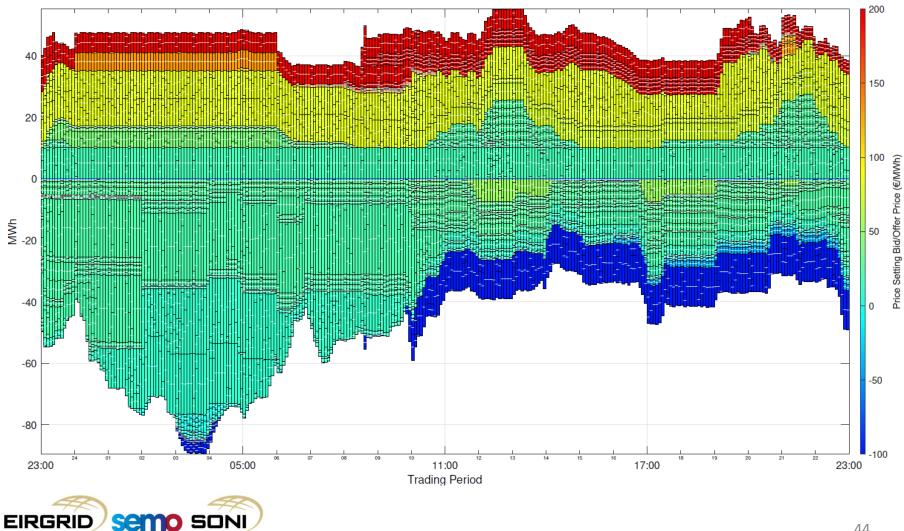




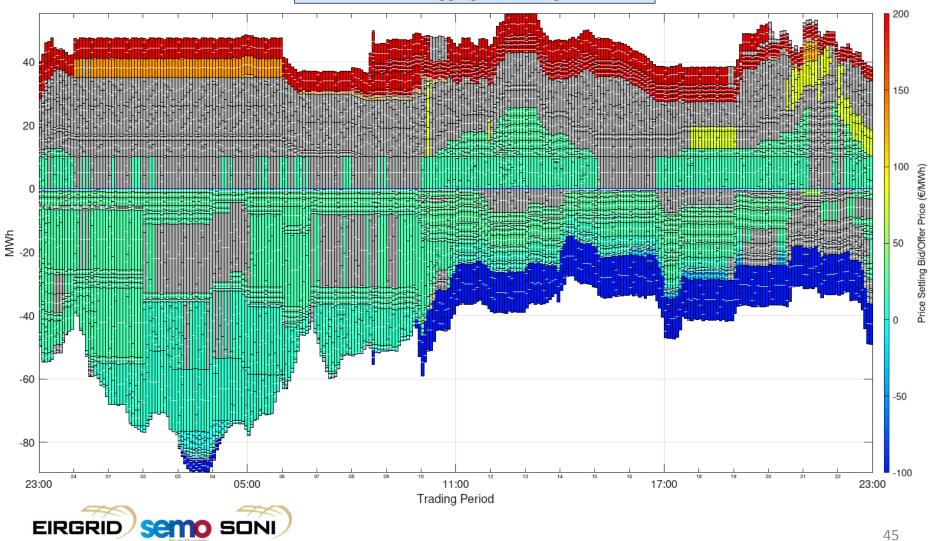




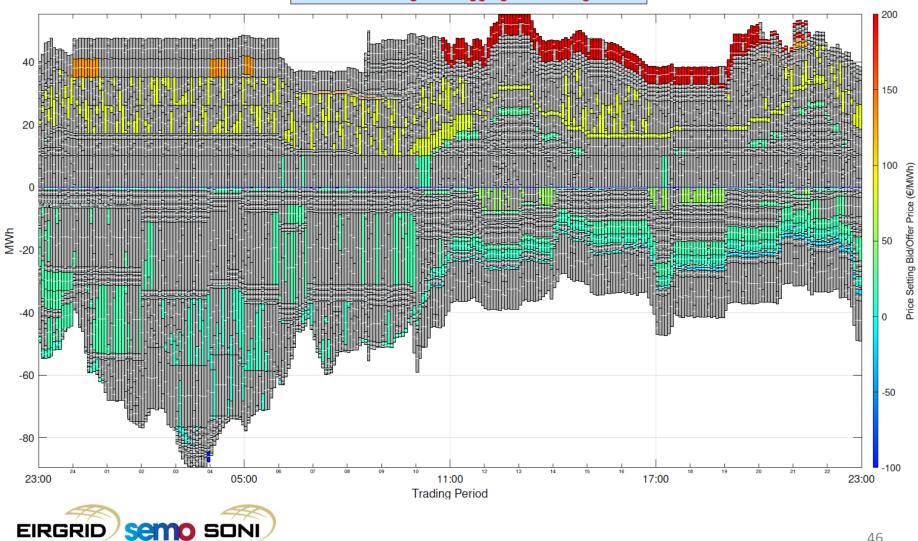
PIMB Ranked QBOA Stack for: 25-Aug-2019



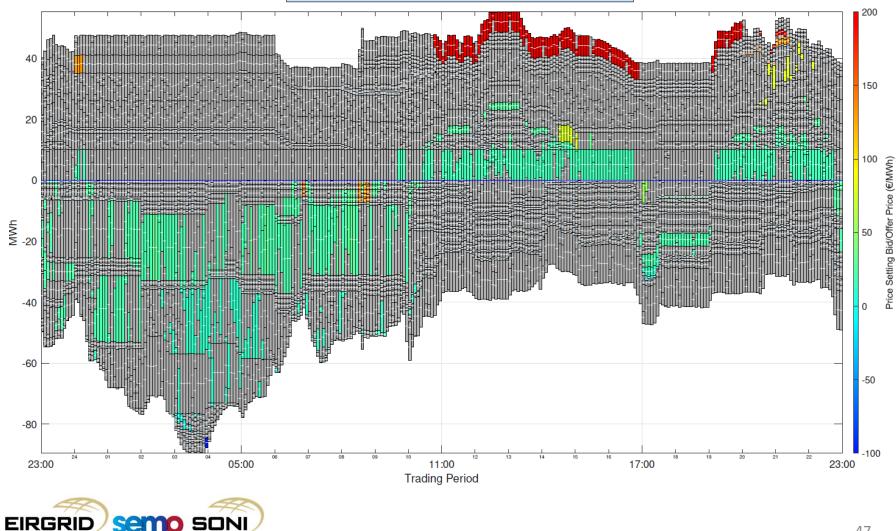
PIMB SO Flagging for: 25-Aug-2019



PIMB Non-Marginal Flagging for: 25-Aug-2019



Imbalance Price Tag with PMEA for: 25-Aug-2019



Agenda

Item	Presenter
Welcome	Anne Fitzgerald
Known Issues and Release Update	David Lee
Ex-Ante Market	Michael Atcheson, Liam McAllister
Balancing Market	John Ging, Rory Cafferky
Repricing Update	Julie McGee
Settlements	Claire Kane, Sean O'Rourke, John O'Dea
Query Management	Claire Breslin
Q&A	



Repricing Update

Application of an amended <u>Price Materiality Threshold of 0%</u> on a <u>temporary basis, until such time as an I.T. solution</u> that is capable of calculating materiality is delivered.

Progress Update:

- Testing of repricing solution on track
 - Release D to be deployed on the 15th of October
 - Further 2 to 3 weeks of analysis (in test) post deployment.
- Commencement of repricing early to mid November.
- Alignment with M+13 resettlement?
 - Unable to meet first M+13 runs.
 - Data for M+13 required early October.
 - Potentially able to meet M+13 by November / December.
 - Adhoc resettlement for October and November 2018.
 - To be completed mid 2020.



Repricing and Price Materiality Threshold Parameter Consultation

- Application of repricing for the period from 1 October 2018 to 11 June 2019 using the currently approved <u>5% Price Materiality Threshold.</u>
- Application of an amended <u>Price Materiality Threshold of 0%</u> on a <u>temporary basis, until such time as an I.T. solution</u> that is capable of calculating materiality is delivered.
- 3. Raising an <u>Urgent Modification</u> to the Trading and Settlement Code, to amend Section E.3.8 on a <u>temporary basis with the intention of not</u> <u>carrying out repricing from 1 October 2018 to 11 June 2019.</u>
- Raising an <u>Urgent Modification</u> to the Trading and Settlement Code, to amend Section E.3.8 on <u>an enduring basis in order to require any</u> <u>repricing to be completed by the 13th month after the trading date at</u> <u>the latest.</u>



SEMO review of options posed based on current work-plan.

Proposal	Status
1. Apply 5% PMT	SEMO do not currently have a repricing solution capable of applying a 5% PMT. To implement this solution would mean repricing would not commence until at least Q4 2020.
2. Apply 0% PMT until an I.T Solution is available.	Status update discussed on the previous slide.
3. Urgent Modification to amend Section E.3.8 on a temporary basis with the intention of not carrying out (or suspend) repricing from 1 October 2018 to 11 June 2019.	SEMO would turn attention to implementing a solution that can apply a 5% PMT for future periods requiring repricing.
4. Urgent Modification on an enduring basis in order to require any repricing to be completed by the 13 th month after the trading date at the latest.	 If a 0% PMT was applied, the plan for option 2 would apply, albeit October and November 2018 would not be repriced. If however the intention was to apply a 5% PMT, SEMO would not have a solution in place by M + 13 for any periods requiring repricing, and therefore would be unable to reprice 1st October 2018 to 11th June 2019.



Repricing Update: Practical Issues

- Fix as many issues as possible when repricing includes those which were unknown defects at the time of a particular dispute.
- Not all defects will be resolved within release D.

Issue Type	Count of	Issue ID
	Issues	
Pricing Algorithm	10	5739; 5737; 5831; 5806; 5875;
		5817; 5929; 5957; 112877; <mark>6076</mark>
Incorrect Input Data (Late issuance of DIs; missing DIs etc)	4	Rpc3; Rpc4; Rpc1; Rpc2
Flags calculated incorrectly (RTD)	2	6105; 6003
Incorrect Application of SO Flags in Pricing	2	5720; 5973
 6003: MWMIN STH and MW MAX STH Constraint not being of 	correctly calculated	

- 6076: PN's reverted to 'null' for one 5 minute Period

– 6105: Unit is not being flagged despite reserve constraint being binding.

- RTD is the real time decision making tool for the control centre which also calculates the flags .
 - Two known defects (6003 and 6105) are currently impacted by flags.
 - RTD cannot be re-run. The M.O *currently* unable to reprice these defects.



Disputes

Issue ID	Manifest Errors	Repricing Summary	Status
6076	Imbalance Price - Missing PN's 23rd July	With vendor for a solution	
6105	Unit is not being flagged despite reserve constraint being binding	Fix as part of Release E.	
-	Wind DI datafeed error & trip DI (15th August)	To be corrected as part of repricing	



Agenda

Item	Presenter
Welcome	Anne Fitzgerald
Known Issues and Release Update	David Lee
Ex-Ante Market	Michael Atcheson, Liam McAllister
Balancing Market	John Ging, Rory Cafferky
Repricing Update	Julie McGee
Settlements	Claire Kane, Sean O'Rourke, John O'Dea
Query Management	Claire Breslin
Q&A	



Resettlement Updates

- M+4 Progress to Date
- M+13 Resettlement Approach
- M+4 Doubling Up
- Ad hoc resettlement



Settlements : July 2019 data key process updates

Settlement Dates	Run Category	Run Type	Runs to complete	On Time	Delayed – Same Day publication	Delayed >1 Day
1 st – 31 st	Settlements	Indicative	31	17	4	10
1 st – 31 st	Settlements	Initial	31	29	2	-
Sep 30 th 2018 – Oct 27 th 2018	M+4 Resettlement	Weekly	28	28	-	-
1 st - 31 st	Credit Reports	Daily	66	66	-	-
1 st – 31 st	Payments In	Weekly	4	4	-	-
1 st – 31 st	Payments Out	Weekly	4	4	-	-



Settlements : August 2019 data key process updates

Settlement Dates	Run Category	Run Type	Runs to complete	On Time	Delayed – Same Day publication	Delayed >1 Day
1 st – 31st	Settlements	Indicative	31	19	3	8
1 st – 31 st	Settlements	Initial	31	28	3	-
Oct 28 th 2018 – Dec 1 st 2018	M+4 Resettlement	Weekly	28	28	-	-
1 st - 31 st	Credit Reports	Daily	66	66	-	-
1 st – 31 st	Payments In	Weekly	4	4	-	-
1 st – 31 st	Payments Out	Weekly	4	4	-	-

Key points :

- Increase of additional catch-up days in July & August due to Bank Holidays had an impacts on indicative publication timelines
- Delays with MDP data, Instruction profiling processing issues and additional processing re-runs were other reasons which caused delays to indicative publications (sequential nature of processing also has an impact)
- Initial data publications on time for ~95% of time for July & August (up from 40% for June 2019)



Settlement Documents publication timelines

Settlement Dates	Run Category	Date published	On Time	Delayed – Same Day publication	Delayed >1 Day
June 23 rd – June 29 th	Settlements	05/07/2019	1	-	-
June 30 th – July 6 th	Settlements	15/07/2019	1	-	-
July 7 th – July 13 th	Settlements	19/07/2019	1	-	-
July 14 th – July 20 th	Settlements	26/07/2019	1	-	-
July 21 st – July 27 th	Settlements	02/08/2019	1	-	-
July 28 th – Aug 3 rd	Settlements	12/08/2019	1	-	-
Aug 4 th – Aug 10 th	Settlements	16/08/2019	1	-	-
Aug 11 th – Aug 17 th	Settlements	23/08/2019	1	-	-
Aug 18 th – Aug 24 th	Settlements	30/08/2019	1	-	-
Aug 25 th – Aug 31 st	Settlements	06/09/2019	-	1	-
Sep 1 st – Sep 7 th	Settlements	13/09/2019	Due to publish Sep 13 th	-	-



Issues impacting SD publication timelines

Date (s)	Issue	Impact to schedule timelines	Issue Status
Friday 6 th September	 KIR ID 5443 (to be published in KIR Sep 13th) BMCRM SD calculation fails for same start or end day of Billing Period for BALIMB and CRM 	 Settlement Documents for the Billing period of the delayed publication within same day on Sep 6th due to internal workaround process to be implemented 	Fix currently in test with Release D. Workaround was in place for Sep 6 th publications.

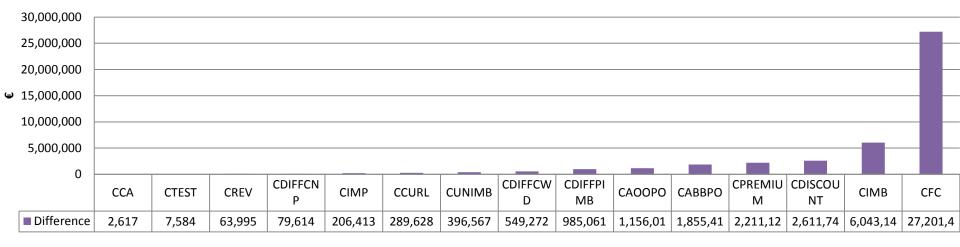
Other updates :

• Average Outturn Availability Report update : Update on previous reports published with no data (over 60 days)



M4 Resettlement Cashflow (2 Months)

Adjusted Amount by Component



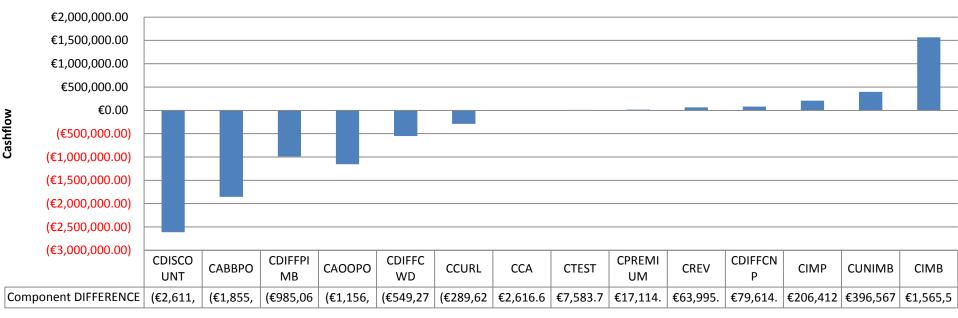
€43 Million is the Absolute Weekly M4 Cashflow up to Week 47 (01.12.2018) for BALIMB.

Total SEM Payment Amount	€43,659,611.55
BALIMB Payments IN	€9,857,604.75
BALIMB Payments OUT	€33,802,006.80



M4 Resettlement Cashflow (2 Months)

Component Difference (Exclude CFC)



Charge Component	Ad Hoc	M4	Diff
ССС	-54,513,385.20	-54,132,481.27	380,903.93
ССР	53,676,824.60	53,703,221.00	26,396.40
CSOCDIFFP	-1,253,807.92	-1,245,046.93	8,760.99
Grand Total	-2,090,368.52	-1,674,307.20	416,061.32

Charge Component	Initial	M4	Diff
CMOAU	-149,395.06	-149,303.20	91.86
CMOAV	-3,889.69	-3,888.77	0.92
CVMO	-2,911,230.34	-2,892,076.18	19,154.17
Grand Total	-3,064,515.10	-3,045,268.15	19,246.94

€435K is the Total M4 Cashflow up to Week 47 (01.12.2018) for CRM & MO.

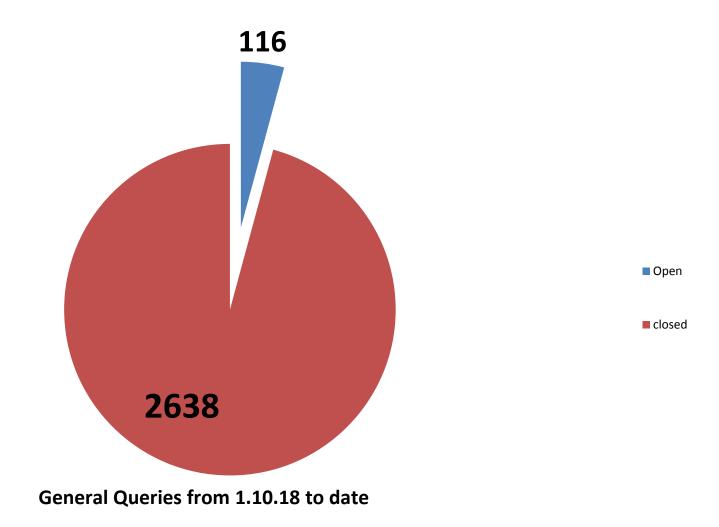


Agenda

Item	Presenter	
Welcome	Anne Fitzgerald	
Known Issues and Release Update	David Lee	
Ex-Ante Market	Michael Atcheson, Liam McAllister	
Balancing Market	John Ging, Rory Cafferky	
Repricing Update	Julie McGee	
Settlements	Claire Kane, Sean O'Rourke, John O'Dea	
Query Management	Claire Breslin	
Q&A		



Query Management – Overall Status





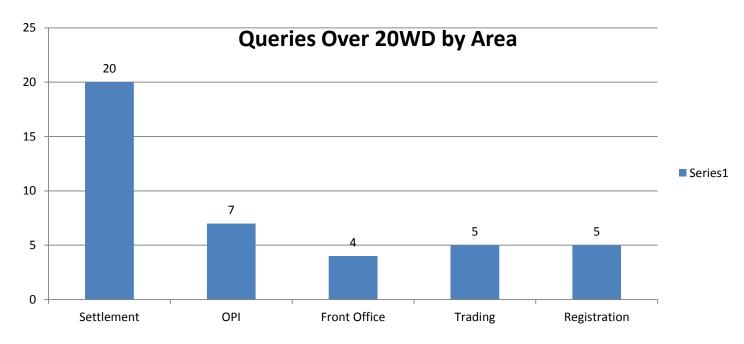
Formal Queries and Disputes

- **Disputes**: Disputes received in total: 100 , Completed: 96; Open: 2; Rejected: 2
- Formal Settlement Queries: Received in total: 284, Completed: 263, In progress: 20; rejected 1



Queries Over 20 Working Days

- 63 Queries are open over 20 working days.
- This is a 59% reduction on the queries over 20 working days in July.





Agenda

Item	Presenter
Welcome	Anne Fitzgerald
Known Issues and Release Update	David Lee
Ex-Ante Market	Michael Atcheson, Liam McAllister
Balancing Market	John Ging, Rory Cafferky
Repricing Update	Julie McGee
Settlements	Claire Kane, Sean O'Rourke, John O'Dea
Query Management	Claire Breslin
Q&A	



Close

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

Thank you for your attendance.



Appendix 1

• <u>Link</u> to MOUG Action register – SEMO website



Appendix 2

• Known Issues Report



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	3 rd May 2019

Known Issues Update – SEMOpx

ID	Name	Description	Impact to Market Participants	Status	Resolution Date
SEMPOpx.0 05	M7 – Market View		Display issue only. No impact to	Closed	On the 04/06/2019 the new non- mandatory ComTrader version 6.6.100.2 was made available under the following link: http://m7tradin g.deutsche- boerse.com/sem o-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 29 th 2019
5737	Units being skipped in QBOA calculations	Unit being skipped in pricing due to "Error in Slope Calculation" causing periodic drop in NIV	QBOA is missed for a Unit, resulting in impact to Imbalance Price	Closed	Release B March 26 th 2019
5831	Cancelled Dispatch Instructions are being processed in pricing	Dispatch Instructions which are cancelled with a 'Not Accepted' status are being processed in pricing	Incorrect QBOA values, resulting in impact to Imbalance Price.	Closed	Release B March 26 th 2019

ID	Name	Description	Impact to Market Participants	Status	Resolution Date
5785		Intermittent switching PBOA from Simple to Complex COD	Incorrect PBOA values, resulting in impact to Imbalance Price	Closed	Release B March 26 th 2019
5844 (PNs)	REPT_042	The Forecast Imbalance Report is not calculating the some of the data within the reports correctly.	The PNS are currently being calculated incorrectly. The report presents inaccurate information.	Closed	After further investigation with the vendor, this report is working as correctly and as per the design for the TSO Demand Forecast column.
5913	REPT_042	The Forecast Imbalance Report is not	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		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.

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, 11 th 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, 11 th 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 <i>,</i> 11 th 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, 11 th June 2019 .

ID	Name	Description	Impact to Market Participants	Status	Resolution Date
5740	· ·	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, 11 th 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		Clocod	Release C, 11 th June 2019 .
5497	VTOD Soak Times	QUANTITY values are incorrect. The values shown are the SOAK HOT QUANTITY values. Please note: the integrity of the VTOD	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, 11 th June 2019 .

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, 11 th 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, 11 th 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, 11 th 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, 11 th June 2019 .

ID	Name	Description	Impact to Market Participants	Status	Resolution Date
5929	causing QBOAs for whole 5	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.	1 181 1/15 3rd dronndd for thd raidi/ant 5	Closed	Release C, 11 th 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.	pumping mode MWh values in this report	In Analysis	In Day 1 plus scope, Target to include in Rel. D Resolution: Software update from vendor

ID	Name	Description	Impact to Market Participants	Status	Resolution Date
117257/6 031	before registration	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 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
5942		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
6021		LOCL instruction intermittently not being applied after a CRLO has been issued.	QBOA are not calculated for the impacted units, resulting in impact to Imbalance Price.	In Analysis	In Day 1 plus scope, target to include in Rel E Resolution: Software update from vendor

ID	Name	Description	Impact to Market Participants	Status	Resolution Date
5991	De Minimis Acceptance Threshold (DMAT) in	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	n Day 1 plus scope, target to include in Rel E Resolution: Software update from vendor
5952	REPT_008: 1 mbalance 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

ID	Name	Description	Impact to Market Participants	Status	Resolution Date
82044	The Interconnector NTC report	Report is designed to show NTC (Net Transfer Capacity) values however is currently showing the TTC (Total Transfer Capacity) values. This is due to a configuration change requested by National Grid prior to go-live	Report is designed to show NTC (Net Transfer Capacity) values however is currently showing the TTC (Total Transfer Capacity) values. This is due to a configuration change requested by National Grid prior to go-live	In Analysis	TBC Resolution: SEMO are carrying out an impact assessment as this impacts multiple IT systems and also has a knock on impact for other processes.
	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
WEB_0	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

ID	Name	Description	Impact to Market Participants	Status	Resolution Date
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
109895	Daily Meter Data Report (Website)	Duplicate entries are appearing in the Dupamic	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	& Decrement al Price	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

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.	n to the RA's for	TBC Resolution: Software update from vendor
5603	REPT_081 hourly Anonymized INC and DEC Curves	Currently the report cumulatively adds	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.	n to the RA's for	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	-	TBC Resolution: Software update from vendor

ID	Name	Description	Impact to Market Participants	Status	Resolution Date
5841	Instructions	This report will now generate even if there is a null Dispatch Instruction. However this conflicts with the XSD schema for the report		In Analysis	TBC Resolution: ITS Update
5317	REPT_088 Net Imbalance Forecast	every half hour , as specified by the ITS,	Information is available less frequently. Market Participants continue to use the information as available.	In Analysis	TBC Resolution: ITS update
6076	PNs not used in	Imbalance Price calculation for an isolated	Incorrect QBOA are calculated for the impacted units, resulting in impact to Imbalance Price.	In Analysis	TBC Resolution: Software update from vendor
102081	REPT_006: Daily	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

ID	Name	Description	Impact to Market Participants	Status	Resolution Date
5654	CPREMIUM for the	CDISCOUNT charge calculations for the	The REPT_043 will be incorrect for these charge types until the issue is resolved within the software.	Closed	Release A Jan 29 th 2019
5658	REPT_044, incorrect values for QCOB, QCNET	miniito vallios the calcillation is	Minimal Impact the report only represents a single value for both QCOB and QCNET in REPT_033, the settlement calculation is unaffected.	Closed	Release A Jan 29 th 2019
5741	Wind (DO)	profiled correctly i.e. the start and end	DQ values not correct, leading to incorrect settlement charge calculations in all settlement artefacts	Closed	Release A Jan 29 th 2019

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

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

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

ID	Name	Description	Impact to Market Participants	Status	Resolution Date
5804	No Load Cost calculation in CFC	Recoverable No Load Costs in CFC double what they should be	Incorrect value in CFC for these cases	Closed	Release A Jan 29 th 2019
5881	Settlement	for New gross amount and Net amount when Settlement Calendar is configured		Closed	Release A Jan 29 th 2019
5881	Settlement	for New gross amount and Net amount when Settlement Calendar is configured		Closed	Release A Jan 29 th 2019

ID	Name	Description	Impact to Market Participants	Status	Resolution Date
5883	QDIFFTRACK to zero if	final QDIFFTRACK to zero if there are	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	-	No impact to market participants manual workaround is in place.	Closed	Feb 18th 2019 Closed as hotfix
5884	QDIFFTRACK Error for CAU units	-	Settlement reports/documents/Statements were delayed in publication to participants	Closed	Feb 2nd 2019 Closed as hotfix
5657	Generator Units registered as part of	Biased Quantities are currently being calculated for all generator units which is registered as part of an Autoproducer site	The SEMO settlements team has developed a work around for this issue. We will retain the item on this list, but it has no impact on the Market Participants.	Closed	Release B March 26 th 2019
5688	Bills case performance		Affects Settlement operations meeting agreed upon publication time lines	Closed	Release B March 26 th 2019

ID	Name	Description	Impact to Market Participants	Status	Resolution Date
5988	in REPT_44 being displayed in	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	5 th April 2019
5888	Metered Quantity	quantity. Metered quantity must be made	Affecting settlement calculations for DSUs, resulting in non-zero undelivered quantities, which should be zero.	Closed	Release C, 11 th 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, 11 th June 2019.
5940	MPOP FPN Misalignment with MMS	with the MM, including incorrect	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, 11 th June 2019.

ID	Name	Description	Impact to Market Participants	Status	Resolution Date
5950	Difference & NP Charges for DSUs	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	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, 11 th 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, 11 th 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, 11 th June 2019
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	Closed	Release C, 11 th June 2019

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, 11 th June 2019 .
5990	Calculation does not set final QDIFFTRACK to 0 if there are no Day	and thereby no QDIFFDA.	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, 11 th June 2019 .
5909	heing calculated	System changes between Simple and Complex COD use when the Order of the first BOA does not equal 1.	This affects CFC calculation	(locod	Release C, 11 th June 2019 .
5893	Incorrect IPQBOA values		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, 11 th June 2019 .
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.	Defect does not affect participant SD reports. Defect confirmed to only affect internal application UI screen. As such issue has been closed – No impact to market participants	Closed	5 July 2019

ID	Name	Description	Impact to Market Participants	Status	Resolution Date
6010	not linked to	Registration Import for Trading Sites(TS) is creating an Error for future effective		In Analysis	In Day 1 plus scope, target to include in Rel D Resolution: Software update from vendor
5944	applying Heat	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	of CDIFFCNPA and	CDIFFCNPB and CDIFFCNPA as zero in the 1st and last ISP of the canacity year	Calculation is currently setting the last and first ISP to CDIFFCNPA / B_($\Omega(\gamma$ -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

ID	Name	Description	Impact to Market Participants	Status	Resolution Date
5923	by Jurisdiction	renorting Aggregated Metered	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	with a Trading Site. The settlement	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	incorrectly assigned the start time of the credit assessment, rather than the	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

ID	Name	Description	Impact to Market Participants	Status	Resolution Date
5910	NTARTING TIAG TOR	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
6035	Fixed Cost Calculation sums values from all AdHoc runs of a Billing Week instead of using the latest AdHoc run for each day	Ad Hoc Run #1 and Ad Hoc Run #2.	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	In Day 1 plus scope, Target to include in Rel. D Resolution: Software update from vendor
5943	Simple/Complex COD	only to the period where the DL is	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
6105	Units not being flagged on upward slope of reserve curve, despite reserve constraint binding	curve and a negative slope at the end of the curve. If reserve is binding all	This defect is only present on four units. If the unit is on a positive slope and the constraint is binding the unit will not be flagged and may contribute to the price as a result.	In Analysis	In Day 1 plus scope, target to include in Rel. E Resolution: Software update from vendor

ID	Name	Description	Impact to Market Participants	Status	Resolution Date
5808	with the Trade and	FMOC is applying the trading day exchange rate of the last day of the month.	FMOC is applying the trading day exchange rate of the last day of the month.	In Analysis	In Day 1 plus scope, target to include in Rel. E Resolution: Software update from vendor
6044	REPT_44 in indicative & initial	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	In Day 1 plus scope, target to include in Rel. E Resolution: Software update from vendor
5953	· ·	Settlement Report not showing Accept Times for QAO & QAB	Market Participants unable to view the accept time of QBOAs used within Settlement	In Analysis	In Day 1 plus scope, target to include in Rel E Resolution: Software update from vendor
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

ID	Name	Description	Impact to Market Participants	Status	Resolution Date
5314	REPT_043, _044	· ·	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.	In Analysis	In Day 1 plus scope, target to include in Rel E Resolution: Software update from vendor
123413		No Load costs are not being paid correctly in some instances in CFC calculation of M+4.	Multiple participants may be underpaid until defect is fixed.	In Analysis	In Day 1 plus scope, target to include in Rel E Resolution: Software update from vendor
6083	QAOBIAS / QABBIAS incorrect ordering of ranked set for calculation leads to incorrect result	M+4 QABBIAS & QABUNDEL volumes are being calculate lower than expected outcomes. Similar to QABBIAS defect 6047	Ranked Set is being presented to the calculation by ranking number descending within position K of the QABBIAS & QABUNDEL calculations incorrectly. This should be ascending	In Analysis	In Day 1 plus scope, target to include in Rel E Resolution: Software update from vendor
6047	QAOBIAS / QABBIAS incorrect ordering of ranked set for calculation leads to incorrect result	Initial Calculation of ordering & ranking not performing in ascending order.	Ranked Set is being presented to the calculation by ranking number descending within position K of the QAOBIAS / QABBIAS calculation incorrectly. This should be ascending	In Analysis	In Day 1 plus scope, target to include in Rel E Resolution: Software update from vendor

ID	Name	Description	Impact to Market Participants	Status	Resolution Date
CR118	Defect 6066 - CSB not applying a default value of zero in settlement calculations where data is not present	Where data is not present in CSB, a default value of zero shall apply within the settlement calculations to allow for the full calculation, publication of 48 trading periods that is to be reflected within statements, reports. A default value is not being applied resulting is missing trading periods.	Seeing inconsistencies between trading periods for a number of charge codes on statements & reports within Indicative, Initial and re- settlement. Unable to correctly shadow settlement off inconsistent statements & reports	In Analysis	In Day 1 plus scope, target to include in Rel E Resolution: Software update from vendor
6054	CFC calculation is including values for intervals prior to Market Start	COCMW/P element of CEC was incorrectly	Nome narticinants have been over haid (F(in	In Analysis	In Day 1 plus scope, target to include in Rel E Resolution: Software update from vendor
6065	Re-settlement of DSU Difference charges	A defect fix in release C corrected incorrectly applied DSU difference charges within Initial settlement. These charges should be reflected / refunded in re-settlement due to the fix for the defect. This is not being reflected within the re-settlement calculation of difference charges and on the re- settlement settlement documents.	The correction of incorrect difference charges applied to DSUs are not being reflected within their re-settlement statements or settlement documents.	In Analysis	In Day 1 plus scope, target to include in Rel E 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	In Day 1 plus scope, target to include in Rel E Resolution: Software update from vendor

ID	Name	Description	Impact to Market Participants	Status	Resolution Date
5339	REPT_043	Incorrect rounding applied to detail records. Summary and Detail records do not sum correctly.	Inconsistency between detailed and summary records within the same REPT_043. Research indicates this to be small amount relative to document totals.	In Analysis	TBC Resolution: Software update from vendor
5772		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		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	the SEMO website	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

ID	Name	Description	Impact to Market Participants	Status	Resolution Date
113784	ISEM_OUI_ExPost_In struction_Profiler_M +4_Generator Operational Characteristics _changes required for 01/10/2018 and going forward	rerun IP for M+4. The registration details within Initial Ex-Post \ Initial Instruction Profile \ Instruction Profile Input \ Generator Operational	a regression test phase for a short period and re-planned for production.	In Analysis	TBC Resolution: Software update from vendor
1	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
	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

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

ID	Name	Description	Impact to Market Participants	Status	Resolution Date
6044	in indicative & initial	OD determinant missing from REPT 11 in	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
CR092	Interconnectors in	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