

Market Operator Monthly Report January 2015

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1 Executive Summary

This Single Electricity Market Operator's (SEMO) report covers the month of operation of January 2015 and is published in accordance with the Single Electricity Market (SEM) Committee decision and Clause 2.144 of the Trading and Settlement Code. Trading and Settlement Code.

During the month of January 2015, Settlements had one late publication as per the Trading and Settlement code for Indicative Settlement.

181 general queries were received in January 2015. During the same period 174 general queries were resolved.

There were five defaults by Participants during January 2015. The largest of these was a Energy Initial invoice €4101.23 which was remedied on the same day.

Formal queries continue to be answered well within the timelines stipulated in the Trading and Settlement (Code).

2 Monthly Statistics

Code Breaches

Breaches of the Trading & Settlement Code were noted in the following areas.

Code Breaches					
	Area	Major	Minor		
Data Providers		1	2		
Market Participants	Pricing & Scheduling	-	-		
	Settlement	-	-		
	Funds Transfer				
	Credit Risk Management	1	-		
SEMO	SEMO Pricing & Scheduling		-		
	Settlement	-	2		
	Funds Transfer	-	-		
	Credit Risk Management		-		
	Other				
Total	•	7	4		

Table 1 - Code Breaches

Further details of each of the code breaches noted above are set out in Appendix A

Key:

- Major Breach late publishing of invoices, default notices issued for non-payment or similar.
- Minor Breach deadlines not met, but any financial implication to Participants. This includes late posting of pricing and settlement runs.

Joining and Terminating Parties and Units

One Party joined the Market in January 2015.

- Gaelectric Energy Marketing and Supply Ltd (PY_000136)

There were no terminating parties in January 2015.

Two new unit became effective in the Market in January 2015.

- Viridian Energy Limited DSU PPMG (PT 400138/DSU 401590)
- Molly Mountain Wind Farm VPTG (PY 000042/ PT 500032)

There were no units de-registered from the Market in January 2015.

Two Supplier units became effective in the Market in January 2015.

- LCC Power (PY 000099/PT 400137)
- Arden Energy Ltd (PY 000133/PT 400149)

Suspension of Participants

There have been no Suspension Orders issued by the Market Operator at this time.

3 Financial Statistics

Total Charges for Each Currency

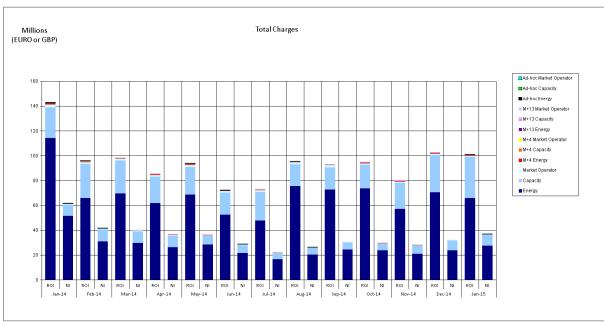


Figure 1 - Total Charges for Each Currency

Market	January 2015		
	ROI NI		
Energy	€66,217,285	£27,989,160	
Capacity	€32,948,586	£8,572,663	
Market Operator	€1,048,030	£280,426	
M+4 Energy	€438,658	£42,990	
M+4 Capacity	€106,048	£9,582	
M+4 Market Operator	€3,854	£365	
M+13 Energy	€150,902	£37,527	
M+13 Capacity	€27,588	£7,105	
M+13 Market Operator	€819	£230	
Ad-hoc Energy	€0	£0	
Ad-hoc Capacity	€2,704	£1,338	
Ad-hoc Market Operator	€0	£0	
Total	€100,944,473	£36,941,384	

Table 2 - Total Charges for Each Currency

Notes relating to Table 2 and 3:

- Month of inclusion based on Invoice Date.
- Amounts are after application of Settlement Reallocations.
- Previous month's data is available in Appendix G.

Millions (EURO or GBP) ***Total Payments** **Total Payments** ***Total Payments** **Total Payments** ***Total Payments** ***Total Payments** **Total Payments**

Total Payments for Each Currency

Figure 2 - Total Payments for Each Currency

Market	January 2015	
	ROI	NI
Energy	€77,706,417	£21,735,749
Capacity	€34,394,755	£7,476,290
M+4 Energy	€438,764	£38,276
M+4 Capacity	€107,476	£8,505
M+4 Market Operator	€4,105	£324
M+13 Energy	€98,915	£25,331
M+13 Capacity	€27,079	£7,456
M+13 Market Operator	€831	£248
Ad-hoc Energy	€14,241	£0
Ad-hoc Capacity	€3,538	£691
Ad-hoc Market Operator	€0	£0
Total	€112,796,121	£29,292,871

Table 3 - Total Payments for Each Currency

Total Balancing Costs

Balancing Costs arise in the Energy and Capacity markets when the summed payments to the SEM from Participants in respect of their Supplier Units do not meet the summed payments to Participants from the SEM in respect of their Generator Units.

Although, it is intended the Energy Payments and Energy Charges should be balanced through the mechanism of the Error Supplier Unit in each jurisdiction, because Energy Payments are made against Market Schedule Quantities while the Error Supplier Unit volumes are calculated against Metered Generation, the different application of Loss Factors means that there is frequently an imbalance between the Energy Payments and Energy Charges.

With regard to the Energy Settlement, the Balancing Costs have been calculated as follows for the entire month:

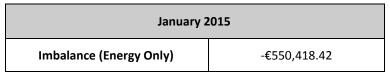


Table 4 - Balancing Costs for Energy Settlement

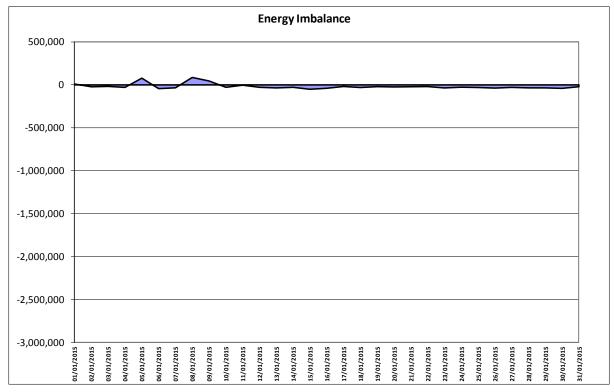


Figure 3 - Energy Imbalances

The full Balancing Cost of the SEM is determined by the summation of the daily payment amounts for Energy Imbalance, Constraint Payments, Uninstructed Imbalance Payments, and Imperfections Charges combined with the weekly Make Whole Payments and Testing Charges.

Historical values for testing charges have been provided in Appendix E.

The figures for the full Balancing Cost of the SEM since the last Market Operator report are shown below, as well as the VAT Balancing Costs.

In tables 5 and 6 below:

- Positive values indicate Payments were greater than Charges.
- Negative values indicate Charges were greater than Payments.

Date Of Invoice	Week No	SEM Balancing Costs	VAT Balancing Costs
06/01/2015	51	€1,093,199.99	-€115,434.63
09/01/2015	52	€1,320,639.28	-€84,567.47
16/01/2015	1	€1,142,575.16	-€178,714.26
23/01/2015	2	€496,291.68	-€87,488.46
30/01/2015	3	-€871,479.91	€86,389.82

Table 5 - Balancing Costs for Trading Payments and Charges

SEM Balancing Costs are provided based on daily exchange rates, VAT Balancing Costs are based on the Invoicing day exchange rate. VAT Balancing costs exclude Currency Cost related VAT.

It is intended that the algorithms set out in the Trading and Settlement Code will lead to a balanced Capacity Market. However, rounding precisions within the systems may result in an imbalance being introduced into the equations. This imbalance may lead to funding requirements to ensure that all payments out are made as per the terms of the Code.

With regard to the Capacity Settlement, the Balancing Costs have been as follows:

January 2015			
Capacity Charges	€58,842,055.07		
Capacity Payments	€58,841,638.42		
Balancing Costs	-€416.65		
VAT	€0.04		

Table 6 - Balancing Costs for Capacity Settlement

Historical figures, the current financial year full Balancing Costs for both Trading and Capacity are provided in <u>Appendix H</u>. VAT Balancing costs exclude Currency Cost related VAT.

Total Currency Costs

Currency Costs in the SEM are calculated with respect to the difference in Exchange Rates due to two components:

- 1) Invoice Currency Costs: in respect of the difference between the Trading Day Exchange Rate (and Annual Capacity Exchange Rate in respect of Capacity Settlement) and the Exchange Rate on the Date of Invoice (being the date of issue of the Invoice) for Trading Payments and Charges.
- 2) Payment Period Currency Costs: in respect of the difference between the Exchange Rates between the Date of Invoice and the Date of Payment.

Although the Code uses the term Currency Cost, the currency differences may end up as a benefit or a cost to the Participant depending on how the Exchange Rate fluctuates between the Billing Period, Invoice Date and Payment Date. In the table below, where this value is positive this means there was an overall benefit to Participants, negative values mean there was an overall cost to Participants resulting from trading in two currencies. Figures are shown in Sterling (£).

Last Date Of Billing Period	Date Of Invoice	Week No	Currency Costs For Energy Settlement (Invoice and Payment)	Currency Cost Adjustment for Inter-jurisdictional SRAs	Total Currency Cost
27/12/2014	06/01/2015	51	£10,296.72	£541.61	£10,838.33
03/01/2015	09/01/2015	52	-£68.92	£1,150.85	£981.94
10/01/2015	16/01/2015	1	-£ 8,141.30	£5,121.79	-£3,019.50
17/01/2015	23/01/2015	2	£5,270.29	£13,950.51	£19,220.80
24/01/2015	30/01/2015	3	£37,259.14	£30,227.84	£67,486.98

Table 7 - Total Currency Costs for Trading Payments and Charges

The Total Currency Cost figures detailed above show the Currency Cost for each Billing Period including Invoice Currency Costs, Payment Period Currency Costs, and Interjurisdictional SRA Currency Costs.

Over the period of this report Currency Costs for each week represented a benefit to Participants of up to £67,486.98 and a cost of £3019.50. Whether Currency Costs are a cost or benefit to Participants is directly related to whether the currency is rising or falling between the billing period, invoice date and payment dates.

Settlement Reallocation Agreements between the two currency zones continue to present volatility in the Currency Costs that appear in the Energy market each week. The value of these adjustments is detailed separately above in each Billing Period.

The Currency Costs, for the current financial year, with respect to Initial Capacity Settlement are set out below. Figures are shown in Sterling (£).

Date Of Invoice	Capacity Month	Currency Costs For Capacity Settlement
10/02/2015	January 2014	-£13,475.29

Table 8 - Total Currency Costs for Capacity Payments and Charges

Cumulative Imperfections Costs Vs Budget

The value of Cumulative Imperfections Costs Vs Budget is calculated as the sum of Total Constraint Payments, Total Uninstructed Imbalance Payments, Total Testing Charges and Total Make Whole Payments, as compared against the Total Imperfections Charges, being the weekly budget for these Imperfections Costs.

These values have been collected across the months since the start of the new financial year, 1st October 2014. The values expressed in Euros are as follows.

This table makes use of the values taken from the Initial Settlement Run of Trading payments and charges.

Total Constraint	Total Uninstructed	Total Make Whole	
Payments	Imbalance	Payments	Total Imperfections
€68,774,969.27	-€985,944.04	€2,423,980.15	-€64,773,699.82

Table 9 - Cumulative Imperfections Costs Vs Budget

Note: The Total Contraint Payment figure above has been updated to contain Interconnector Unit Gate variables.

This is demonstrated in the figure below.

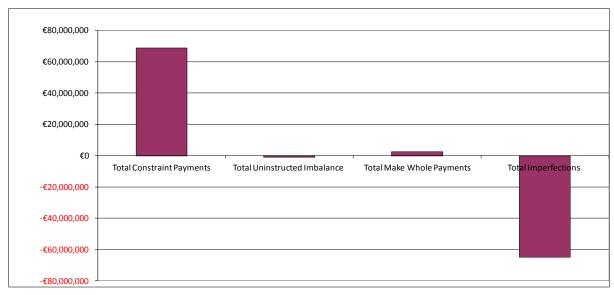


Figure 4 - Cumulative Imperfections Costs Vs Budget

The daily and weekly data that comprised these values is shown in Appendix E.

Financial Changes between Initial Settlement and Subsequent Reruns

The following graphs provide a breakdown of resettlement amounts for the M+4 resettlement period of September 2014 and M+13 resettlement period of December 2013 for Energy and Capacity.

3.1.1 Energy Market

Note: - For Figure 6, 8, 9, net values are shown.

- Positive amounts indicate net additional payments by Participants (Charges).
- Negative amounts indicate net additional payment to be made <u>to</u> Participants (Payments).

The reverse is true for Figure 7 & 10

M+4 Resettlement

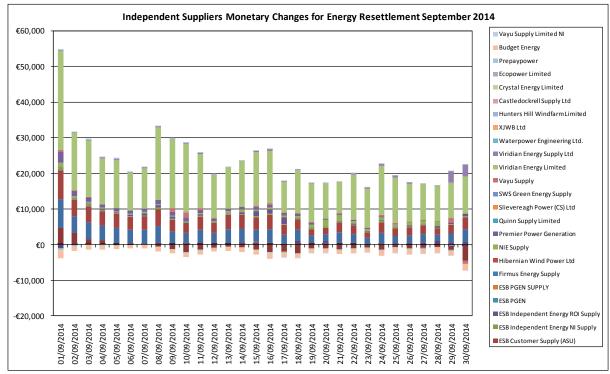


Figure 5 - Independent Suppliers Monetary Changes for Energy Resettlement - September 2014

The above variances relates purely to rounding for Participants between Initial and M+4 Resettlement.

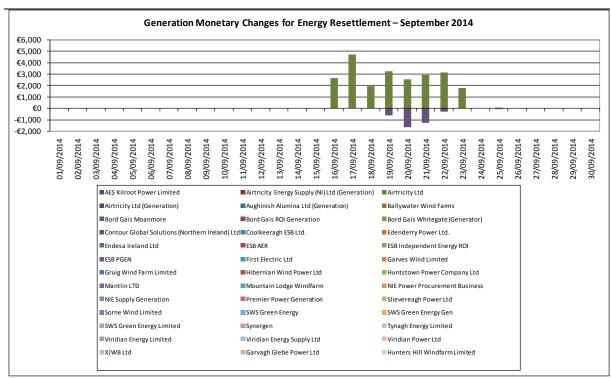


Figure 6 – Generation Monetary Changes for Energy Resettlement – September 2014

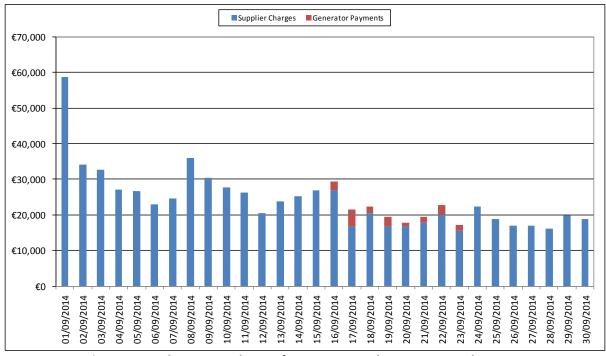


Figure 7 – Total Monetary Changes for Energy Resettlement – September 2014

M+13 Resettlement

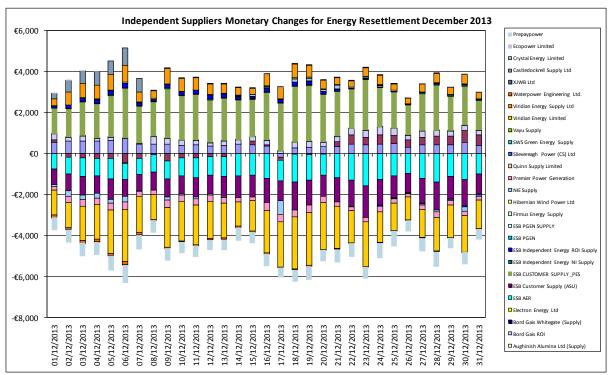


Figure 8 - Independant Suppliers Monetary Changes for Energy Resettlement - December 2013

The above variances relates purely to rounding for Participants between M+4 and M+13 Resettlement.

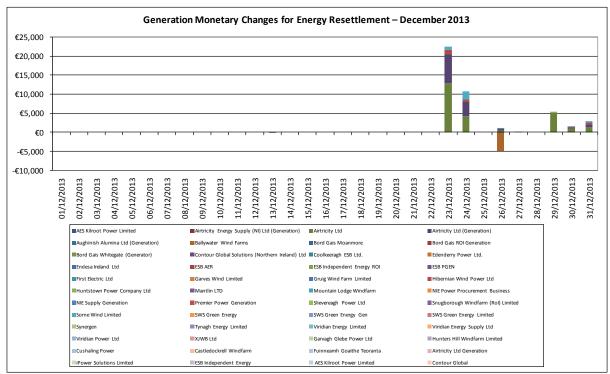


Figure 9 - Generation Monetary Changes for Energy Resettlement - December 2013

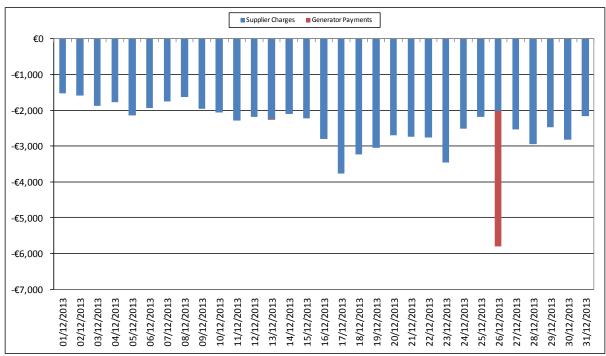


Figure 10 - Total Monetary Changes for Energy Resettlement - December 2013

3.1.2 Capacity Market

Note: - For Figure 12, 13 & 16 net values are shown.

- Positive amounts indicate net additional payments <u>by</u> Participants (Charges).
- Negative amounts indicate net additional payment to be made <u>to</u> Participants (Payments)

The reverse is true for Figure 14 & 22.

The changes in Capacity are graphed below showing the variance in monetary terms as opposed to percentage terms. As the Jurisdictional Error Supply Units can be significantly affected by resettlement, this is more reflective of the monetary redistribution in M+4 and M+13. Please also note that as of June 2011 the Jurisdictional Error Supply Unit (ROI) is now a Retail Supply unit. The Jurisdictional Error Supply Unit (NI) is unchanged.

M+4 Resettlement

Under resettlement, charges originally attributed to the Jurisdictional Error Supplier Units, have now been redistributed among Market Participants.

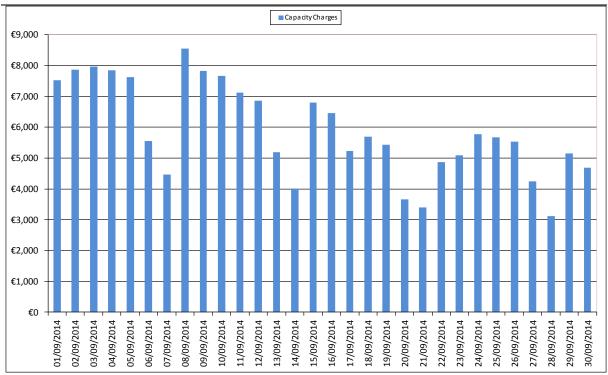


Figure 11 - Independent Suppliers Monetary Changes for Capacity Resettlement - September 2014

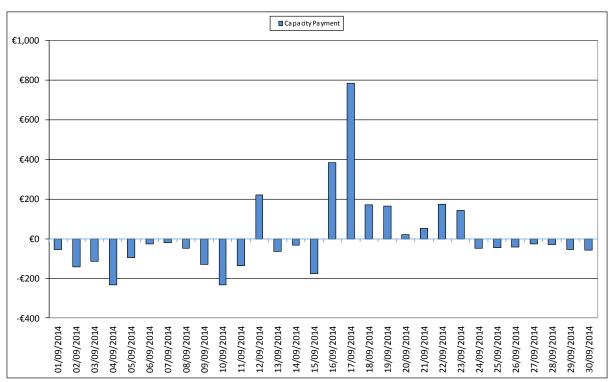


Figure 12 - All Generation Monetary Change for Capacity Resettlement – September 2014

The changes above are driven by updated meter data for Autonomous Price Taker Generators.

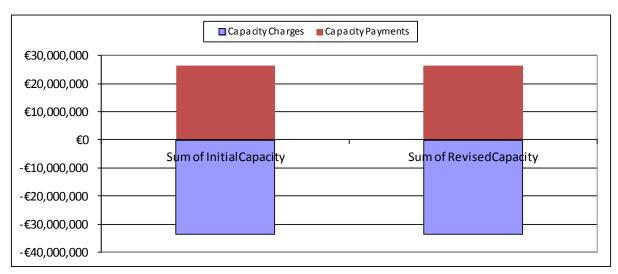


Figure 13 - Comparison of Distribution of Monetary Amounts between Capacity Initial and Resettlement September 2014

The above graph demonstrates that due to all the individual changes to payment and charge amounts on a Supplier or Generator Unit basis, the overall Capacity Market resettlement Charge and Payment amounts have not changed due to resettlement.

M+13 Resettlement

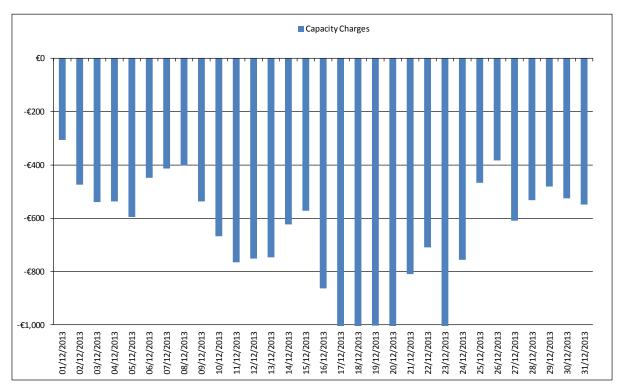


Figure 14 - Independent Suppliers Monetary Changes for Capacity Resettlement - December 2013

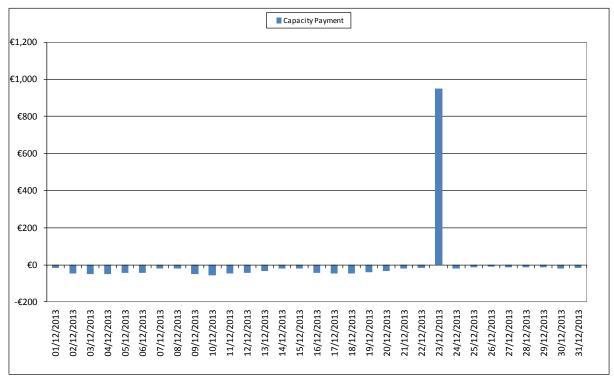


Figure 15 – All Generation Monetary Change for Capacity Resettlement – December 2013

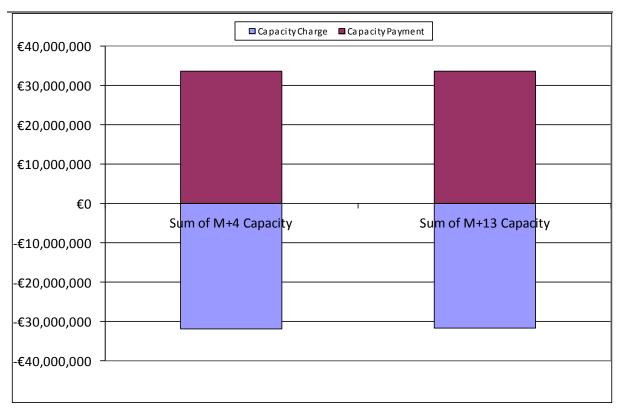


Figure 16 - Comparison of Distribution of Monetary Amounts between M+4 Capacity Resettlement and M+13 Capacity Resettlement – December 2013

The above graph demonstrates despite all the individual changes to payment and charge amounts on a Supplier or Generator Unit basis, the overall Capacity Market resettlement Charge and Payment amounts have not changed due to resettlement.

4 Helpdesk Call Statistics

The statistics presented in Table 10 - Helpdesk Call Statistics covers the month of January 2015.

Market Helpdesk Report: 01/01/15 to 31/01/15

	Received	Resolved within the period	Not Resolved	Resolved in the period	Resolution Time (Working Days)	Resolved On Time
Normal	179	161	18	173	1.37	166
Important	1	0	1	0	0.00	0
Urgent	1	1	0	1	0.04	1
Settlement	6	5	1	5	5.15	5
Credit	0	0	0	0	0.00	0
Dispute	0	0	0	0	0.00	0
Data	1	1	0	1	7.88	1
Total/Average	188	168	20	180	2.89	173

Table 10 - Helpdesk Statistics

Definitions:

- Resolved within the Period refers to queries raised and resolved within the calendar month of January 2015.
- Resolved in the Period refers to queries resolved within January 2015, and includes queries raised before this time.
- Resolution Time (Working Days) refers to average time to resolve, in working days, for this category of query. It is calculated based on all queries for the category, not just January 2015.
- Not Resolved refers to queries raised but not resolved within January 2015.
- *Urgent* are general queries which may have an impact on market operations. SEMO has an internal objective to resolve these within 3 working days; however, this is not mandated service level under the Trading & Settlement Code.
- *Disputes* are where a dispute has been raised over the outcome of a data or settlement query.

The average resolution time for General Queries has decreased by 0.21 working days in January 2015 to 1.77 from 1.56 working days in December 2014. SEMO has a metric to resolve General Queries within 20 Working Days. These include queries received over the phone and e-mail. There were no queries logged in January 2015 that took over 20 working days to resolve.

Data and Settlement Queries generally continue to be responded to within the timelines required by the Code, i.e. one calendar month. No Formal Query timeline extensions were required during January 2015 with regard to formal Settlement Queries.

5. Disputes and Queries

List of Disputes by Topic

There were no Disputes raised during the month of January 2015 and there are no outstanding Disputes.

Dispute	Raised	Resolved
-	-	-

Table 11 – List of Disputes

List of Queries by Topic

5.1.1 Data Queries

There were no formal Data Queries raised during the month of January 2015.

Topic	Number Of Queries
-	-

Table 12 – Upheld Data Queries by topic

5.1.2 Settlement Queries

There were seven Settlement Queries raised in January 2015. Of the seven, one was not upheld and six were resolved .

Topic	Number Of Queries
CLAFs	1
PUG-DOG	1
Metered Generation	1
MIUN issue	1
Payment Calculation	1
SO-SO Trades	1

Table 13 - Upheld Settlement Queries by topic

- One query relating to CLAFs was raised, this was deemed to be of low Materiality and will be corrected in M+13.
- One query relating to PUG-DOG was raised, this was deemed to be of low Materiality and will be corrected in M+4.
- One query relating to Metered Generation was raised, this was deemed to be of low Materiality and will be corrected in M+4.

- One query relating to an MIUN issue was raised, this was deemed to be of low Materiality and will be corrected in M+4.
- One query relating to a Payment Calculation was upheld, however it is not Material and will not be re-settled.
- One query relating to SO-SO Trades was raised, this was deemed to be of low Materiality and will be corrected in M+4.

Unresolved Queries

There are no unresolved Data Queries as at the 4th of February, 2015.

A full list of all the Data and Settlement queries raised is contained in Appendix B.

6. Central Systems

Proportion of Default Data Used

On review of the Commercial Offer Data used in the MSP runs, 73.47% of data used was submitted by Participants through the normal Bid-Offer process. 26.44% of the data used was based on Standing Commercial Offer Data. 0.08% of the data used was based on adjusted offer data. None of the data used was based on Default Commercial Offer Data (Default differs from Standing in that it is based on the initial Default data submitted during registration process and not on more recent Standing Data submitted by the Participant through the Market Participant Interface). Details by unit are provided in Appendix F.

Proportion of Estimated Meter Data used in Initial Settlement and Resettlement

This is not calculable presently.

List of System Errors and Re-runs

6.1.1 Re-Pricing and Resettlement Runs

There were no Re-Price runs carried out in January 2015.

There were two Resettlement runs carried out in January 2015.

6.1.2 System Errors

There was one defect found in January in MA.

This was defect 137670 and relates to the Heat state on new units coming effective. There is an issue with how the Instruction profiler handles this.

This has been raised as a defect and will be fixed for the SEM 2.6.0 Release.

Details are provided in 10 Appendix C: List of All System Errors and Failures.

6.2 Operational Timings

This section lists the operation timings of MSP software runs and Settlement runs.

There are five run types for MSP software,

- Ex-Ante 1 Indicative, run on Trading Day 1 calendar day,
- Ex-Ante 2 Indicative, run on Trading Day 1 calendar day,
- With In Day 1 Indicative, run on Trading Day,
- Ex-Post Indicative, run on Trading Day + 1 calendar day, and
- Ex-Post Initial, run on Trading Day + 4 calendar days.

The following tables and graphs provide details for the postings of the MSP for January 2015.

6.2.1 MSP Postings January 2015

Process	On Time	< 1 hr late	> 1 hr late	Not done
Gate Close EA	31-31	0-31	0-31	0
Post EA1	31-31	0-31	0-31	0
Post EA2	30-31	0-31	0-31	1
Post WD1	31-31	0-31	0-31	0
Post EP1	31-31	0-31	0-31	0
Post EP2	30-31	0-31	0-31	0

Table 14 - Operational Timings

Process	On Time	< 1 hr late	> 1 hr late	Not done
Gate Close	100%	0%	0%	0%
Post EA1	100%	0%	0%	0%
Post EA2	99%	0%	0%	1%
Post WD1	100%	0%	0%	0%
Post EP1	100%	0%	0%	0%
Post EP2	99%	0%	0%	0%

Table 15 - Operational Timings (% on time)

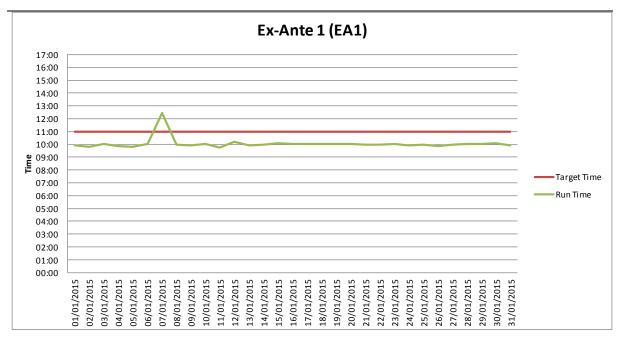


Figure 17 – Ex-Ante 1

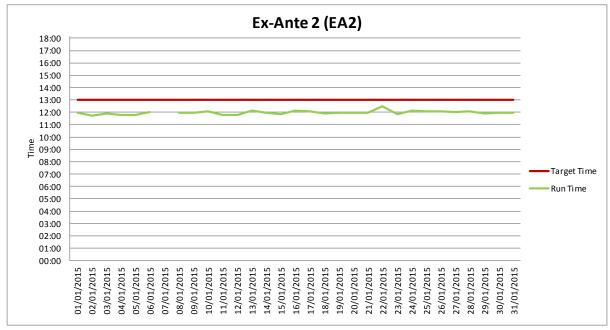


Figure 18 - Ex-Ante 2

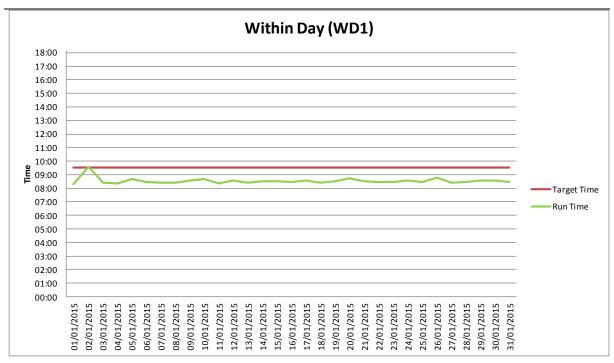


Figure 19 - Within Day 1

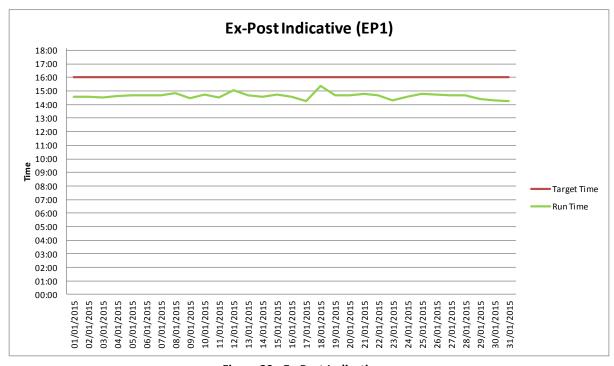


Figure 20 - Ex-Post Indicative

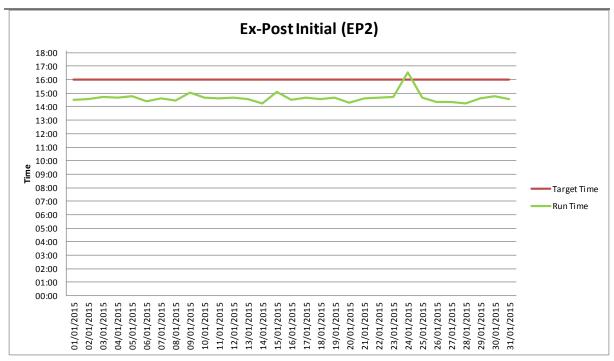


Figure 21 - Ex-Post Initial

Details of the operational timings of the Market System and Price (MSP) runs and Gate Closure are provided in <u>Appendix D</u>.

6.2.2 MSP Algorithms

The Market Operator has two different certified solvers used to determine Unit Commitment. These solvers use the Lagrangian Relaxation (LR) and Mixed Integer Programming (MIP) methodologies.

The primary solver used in the SEM is Lagrangian Relaxation (LR). Under certain schedule outcomes where a significant pricing event is observed, the MSP software is re-run using the Mixed Integer Programming (MIP) solver. The outcomes of the two solvers are compared. Where solution determined using the MIP solver provides a better overall solution, this solution may be selected for publishing. An updated policy document on the use of MIP has been published and is available on the SEMO website here.

In January 2015, there were eight instances of publishing with the MIP solver.

A detail of historical runs and dates where the MIP algorithm has been used for published results is provided in <u>Appendix I</u>.

6.2.3 Settlement Postings January 2015

The publication timings for Settlement runs are provided below.

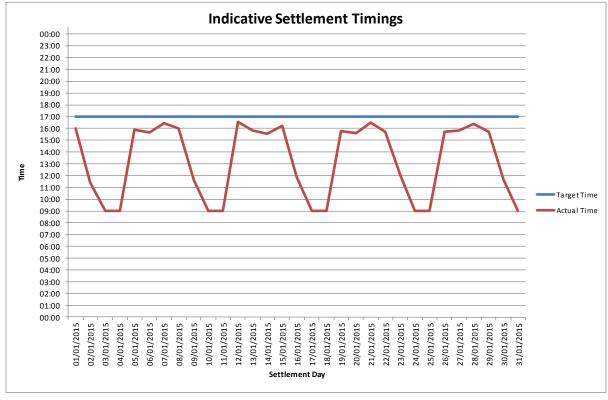


Figure 22 - Indicative Settlement Postings

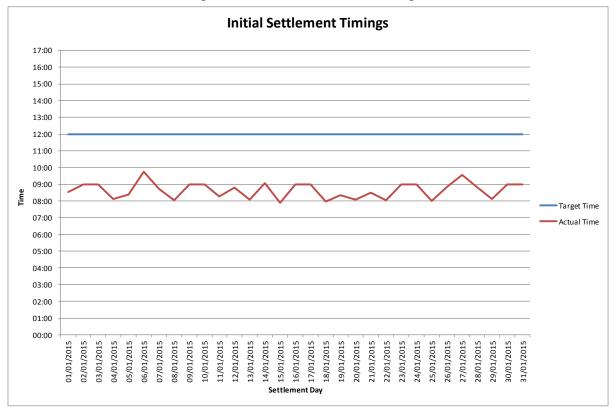


Figure 23 - Initial Settlement Postings

Further details of any delays noted above are provided in Appendix A

6.5 Market System Releases

6.5.1 Release SEM R2.5.0 (Deployed: November 14th, 2014)

Approval for the proposed scope for this release was received from the Regulatory Authorities on May 1^{st} , 2014. The High Level Impact Assessment (HLIA) was published to the industry on May 7^{th} , 2014.

The following CR's were deployed:

CR Ref.	System	Description
SEM_PC_CR322	STL	Eligible Availability for Energy Limited Units Under Test
SEM_PC_CR327	MI	Event Queuing
SEM_PC_CR333	STL	Functionality to apply PUGDOG, TTariff on a Trading Day
		basis
SEM_PC_CR332	STL	Issue Zero Invoices
SEM_PC_CR330	MI	Changes to IART Report
SEM_PC_CR336	STL	HMRC VAT Change
SEM_PC_CR340	MA	DSI-Processing of Bids
SEM_PC_CR344	MA	SPOT ATC to override ATC Interval file in UUC

The software was deployed to our Production systems on Friday, November 14th, 2014.

We received the first Wash-up release for MI/MA on Friday November 28th, 2014. This was deployed on Tuesday December 2nd and testing commenced on a number of minor issues around CR's 330 & 344.

This was deployed to Production on December 16th, 2014.

6.5.2 Release SEM R2.6.0 (Proposed Deployment: April 2015)

The release cut-off date for the SEM R2.6.0 release was Friday September 5th, 2014.

As at the Cut-Off Date there were no:

- Approved Modification Proposals or
- New Change Requests submitted to the SDS

As there are no functional changes being proposed, a Change Control Forum (CCF) meeting will not be required. Three technical changes have been proposed by SEMO IT and these are currently being assessed by our vendors. Once assessments are complete SEMO will issue a scope proposal to the Regulatory Authorities and if approved, this will be published to the industry.

We are due our first drop of the software on 31st March. Once deployed to non-production SIT testing will commence. As there are no functional changes a full suite of regression tests will be performed to verify the applications are fit for purpose.

7 Occasional Components

7.1 Disaster Recovery/Business Continuity Tests

There was no Business Continuity Tests performed during January 2015.

7.3 Communications or Systems Failures

There was 2 Market Interface System issues during January 2015;

On the 23/01/2015, Market Operations reported that they were unable to access the Dynamics system. From investigation, an issue was found on the Dynamics server, which was resolved, and connectivity restored and tested (from both the technical view, and also from the Market Operations view) – all was confirmed working again.

On the 29/01/2015, the TSO reported that they had a issue submitting / getting information from the AMP web service. A call was placed with the 3rd party vendors, and upon investigation, an issue with mis-configuration was found on a web server. This web server was in the Disaster Recovery (DR) site, as a DR switch was occurring during this period (start 27/01/2015, finish 29/01/2015). The 3rd party vendors corrected this issue on the DR site, all was tested, and verified working again for the web service component of AMP.

7.4 Denial of Service Attacks

There was no Denial of Service Attacks during January 2015.

7.5 Submission of Parameters to RAs for Approval

No parameters were submitted to the Regulatory Authorities during January 2015.

8 Appendix A: Detail of Code Breaches

Market Participant

Ops Date Identified	Run Type	Quality or Timing	Party	Issue Type	Description	Cause	Resolution	T and SC Breach
09/01/2015	Money In	Timing	Participant	Payment Default	Electron Energy defaulted on a Wk 51 2014 Energy Initial Invoice.	The energy invocie was not paid before the 12:00 deadline. This resulted in implementing the LOC drawdown process.	The funds were recovered via a credit call made on their letter of credit. All deadlines were met in the LOC process and funds were drawndown successfully.	Major
13/01/2015	Money In	Timing	Participant	Payment Default	PT_400068 Ecopower Supply Limited defaulted on a Week 51 2014 Initial VMOC Invoice	Participant Error	Late payment received for full amount on the 14/01/2015	Major
14/01/2015	Money In	Timing	Participant	Payment Default	PT_400069 G.A.E.L Force Power Ltd defaulted on a Week 36 2014 Revised Energy invoice.	Participant Error	Default letter was issued	Major
14/01/2015	Money In	Timing	Participant	Payment Default	IA_NIMOYLE Limited defaulted on a Week 52 2015 Initial Energy invoice.	Participant Error	Late payment received for full amount on the 14/01/2015 at 12:04	Major
21/01/2015	Money In	Timing	Participant	Payment Default	Tynagh Energy Limited PT_400041 Limited defaulted on a November 2013 Adhoc Capacity invoice.	Participant Error	The invoice amount was taken from Tynagh Energy Limited cash collateral account. A default letter was issued	Major
29/01/2015	CRM	Timing	Participant	Credit	LCC Power Limited (CP_400137) defaulted on a CCIN issued on 27/01/2015	CCIN was not resolved within the T&SC timeframes	LCC Power Limited (CP_400137) increased cash collateral on the 30/01/2015 which closed the CCIN $$	Major

Table 16 - Code Breaches – Market Participants

Data Provider

Ops Date Identified	Run Type	Quality or Timing	Party	Issue Type	Description	Cause	Resolution	T and SC Breach
02/01/2015	EA1	Timing	EirGrid MDP	Operational	The EirGrid Wind Forecast file, for Trade Date 03/01/2015, was not received before the ExAnte 1 (EA1), gate window closure, at 09:30am.	The EirGrid Wind Forecast file, for Trade Date 03/01/2015, was not received due to an internal EirGrid TSO system error, resulting in the non-generation of the forecast file.	The EirGrid TSO submitted the Wind Forecast file, and this was received into the Market Systems at 09:31.	Minor
06/01/2015	EA1	Timing	SONI TSO	Operational	The Ex Ante1 (EA1) Market Schedule, for Trade Date 07/01/2015, was not published by the publication deadline of 11:00.	The Ex-Ante1 (EA1) Market Schedule, for Trade Date $07/01/2015$, could not be generated. This was due to the non-receipt of the SONI Wind Forecast file which was required for the ExAnte 1 (EA1) run type.	The SONI Wind Forecast was recieved at 11:56, on Operational Date 06/01/2015, enabling the publication of the Ex Ante 1 (EA1) Market Schedule, for Trade Date 07/01/2015.	Minor
06/01/2015	EA1	Timing	SONI TSO	Operational	The SONI Wind Forecast file, for Trade Date 08/01/2015, was not received before the ExAnte 1 (EA1), gate window closure, at 09:30am.	The SONI Wind Forecast file, for Trade Date 08/01/2015, was not received due to the non-inclusion of a newly registered unit which was going effective on Trade Date 08/01/2015. This resulted in the failure of the forecast file being received into the Market Systems.	A SONI Wind Forecast contingency file, including the newly registered unit details, was submitted successfully to the Market Systems at 11:56 on Trade Date 08/01/2015.	Major

Table 17 - Code Breaches - Data Providers

SEMO - Pricing and Scheduling

There were no issues to report in January 2015



Table 18 - Code Breaches - Pricing and Scheduling

SEMO – Settlements

Ops Date Identified	Run Type	Quality or Timing	Party	Issue Type	Description	Cause	Resolution	T and SC Breach
15/01/2015	M+13 ENG & VMOC Statements	Timing	SEMO		Wk 50 2013 M+13 was delayed and published after the 17:00 deadline.	Statements were delayed due to materiality not matching analyst calculations on the VPTG defect.	Schedules including the VPTG defect data were cancelled and M13 run with original schedules.	Minor
21/01/2015	SE1	Timing	SEMO		Indicative Statements and PIRs for 20/01/2015 were published after the 17:00 deadline.	This was a registration issue whereby a new unit became effective in the market and as a result MDP's could not submit meter files to the settlements system.	A script to rectify this was run in to the MPI and Indicative Statements and PIR's were published on the 22/01/2015.	Minor

Table 19 - Code Breaches - Settlements

SEMO - Funds Transfer

There were no issues to report in January 2015

Ops Date Identified	Run Type	Quality or Timing	Party	Issue Type	Description	Cause	Resolution	T and SC Breach	
There are no items to show in this view of the "Issues L	here are no items to show in this view of the "Issues Log" list. To create a new item, click "New" above.								

Table 20 - Code Breaches - Funds Transfer

SEMO - Credit Management

There were no issues to report in January 2015

Ops Date Identified	Run Type	Quality or Timing	Party	Issue Type	Description	Cause	Resolution	T and SC Breach	
There are no items to show in this view of the "Is:	There are no items to show in this view of the "Issues Log" list. To create a new item, click "New" above.								

Table 21 - Code Breaches - Credit Risk Management

SEMO – Other

There were no issues to report in January 2015

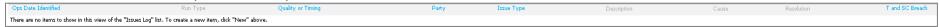


Table 22 - Code Breaches - Other

9 Appendix B: List of Queries by Type

Data Queries

Summary Title	Description	ID	Logged On	Date sent to MP

Table 23 - Data Queries

Settlement Queries

Summary Title	Description	ID	Logged On	Date sent to MP
Capacity	PT_500075 has MIUNs of 16.04MW in delivery (tom 2, interval 1 in EA1) but did not receive MSQ in this period. As CPGF=0 all scaling prices for this period resolve to zero therefore PT_500095 should not have a charge in this period but SEMO have charged 9313	PT_500075 Cenergise	2015-01-08	2015-01-19
CLAFs	The CLAFs for the following NI generating units (GU_500130, GU_500131, GU_500140, GU_500020, GU_500211, GU_500720, GU_500740, GU_501040, GU_501120, GU_501150, GU_501160, GU_501180, GU_501230 and GU_501310) were submitted incorrectly for settlement day 01/10/2014 (Trade Date 30/09/2014) for the period 00:00 to 06:00. The CLAFs have already been corrected and resubmitted to SEMO by IS Support (SONI).	SONI TSO	2015-01-30	2015-02-02
PUG-DOG	The following units were registered in the market on 09/12/2014: GU_401750, GU_401740, GU_401730, GU_401720, GU_401760, GU_401710. As a result of a defect in the central market systems, PUGDOG values were not applied correctly to these units for 09/12/2014 and 10/12/2014 resulting in Uninstructed Imbalances being calculated incorrectly on these days.		2015-01-05	2014-12-11
Metered Generation	The meters were uncontactable for GU_401240 (Dromdeeveen Windfarm Phase 1), this resulted in SCADA being sent to the SEM for GU_401240 (Dromdeeveen Windfarm Phase 1) for all of the 09/01/2015. Meter data is now available	GU_401240 - Dromdeeveen Windfarm Phase 1	2015-01-13	2015-01-23

MIUN issue	Querying the MGEU_IA_NIMOYLE_I_NIMOYLE values in PIR for settlement date 12/12/2014 for trading periods 00:30 – 02:00. The values in the Error report in AMP are different to the PIR for this settlement date. Can you please confirm what values are applied to generator the MG EU value for these periods?	Interconnector Administrator	2015-01-06	2014-12-23
Payment Calculation	The Indicative Energy PIRs for both PT_50028 & PT_500036 for 26-28 Dec 2014 contain zeros all day for the component AIND_NI. We are therefore unable to replicate the settlement calculations since it is not possible to divide by zero. It could not be correct that the Aggregate Interval Net Demand for all of NI is zero. Can you look into this please?	PT_500028 and PT_500036	2015-01-02	2015-01-09
SO-SO Trade	Incorrect costs were provided to SEMO for a Moyle SO trade for 16.10.2014. Trade costs which were submitted to SEMO at D+3 were incorrect. The amended costs per trade date are included with this query. Trade costs which were submitted to SEMO at D+3 were incorrect. The amended costs per trade date are included with this query. The values in the Error report in AMP are different	Interconnector Administrator	2015-01-05	2015-01-06

Table 24 - Settlement Queries

10 Appendix C: List of All System Errors and Failures

The definitions of the statuses used for the List of All System Errors and Failures are:

- In Progress: Fix being identified and implemented.
- Resolved: Fix has been implemented, but reruns have not been performed.
- Closed: Required reruns have been performed and error-failure has been completely rectified.

Note: Items in the List of All System Errors and Failures that have status 'Closed' in this month's report will not appear in subsequent Monthly Market Operator Reports as they are no longer open issues.

Issue No.	Description	Effect	Fixed from	Re-Pricing	Resettlement	Status
ABB2015- 137670	IP - Heat state issue on new unit	-	-	-	-	1
SETSEMO126	Incorrect User Information displayed in Weblink					

Table 25 - List of System Errors and Failures

11 Appendix D: Details of Operational Timings

Market Schedule and Price Runs

	EA1 Po	ostings	EA2 Postings		WD1 P	ostings	EP1Po	stings	EP2 Postings	
Operational										
Day	Target	Actual	Target	Actual	Target	Actual	Target	Actual	Target	Actual
01/01/2015	11:00	09:57:00	13:00	11:56	09:30	08:17	16:00	14:34	17:00	14:32
02/01/2015	11:00	09:47:00	13:00	11:45	09:30	09:34	16:00	14:36	17:00	14:35
03/01/2015	11:00	10:03:00	13:00	11:55	09:30	08:23	16:00	14:33	17:00	14:44
04/01/2015	11:00	09:52:00	13:00	11:47	09:30	08:22	16:00	14:37	17:00	14:39
05/01/2015	11:00	09:48:00	13:00	11:48	09:30	08:39	16:00	14:40	17:00	14:46
06/01/2015	11:00	10:02:00	13:00	12:01	09:30	08:27	16:00	14:40	17:00	14:25
07/01/2015	11:00	12:28:00	13:00	00:00	09:30	08:25	16:00	14:41	17:00	14:36
08/01/2015	11:00	09:59:00	13:00	11:57	09:30	08:25	16:00	14:50	17:00	14:28
09/01/2015	11:00	09:55:00	13:00	11:56	09:30	08:35	16:00	14:27	17:00	15:03
10/01/2015	11:00	10:03:00	13:00	12:05	09:30	08:39	16:00	14:43	17:00	14:39
11/01/2015	11:00	09:46:00	13:00	11:46	09:30	08:20	16:00	14:33	17:00	14:36
12/01/2015	11:00	10:12:00	13:00	11:46	09:30	08:34	16:00	15:02	17:00	14:41
13/01/2015	11:00	09:56:00	13:00	12:08	09:30	08:25	16:00	14:41	17:00	14:33
14/01/2015	11:00	09:59:00	13:00	11:56	09:30	08:30	16:00	14:36	17:00	14:13
15/01/2015	11:00	10:07:00	13:00	11:51	09:30	08:30	16:00	14:43	17:00	15:07
16/01/2015	11:00	10:02:00	13:00	12:07	09:30	08:29	16:00	14:36	17:00	14:30
17/01/2015	11:00	10:03:00	13:00	12:05	09:30	08:35	16:00	14:17	17:00	14:39
18/01/2015	11:00	10:03:00	13:00	11:53	09:30	08:26	16:00	15:24	17:00	14:33
19/01/2015	11:00	10:03:00	13:00	11:59	09:30	08:31	16:00	14:40	17:00	14:39
20/01/2015	11:00	10:02:00	13:00	11:57	09:30	08:45	16:00	14:41	17:00	14:16
21/01/2015	11:00	09:58:00	13:00	11:57	09:30	08:32	16:00	14:46	17:00	14:38
22/01/2015	11:00	09:59:00	13:00	12:28	09:30	08:27	16:00	14:40	17:00	14:41
23/01/2015	11:00	10:01:00	13:00	11:52	09:30	08:27	16:00	14:20	17:00	14:42
24/01/2015	11:00	09:56:00	13:00	12:09	09:30	08:35	16:00	14:34	17:00	16:32
25/01/2015	11:00	09:59:00	13:00	12:05	09:30	08:28	16:00	14:46	17:00	14:40
26/01/2015	11:00	09:53:00	13:00	12:05	09:30	08:47	16:00	14:43	17:00	14:20
27/01/2015	11:00	09:58:00	13:00	12:01	09:30	08:26	16:00	14:41	17:00	14:21
28/01/2015	11:00	10:01:00	13:00	12:05	09:30	08:29	16:00	14:41	17:00	14:14
29/01/2015	11:00	10:01:00	13:00	11:55	09:30	08:33	16:00	14:25	17:00	14:38
30/01/2015	11:00	10:05:00	13:00	11:58	09:30	08:34	16:00	14:19	17:00	14:45
31/01/2015	11:00	09:54:00	13:00	11:58	10:30	08:29	16:00	14:17	17:00	14:33

Table 26 – MSP Runs

Settlement Runs

		INDICATIV	/E	INITIAL				
Trading	Target	Actual	Target	Actual	Trading	Target	Actual	
Day	Date	Date	Time	Time	Day	Date	Time	Time
01/01/2015	02/01/2015	02/01/2015	17:00	16:01	01/01/2015	08/01/2015	12:00	08:31
02/01/2015	05/01/2015	05/01/2015	17:00	11:26	02/01/2015	08/01/2015	12:00	12:34
03/01/2015	05/01/2015	05/01/2015	17:00	12:17	03/01/2015	08/01/2015	12:00	13:55
04/01/2015	05/01/2015	05/01/2015	17:00	15:55	04/01/2015	09/01/2015	12:00	08:07
05/01/2015	06/01/2015	06/01/2015	17:00	15:53	05/01/2015	12/01/2015	12:00	12:25
06/01/2015	07/01/2015	07/01/2015	17:00	15:39	06/01/2015	13/01/2015	12:00	12:41
07/01/2015	08/01/2015	08/01/2015	17:00	16:27	07/01/2015	14/01/2015	12:00	08:44
08/01/2015	09/01/2015	09/01/2015	17:00	15:59	08/01/2015	15/01/2015	12:00	08:02
09/01/2015	12/01/2015	12/01/2015	17:00	11:39	09/01/2015	15/01/2015	12:00	12:29
10/01/2015	12/01/2015	12/01/2015	17:00	13:22	10/01/2015	15/01/2015	12:00	13:45
11/01/2015	12/01/2015	12/01/2015	17:00	15:31	11/01/2015	16/01/2015	12:00	08:16
12/01/2015	13/01/2015	13/01/2015	17:00	16:32	12/01/2015	19/01/2015	12:00	12:45
13/01/2015	14/01/2015	14/01/2015	17:00	15:51	13/01/2015	20/01/2015	12:00	12:46
14/01/2015	15/01/2015	15/01/2015	17:00	15:33	14/01/2015	21/01/2015	12:00	09:03
15/01/2015	16/01/2015	16/01/2015	17:00	16:13	15/01/2015	22/01/2015	12:00	07:54
16/01/2015	19/01/2015	19/01/2015	17:00	11:51	16/01/2015	22/01/2015	12:00	12:14
17/01/2015	19/01/2015	19/01/2015	17:00	13:27	17/01/2015	22/01/2015	12:00	13:46
18/01/2015	19/01/2015	19/01/2015	17:00	16:21	18/01/2015	23/01/2015	12:00	07:58
19/01/2015	20/01/2015	20/01/2015	17:00	15:45	19/01/2015	26/01/2015	12:00	08:21
20/01/2015	22/01/2015	22/01/2015	17:00	15:35	20/01/2015	27/01/2015	12:00	08:04
21/01/2015	22/01/2015	22/01/2015	17:00	16:31	21/01/2015	28/01/2015	12:00	08:29
22/01/2015	23/01/2015	23/01/2015	17:00	15:44	22/01/2015	29/01/2015	12:00	08:03
23/01/2015	26/01/2015	26/01/2015	17:00	12:00	23/01/2015	29/01/2015	12:00	12:10
24/01/2015	26/01/2015	26/01/2015	17:00	13:41	24/01/2015	29/01/2015	12:00	13:58
25/01/2015	26/01/2015	26/01/2015	17:00	15:35	25/01/2015	30/01/2015	12:00	08:01
26/01/2015	27/01/2015	27/01/2015	17:00	15:42	26/01/2015	02/02/2015	12:00	08:51
27/01/2015	28/01/2015	28/01/2015	17:00	15:48	27/01/2015	03/02/2015	12:00	09:33
28/01/2015	29/01/2015	29/01/2015	17:00	16:23	28/01/2015	04/02/2015	12:00	08:50
29/01/2015	30/01/2015	30/01/2015	17:00	15:42	29/01/2015	05/02/2015	12:00	08:08
30/01/2015	02/02/2015	02/02/2015	17:00	11:42	30/01/2015	05/02/2015	12:00	11:45
31/01/2015	02/02/2015	02/02/2015	17:00	12:57	31/01/2015	05/02/2015	12:00	13:01

Table 27 - Settlement Runs

12 Appendix E: Imperfections Charge

This appendix provides daily data for the Constraint Payments, Uninstructed Imbalance Payments and Imperfections Charges, and as well as the weekly values of Make Whole Payments and Testing Charges.

The following table is updated to take account of the values calculated in the Initial Settlement runs only.

Historical information will be shown in Appendix E until completion of the current financial year. Information prior to that can be found in previous Monthly Market Operator Reports.

Date	Constraints Payments	Uninstructed Imbalances Payments	Imperfections Charges		
01/10/2014	€227,003.16	€4,663.19	-€497,010.43		
02/10/2014	€735,796.33	-€19,882.49	-€485,485.43		
03/10/2014	€614,655.29	€10,871.94	-€504,078.89		
04/10/2014	€431,006.78	-€7,434.77	-€448,528.17		
05/10/2014	€824,385.72	€10,977.87	-€414,125.03		
06/10/2014	€656,891.36	-€20,536.24	-€496,825.27		
07/10/2014	€271,569.15	€7,652.10	-€515,909.62		
08/10/2014	€317,802.51	-€36,024.01	-€520,694.36		
09/10/2014	€271,129.06	-€14,582.31	-€525,428.89		
10/10/2014	€442,983.70	-€26,317.26	-€517,313.97		
11/10/2014	€311,801.03	€11,849.83	-€473,083.86		
12/10/2014	€401,470.02	-€7,407.00	-€451,034.95		
13/10/2014	€353,395.99	-€24,498.55	-€513,674.01		
14/10/2014	€358,013.74	-€19,066.88	-€523,546.32		
15/10/2014	€428,117.82	-€853.11	-€511,064.60		
16/10/2014	€310,763.65	-€12,618.38	-€513,456.78		
17/10/2014	€483,353.64	-€5,253.97	-€495,989.17		
18/10/2014	€1,079,153.36	€23,841.90	-€428,037.24		
19/10/2014	€506,373.44	-€2,840.01	-€416,208.56		
20/10/2014	€565,796.01	-€13,121.95	-€490,614.73		
21/10/2014	€722,480.43	€17,262.53	-€491,996.93		
22/10/2014	€622,659.96	-€35,249.53	-€515,127.40		
23/10/2014	€299,585.53	€2,462.07	-€513,013.48		
24/10/2014	€505,499.46	-€8,503.06	-€505,991.61		
25/10/2014	€899,840.05	€24,936.45	-€439,804.29		
26/10/2014	€867,189.29	-€8,010.50	-€428,234.85		
27/10/2014	€739,332.30	€6,690.55	-€444,796.70		
28/10/2014	€553,302.80	-€61,012.80	-€519,037.78		
29/10/2014	€754,919.24	-€6,314.82	-€530,046.54		
30/10/2014	€636,202.61	-€3,395.44	-€513,730.14		
31/10/2014	€508,522.20	-€17,778.71	-€506,014.82		
01/11/2014	€546,540.25	-€6,912.86	-€457,086.94		
02/11/2014	€318,890.98	-€12,990.39	-€443,511.55		
03/11/2014	€569,073.38	-€4,244.85	-€532,442.41		
04/11/2014	€669,098.98	-€16,550.06	-€528,960.67		
05/11/2014	€546,197.90	-€18,613.60	-€550,138.29		
06/11/2014	€637,275.88	-€14,424.86	-€537,063.83		
07/11/2014	€382,071.17	-€11,250.48	-€531,305.30		
08/11/2014	€416,600.72	-€18,592.20	-€500,732.00		
09/11/2014	€324,554.00	-€6,024.57	-€481,392.83		

10/11/2014	€506,959.62	-€12,756.86	-€540,675.17
11/11/2014	€305,371.45	-€44,629.39	-€565,550.06
12/11/2014	€532,498.02	-€28,281.20	-€554,600.49
13/11/2014	€345,990.75	-€17,901.27	-€553,923.16
14/11/2014	€343,466.61	-€1,320.38	-€534,716.18
15/11/2014	€494,457.91	€3,019.64	-€499,765.88
16/11/2014	€360,376.17	€7,373.68	-€482,898.42
17/11/2014	€553,003.49	-€24,556.35	-€545,895.52
18/11/2014	€415,247.34	€4,362.82	-€543,481.42
19/11/2014	€534,047.47	-€12,653.01	-€548,548.06
20/11/2014	€548,216.05	-€26,506.42	-€571,397.50
21/11/2014	€351,743.55	-€34,277.81	-€542,644.18
22/11/2014	€402,367.39	-€15,880.02	-€504,134.67
23/11/2014	€543,674.52	-€9,757.73	-€492,515.83
24/11/2014	€436,153.86	-€3,275.68	-€568,242.69
25/11/2014	€252,433.54	-€17,224.01	-€582,837.38
26/11/2014	€268,639.50	-€6,672.97	-€590,843.52
27/11/2014	€477,133.30	-€17,221.50	-€571,833.74
28/11/2014	€514,059.40	-€24,958.57	-€548,216.58
29/11/2014	€466,095.46	-€17,684.09	-€518,324.65
30/11/2014	€426,493.00	€228.22	-€497,681.99
01/12/2014	€425,729.84	-€17,667.29	-€564,559.17
02/12/2014	€608,884.75	-€17,007.29	-€580,266.39
03/12/2014	€506,617.59	-€48,599.53	-€604,794.55
04/12/2014	€500,017.35	-€26,701.42	-€598,118.36
05/12/2014	€461,085.09	-€25,561.67	-€572,477.87
06/12/2014	€568,753.24	-€12,613.70	-€516,202.71
07/12/2014	€484,127.53	€2,302.13	-€486,982.31
08/12/2014	€885,938.85	-€37,551.38	-€584,787.94
09/12/2014	€718,257.00	-€19,795.27	-€567,508.60
10/12/2014	€694,745.69	-€28,671.71	-€573,652.69
11/12/2014	€523,434.14	-€5,545.19	-€588,404.70
12/12/2014	€674,997.85	-€30,954.05	-€590,328.30
13/12/2014	€574,892.66	-€14,185.39	-€545,225.54
14/12/2014	€628,744.88	-€7,460.18	-€494,683.75
15/12/2014	€586,494.13	-€52,410.95	-€589,165.45
16/12/2014	€596,239.45	-€17,823.19	-€593,950.92
17/12/2014	€709,290.15	-€19,551.47	-€567,440.23
18/12/2014	€896,816.00	€2,905.28	-€554,081.45
19/12/2014	€995,932.96	€4,662.09	-€543,943.87
20/12/2014	€505,276.32	€4,952.12	-€510,278.41
21/12/2014	€1,032,186.15	€3,856.82	-€470,790.42
22/12/2014	€783,718.05	€19,779.93	-€528,728.17
23/12/2014	€580,782.79	€13,315.83	-€531,858.69
24/12/2014	€522,323.53	-€1,231.24	-€497,446.95
25/12/2014	€365,691.72	€1,963.64	-€464,366.17
26/12/2014	€540,788.12	-€8,172.04	-€457,472.59
27/12/2014	€646,748.39	€14,909.59	-€472,798.28
28/12/2014	€607,407.31	€7,022.19	-€497,727.79
29/12/2014	€555,367.66	€7,365.97	-€524,246.05
30/12/2014	€640,363.39	€14,384.93	-€505,239.86
31/12/2014	€603,204.62	€25,349.47	-€482,895.60
01/01/2015	€1,183,313.74	€22,302.55	-€432,637.80

02/01/2015	€719,060.46	€7,180.94	-€488,863.06
03/01/2015	€347,426.55	€22,383.30	-€509,883.65
04/01/2015	€368,525.85	€17,445.50	-€492,762.63
05/01/2015	€858,552.99	-€57,810.06	-€547,249.34
06/01/2015	€846,901.18	€24,062.40	-€565,026.70
07/01/2015	€754,789.55	€18,197.44	-€553,124.60
08/01/2015	€738,052.46	€5,912.21	-€560,161.59
09/01/2015	€799,401.56	€25,467.67	-€544,123.83
10/01/2015	€471,870.80	€23,541.24	-€489,886.95
11/01/2015	€804,037.00	€7,957.03	-€475,707.54
12/01/2015	€532,334.91	-€28,660.44	-€547,621.88
13/01/2015	€657,677.89	€13,214.17	-€585,068.72
14/01/2015	€769,303.38	-€3,725.21	-€591,675.05
15/01/2015	€571,780.65	€11,193.51	-€586,646.16
16/01/2015	€716,352.94	-€13,748.94	-€590,495.78
17/01/2015	€377,678.95	€8,181.35	-€550,070.38
18/01/2015	€166,250.30	-€3,020.40	-€514,226.93
19/01/2015	€698,080.04	-€37,908.42	-€609,509.53
20/01/2015	€437,319.37	-€40,386.17	-€614,164.65
21/01/2015	€667,403.57	-€48,191.01	-€614,449.45
22/01/2015	€542,321.93	-€24,334.20	-€614,473.92
23/01/2015	€461,543.80	-€1,291.99	-€571,701.09
24/01/2015	€375,088.02	€3,285.01	-€529,114.19
25/01/2015	€370,985.65	-€4,188.67	-€488,904.88
26/01/2015	€761,148.58	-€5,809.04	-€566,069.74
27/01/2015	€496,305.71	€3,197.27	-€578,227.32
28/01/2015	€679,942.31	-€5,819.24	-€567,278.15
29/01/2015	€842,221.29	-€19,380.22	-€582,068.03
30/01/2015	€498,670.69	-€9,939.77	-€568,791.17
31/01/2015	€621,711.25	€5,481.92	-€512,025.64

 Table 28 - Constraint Payments, Uninstructed Imbalance Payments, and Imperfections Charges

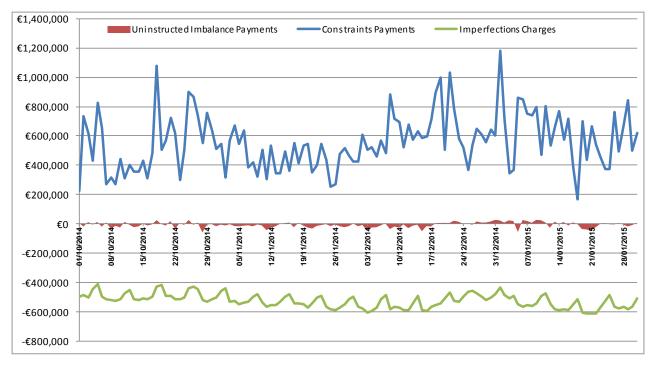


Figure 24 - Constraint Payments, Uninstructed Imbalance Payments, and Imperfections Charges

Week No	Make Whole Payments
38	€202,188.33
39	€225,015.64
40	€280,671.13
41	€186,568.53
42	€159,900.73
43	€172,804.93
44	€117,287.97
45	€69,322.58
46	€151,346.18
47	€116,593.30
48	€89,395.20
49	€75,360.41
50	€169,324.41
51	€121,591.48
52	€55,670.15
1	€80,155.98
2	€72,635.72
3	€117,670.85
4	€162,664.95

Table 29 - Make Whole Payments

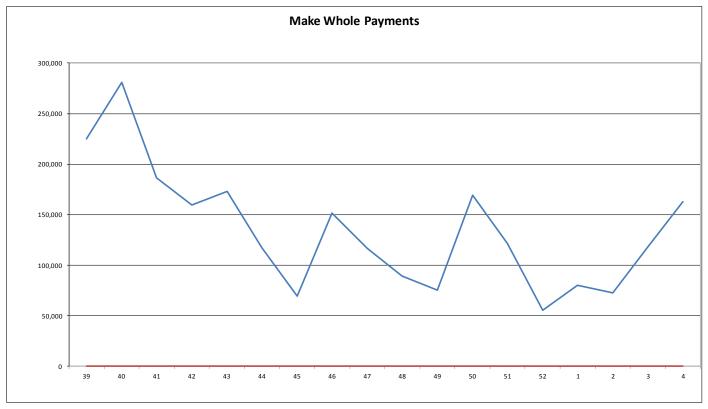


Figure 25 - Make Whole Payments

Week No	Testing Charges
39	-€64,349.25
40	-€23,212.88
41	-€8,173.18
42	-€106,220.13
43	-€106,488.24
44	-€74,217.72
45	-€13,149.01
46	€31,147.27
47	-€34,993.39
48	-€8,926.09
49	-€31,711.41
50	-€91,587.25
51	-€43,797.04
52	€0.00
1	-€69,863.70
2	€0
3	€0
4	€0

Table 30 - Testing Charges

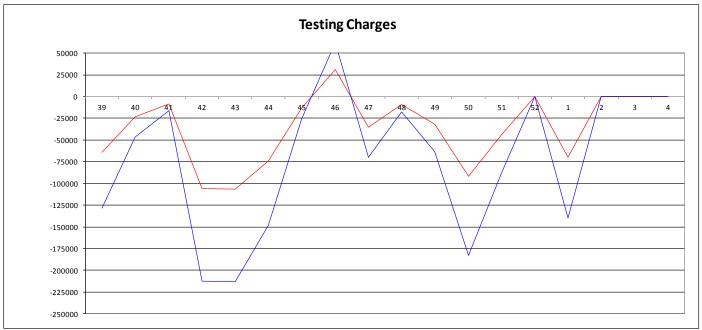


Figure 26 - Testing Charges

13 Appendix F: Default Commercial Offer Data Used

The table below lists for each unit the number of times in operations during January 2015 where the Commercial Offer Data was based on a Participant submission within the Market window, or based on Standing Data or Default Data submitted.

PNAME	RNAME	Manual	Adjusted	Standing	COUNT
PT_400090	DSU_401620			31	31
PT_400090	DSU_401610	24			24
PT_400138	DSU_401590	5			5
PT_400111	DSU_401390		5		5
PT_400116	DSU_401400	31			31
PT_400090	DSU_401610			9	9
PT_400090	DSU_401270			1	1
PT_400090	DSU_401270	30			30
PT_400106	DSU_401330	42			42
PT_400133	DSU_401530			25	25
PT_400133	DSU_401530	6			6
PT_400124	DSU_401490	31			31
PT_400024	GU_400120	31			31
PT_400024	GU_400121	31			31
PT 400026	GU 400140	31			31
PT_400030	GU_400180	47			47
PT_400030	GU_400181	48			48
PT_400030	GU_400182	47			47
PT 400030	GU 400183	45			45
PT_400030	GU_400200	41			41
PT_400030	GU_400201	41			41
PT 400030	GU 400202	42			42
PT_400030	GU_400203	41			41
PT_400030	GU_400210	40			40
PT_400030	GU_400211	40			40
PT_400030	GU_400220	40			40
PT 400030	GU 400221	40			40
PT_400030	GU_400240	40			40
PT_400030	GU_400250	40			40
PT_400030	GU_400251	40			40
PT_400030	GU_400252	40			40
PT_400030	GU_400260	40			40
PT_400030	GU_400270	41			41
PT_400030	GU_400271	40			40
PT_400030	GU_400272	43			43
PT_400030	GU_400280	40			40
PT_400030	GU_400281	40			40
PT_400030	GU_400290	40			40
PT_400030	GU_400300	46			46
PT_400030	GU_400311	46			46
PT_400030	GU_400323	47			47
PT_400030	GU_400360	40			40
PT_400030	GU_400361	40			40
PT_400030	GU_400362	40			40
PT_400030	GU_400363	40			40

	T a		
PT_400030	GU_400370	40	40
PT_400030	GU_400850	47	47
PT_400032	GU_400430	30	30
PT_400034	GU_400940	30	30
PT_400034	GU_401090	30	30
PT_400034	GU_401440	30	30
PT_400035	GU_400480	57	57
PT_400037	GU_400500	36	36
PT_400041	GU_400530	55	55
PT_400044	GU_400540	57	57
PT_400054	GU_400620	30	30
PT_400055	GU_400630	30	30
PT_400064	GU_400750	31	31
PT_400064	GU_400751	31	31
PT_400064	GU_400752	31	31
PT_400064	GU_400753	31	31
PT_400064	GU_400754	31	31
PT_400064	GU_400760	31	31
PT_400064	GU_400761	31	31
PT_400064	GU_400762	31	31
PT_400064	GU_400770	31	31
PT_400064	GU_400771	31	31
PT_400064	GU_400780	31	31
PT_400064	GU_400781	31	31
PT_400075	GU_400930	84	84
PT_400077	GU_400950	30	30
PT_400078	GU_401010	31	31
PT_400078	GU_401011	31	31
PT_400151	GU_401770	19	19
PT_400152	GU_401710	4	4
PT_400152	GU_401720	4	4
PT_400152	GU_401730	4	4
PT_400152	GU_401740	4	4
PT_400152	GU_401750	4	4
PT 400152	GU 401760	4	4
PT_500024	GU_500040	43	43
PT 500024	GU 500041	29	29
PT 500027	GU 500130	88	88
PT_500027	GU 500131	88	88
PT_500027	GU_500140	88	88
PT_500040	GU_500280	31	31
PT_500040	GU_500281	31	31
PT 500040	GU_500282	31	31
PT 500040	GU_500283	31	31
PT 500040	GU 500284	31	31
PT 500045	GU 500820	31	31
PT 500045	GU_500821	31	31
PT_500045	GU_500822	31	31
PT 500045	GU_500823	31	31
PT_500045	GU_500824	31	31
PT_500045	GU_500825	31	31
PT 500048	GU 500904	51	51
PT 500050	GU 501040	30	30
PT_500050	GU 501050	30	30
1 1_000000	30_301030]	30

DT 500050	CII 504450	20			20
PT_500050 PT_500050	GU_501150 GU 501190	30			30
	_	30			30
PT_500053	GU_501130	31			31
PT_500066	GU_501210	30		0.4	30
PT_400021	GU_400021			31	31
PT_400021	GU_400050			31	31
PT_400021	GU_400060			31	31
PT_400021	GU_400070			31	31
PT_400021	GU_400080			31	31
PT_400021	GU_400591			31	31
PT_400021	GU_400600			31	31
PT_400021	GU_400910			31	31
PT_400021	GU_400920			31	31
PT_400021	GU_401080			31	31
PT_400021	GU_401380			31	31
PT_400021	GU_401600			31	31
PT_400021	GU_401640			31	31
PT_400025	GU_400130			31	31
PT_400030	GU_400310			31	31
PT_400032	GU_400430			1	1
PT_400034	GU_400940			1	1
PT_400034	GU_401090			1	1
PT_400034	GU_401440			1	1
PT_400038	GU_400550			31	31
PT_400050	GU_400650			31	31
PT_400050	GU_400660			31	31
PT_400050	GU_401000			31	31
PT_400050	GU_401060			31	31
PT_400050	GU_401150			31	31
PT_400050	GU_401240			31	31
PT_400050	GU_401250			31	31
PT_400050	GU_401290			31	31
PT_400050	GU_401360			31	31
PT_400054	GU_400620			1	1
PT_400055	GU_400630			1	1
PT_400062	GU_400730			31	31
PT_400062	GU_400731			31	31
PT_400062	GU_400840			31	31
PT_400062	GU_401310			1	1
PT_400062	GU_401550			1	1
PT_400062	GU_401551			1	1
PT_400062	GU_401560			1	1
PT_400062	GU_401570			1	1
PT_400062	GU_401580			1	1
PT_400077	GU_400950			1	1
PT_400082	GU_401100			31	31
PT_400087	GU_401230			31	31
PT_400152	GU_401710			28	28
PT_400152	GU_401720			28	28
PT_400152	GU_401730			28	28
PT_400152	GU_401740			28	28
PT_400152	GU_401750			28	28
PT_400152	GU_401760			28	28
PT_500021	GU_500010			31	31
	•	•	-		

PT_500050 PT_500050	GU_501050 GU_501150			1 1	1
PT_500050 PT_500061	GU_501190 GU_501170			1 31	1 31
PT_500062	GU_501180			31	31
PT_500066 PT_500073	GU_501210 GU 501230			31	1 31
PT_500074	GU_501250			31	31
PT_400021	I_ROIEWIC	31			31
PT_500024	I_NIMOYLE I NIMOYLE	58			58
PT_500021 PT_500075	I_NIMOYLE	31 89			31 89
PT 500078	I NIMOYLE	31			31
PT 500069	I NIMOYLE	93			93
PT 500031	I NIMOYLE	33			33
PT_400096	I_ROIEWIC	92			92
PT_400113	I_ROIEWIC	31			31
PT_500037	I_NIMOYLE	31			31
PT_400115	I_ROIEWIC	33			33
PT_400136	I_ROIEWIC	67			67
PT_500070	I_NIMOYLE	69			69
PT_400108	I_ROIEWIC	63			63
PT_400030	I_ROIEWIC	57			57
PT_400099	I_ROIEWIC	31			31
	Total	4329	5	1558	5892
	Percentage	73.47%	0.08%	26.44%	100.00%

Table 31 – Default Commercial Data Used

14 Appendix G: Total Charges and Payments Data

The tables below list historical values for Total Charges and Total Payments in the SEM by month and currency since start of the SEM.

- Month of inclusion based on invoice date.
- Amounts are after application of Settlement Reallocation.

	Energy	Capacity	Market Operator	M+4 Energy	M+4 Capacity	M+4 Market Operator	M+13 Energy	M+13 Capacity	M+13 Market Operator	Ad-hoc Energy	Ad-hoc Capacity	Ad-hoc Market Operator	Total
ROI	£94,237,410.27	£26,111,830.04	£1,768,924.89	£1,095,479.88	£186,255.41	£10,667.03	£1,203,541.15	£58,436.00	£1,881.53	£2,162,845.35	£0.00	£0.00	126,837,271.55
NI	£40,120,956.32	£9,383,627.04	£512,345.05	£79,171.25	£13,455.28	£753.82	£304,333.70	£18,778.73	£614.32	£591,913.98	£0.00	£0.00	51,025,949.49
ROI	£59,731,699.86	£27,864,400.43	£1,135,385.04	£777,997.00	£175,711.33	£8,515.85	£874,795.89	£44,746.05	£1,825.43	£0.00	£0.00	£0.00	90,615,076.88
NI	£26,108,999.75	£9,220,782.35	£325,646.22	£58,193.58	£77,917.35	£571.58	£137,253.25	£14,599.87	£487.47	£0.00	£0.00	£0.00	35,944,451.42
ROI	£114,421,340.65	£24,793,160.86	£2,129,762.27	£798,055.27	£127,352.61	£7,984.34	£204,139.96	£36,418.59	£1,561.86	£473,584.35	£0.00	£0.00	142,993,360.76
NI	£51,824,850.54	£9,142,377.84	£617,870.56	£62,006.75	£10,003.11	£595.49	£67,335.86	£14,491.45	£574.85	£141,821.26	£0.00	£0.00	61,881,927.71
ROI	£66,102,607.16	£27,393,747.26	£1,496,376.58	£305,733.65	£76,911.71	£2,819.89	£479,013.35	£22,451.87	£9,128.65	£381,194.91	£0.00	£0.00	96,269,985.03
NI	£31,130,342.59	£9,846,758.26	£422,869.99	£25,720.60	£3,900.39	£240.37	£187,918.65	£15,303.03	£942.92	£235.51	£0.00	£0.00	41,634,232.31
ROI	£70,041,213.49	£26,285,336.21	£1,449,159.95	£261,906.17	£61,216.38	£2,226.19	£92,283.95	£30,407.22	£960.16	£0.00	£0.00	£0.00	98,224,709.72
NI	£30,175,818.70	£9,293,564.48	£406,620.40	£46,940.79	£7,639.04	£408.77	£52,408.32	£11,933.67	£470.83	£0.00	£0.00	£0.00	39,995,805.00
ROI	£62,098,778.40	£21,155,742.39	£1,388,175.41	£528,104.58	£142,466.39	£4,901.73	£242,053.48	£38,030.86	£1,783.00	£0.00	£0.00	£0.00	85,600,036.24
NI	£26,448,426.91	£9,644,850.74	£386,840.18	£307,948.88	£77,962.26	£2,649.15	£53,805.05	£9,613.13	£381.03	£0.00	£0.00	£0.00	36,932,477.33
ROI	£68,945,192.38	£22,029,381.87	£1,615,436.17	£629,905.18	£213,410.99	£7,659.07	£192,421.65	£21,030.53	£1,110.05	£429,407.30	£0.00	£0.00	94,084,955.19
NI	£28,649,957.73	£7,313,397.03	£439,831.96	£149,812.37	£34,908.87	£997.82	£58,386.93	£9,959.93	£468.77	£0.03	£0.00	£0.00	36,657,721.44
ROI	£52,841,750.77	£17,596,854.80	£1,312,068.35	£423,771.26	£115,750.72	£4,162.65	£89,169.46	£18,685.28	£1,014.73	£28,526.30	£0.00	£0.00	72,431,754.32
NI	£21,944,762.06	£6,361,219.34	£345,120.63	£120,971.43	£44,784.33	£1,003.03	£41,125.48	£9,461.42	£415.67	£2,532.18	£0.00	£0.00	28,871,395.57
ROI	£48,255,770.91	£22,988,780.17	£1,292,701.68	£332,606.61	£88,357.34	£2,943.28	£85,242.72	£17,526.18	£1,047.39	£0.00	£0.00	£0.00	73,064,976.28
NI	£16,832,807.07	£5,122,118.14	£325,108.62	£91,338.63	£25,719.39	£870.76	£34,166.04	£7,520.83	£436.14	£0.00	£0.00	£0.00	22,440,085.62
ROI	£66,217,285.22	£32,948,586.09	£1,048,029.61	£438,657.65	£106,047.92	£3,853.63	£150,902.14	£27,588.16	£819.15	£0.00	£2,703.81	£0.00	100,944,473.38
NI	£27,989,159.87	£8,572,662.67	£280,425.53	£42,989.83	£9,581.57	£365.00	£37,526.70	£7,104.61	£229.56	£0.00	£1,338.36	£0.00	36,941,383.70
ROI	£73,166,499.86	£17,774,079.00	£1,638,145.68	£285,506.09	£62,431.70	£3,367.28	£92,320.83	£30,020.38	£728.19	£0.00	£0.00	£0.00	93,053,099.01
NI	£24,828,028.32	£5,414,449.74	£421,681.34	£62,719.19	£15,276.27	£566.66	£41,391.12	£13,194.54	£660.78	£0.00	£0.00	£0.00	30,797,967.96
ROI	£24,219,443.57	£5,293,829.01	£290,759.61	£125,095.27	£15,188.14	£796.75	£32,076.91	£6,465.54	£355.27	£0.00	£0.00	£0.00	29,984,010.07
NI	£73,931,567.89	£18,999,271.36	£1,111,306.76	£521,095.61	£105,483.15	£5,765.50	£89,815.40	£9,518.03	£802.55	£0.00	£0.00	£0.00	94,774,626.25
ROI	£57,386,075.03	£21,066,561.05	£829,482.91	£519,431.32	£147,151.65	£6,123.28	£79,434.93	£23,622.83	£721.00	£0.00	£0.00	£0.00	80,058,604.00
NI	£21,159,632.98	£6,853,966.46	£220,983.06	£50,691.24	£27,250.12	£653.21	£26,795.35	£6,589.23	£253.47	£0.00	£0.00	£0.00	28,346,815.12
ROI	£66,217,285.22	£32,948,586.09	£1,048,029.61	£438,657.65	£106,047.92	£3,853.63	£150,902.14	£27,588.16	£819.15	£0.00	£2,703.81	£0.00	100,944,473.38
NI	£27,989,159.87	£8,572,662.67	£280,425.53	£42,989.83	£9,581.57	£365.00	£37,526.70	£7,104.61	£229.56	£0.00	£1,338.36	£0.00	36,941,383.70
ROI	£66,217,285.22	£32,948,586.09	£1,048,029.61	£438,657.65	£106,047.92	£3,853.63	£150,902.14	£27,588.16	£819.15	£0.00	£2,703.81	£0.00	100,944,473.38
NI	£27,989,159.87	£8,572,662.67	£280,425.53	£42,989.83	£9,581.57	£365.00	£37,526.70	£7,104.61	£229.56	£0.00	£1,338.36	£0.00	36,941,383.70

Table 32 - Total Charges by Month

Mark	cet	Energy	Capacity	M+4 Energy	M+4 Capacity	M+4 Market Operator	M+13 Energy	M+13 Capacity	M+13 Market Operator	Ad-hoc Energy	Ad-hoc Capacity	Ad-hoc Market Operator	Total
Nov-13	ROI	€101,727,467.69	€26,117,243.83	€1,224,763.25	€189,998.42	€12,263.50	€1,215,831.35	€57,206.41	€1,470.22	€2,187,635.43	€0.00	€0.00	€132,733,880.10
1404-72	NI	€38,593,632.08	€9,396,822.98	€111,667.01	€10,330.33	€754.66	€405,512.07	€19,818.44	€503.29	€523,998.04	€0.00	€0.00	€49,063,038.90
Dec-13	ROI	€65,016,104.57	€28,265,983.93	€814,481.63	€237,772.30	€8,560.54	€742,019.49	€45,101.88	€1,753.62	€0.00	€0.00	€0.00	€95,131,777.96
Der-12	NI	€26,883,033.60	€8,854,167.97	€62,225.77	€25,458.47	€563.46	€254,389.50	€14,183.48	€467.80	€0.00	€0.00	€0.00	€36,094,490.05
Jan-14	ROI	€134,009,133.84	€23,642,517.67	€793,440.19	€126,432.23	€7,824.65	€221,578.57	€36,894.00	€1,646.36	€479,971.01	€0.00	€0.00	€159,319,438.52
Jan-14	NI	€51,714,479.92	€10,157,332.65	€82,843.03	€10,154.76	€543.56	€66,035.81	€14,046.97	€605.11	€109,684.36	€0.00	€0.00	€62,155,726.17
Feb-14	ROI	€78,679,881.12	€26,819,095.36	€304,687.52	€76,805.50	€2,536.46	€531,739.65	€29,343.21	€10,349.43	€443,421.38	€0.00	€0.00	€106,897,859.63
reu-14	NI	€29,747,186.53	€10,347,544.45	€37,918.21	€4,082.15	€214.26	€179,315.25	€9,737.45	€350.80	€3.55	€0.00	€0.00	€40,326,352.65
Mar-14	ROI	€75,149,006.14	€26,180,620.54	€259,644.98	€60,397.08	€2,170.67	€127,303.70	€28,200.28	€960.40	€0.00	€0.00	€0.00	€101,808,303.79
IVIdI-14	NI	€29,749,446.42	€9,292,032.85	€46,950.40	€8,326.93	€408.65	€52,017.29	€13,760.80	€471.08	€0.00	€0.00	€0.00	€39,163,414.42
Арг-14	ROI	€65,482,679.64	€21,981,963.17	€549,302.08	€147,627.43	€4,399.40	€259,726.57	€38,566.49	€1,783.33	€0.00	€0.00	€0.00	€88,466,048.11
Apr-14	NI	€25,517,456.45	€8,979,409.88	€303,950.50	€73,719.22	€2,138.60	€56,294.66	€9,188.57	€381.08	€0.00	€0.00	€0.00	€34,942,538.96
May-14	ROI	€68,502,489.93	€22,405,052.21	€652,683.44	€210,307.65	€7,807.32	€249,029.58	€16,425.79	€1,110.17	€9,581.32	€0.00	€0.00	€92,054,487.41
IVIAY-14	NI	€27,515,054.00	€7,036,489.15	€150,145.26	€37,452.65	€999.79	€81,713.52	€13,718.04	€468.77	€3.89	€0.00	€0.00	€34,836,045.07
Jun-14	ROI	€53,863,542.49	€16,268,861.66	€424,333.36	€121,415.36	€4,245.54	€106,227.35	€17,318.53	€1,014.63	€10,805.33	€0.00	€0.00	€70,817,764.25
Juli-14	NI	€18,301,490.12	€7,464,864.99	€121,134.45	€40,186.30	€1,005.32	€50,770.87	€10,564.39	€415.66	€29.76	€0.00	€0.00	€25,990,461.86
Jul-14	ROI	€50,929,138.15	€21,772,067.06	€326,631.36	€82,858.43	€2,938.18	€123,130.56	€17,118.42	€1,016.51	€0.00	€0.00	€0.00	€73,254,898.67
Jui-14	NI	€12,936,147.70	€6,035,816.09	€91,479.13	€29,875.87	€813.16	€67,310.27	€7,807.37	€427.29	€0.00	€0.00	€0.00	€19,169,676.88
Aug-14	ROI	€76,295,371.52	€16,503,906.00	€283,973.76	€42,797.07	€2,738.01	€125,676.42	€0.00	€1,327.83	€29.36	€0.00	€0.00	€93,255,819.97
Aug-14	NI	€21,735,748.95	€7,476,289.80	€38,275.71	€8,505.48	€324.11	€25,331.16	€7,456.18	€248.46	€0.00	€691.42	€0.00	€29,292,871.27
Sep-14	ROI	€73,630,247.02	€17,405,067.16	€261,367.00	€62,924.88	€3,377.33	€73,033.72	€11,845.94	€728.13	€0.00	€0.00	€0.00	€91,448,591.18
3ep-14	NI	€22,272,153.08	€5,742,482.51	€49,069.86	€14,962.35	€717.66	€41,404.59	€13,672.05	€509.28	€0.00	€0.00	€0.00	€28,134,971.38
Oct-14	ROI	€21,735,748.95	€7,476,289.80	€38,275.71	€8,505.48	€324.11	€25,331.16	€7,456.18	€248.46	€0.00	€691.42	€0.00	€29,292,871.27
011-14	NI	€18,391,944.98	€5,868,972.09	€82,257.95	€15,709.16	€1,031.70	€42,677.16	€6,422.11	€498.29	€0.00	€0.00	€0.00	€24,409,513.44
Nov-14	ROI	€64,818,088.97	€20,480,936.98	€530,386.99	€157,754.12	€6,116.91	€78,674.36	€23,606.67	€1,289.81	€0.00	€0.00	€0.00	€86,096,854.81
1404-14	NI	€14,616,605.70	€7,312,194.38	€50,960.79	€18,897.71	€653.20	€37,498.77	€6,592.72	€254.29	€0.00	€0.00	€0.00	€22,043,657.56
Dec-14	ROI	€77,706,417.44	€34,394,754.66	€438,764.21	€107,475.98	€4,105.28	€98,914.59	€27,079.30	€830.89	€14,240.78	€3,537.75	€0.00	€112,796,120.88
Dec-14	NI	€21,735,748.95	€7,476,289.80	€38,275.71	€8,505.48	€324.11	€25,331.16	€7,456.18	€248.46	€0.00	€691.42	€0.00	€29,292,871.27
lan 15	ROI	€77,706,417.44	€34,394,754.66	€438,764.21	€107,475.98	€4,105.28	€98,914.59	€27,079.30	€830.89	€14,240.78	€3,537.75	€0.00	€112,796,120.88
Jan-15	NI	€21,735,748.95	€7,476,289.80	€38,275.71	€8,505.48	€324.11	€25,331.16	€7,456.18	€248.46	€0.00	€691.42	€0.00	€29,292,871.27

Table 33 - Total Payments by Month

15 Appendix H: Full Balancing Costs

Historical figures for full Balancing Costs of both the Trading and Capacity Markets, for the current financial year (October to September), are provided below. Information related to periods before this is available in previous Monthly Market Operator Reports.

- Positive values indicate Payments were greater than Charges.
- Negative values indicate Charges were greater than Payments.

Trading Market

Date Of Invoice	Week No	SEM Balancing Costs	VAT Balancing Costs	
03/10/2014 38		-€115,563.34	-€ 12,716.83	
10/10/2014	39	€103,327.94	€49,084.94	
17/10/2014	40	-€315,014.02	-€ 48,688.42	
24/10/2014	41	€234,738.53	€13,856.57	
31/10/2014	42	€833,278.35	-€228,026.23	
07/11/2014	43	€1,209,277.49	€172,019.41	
14/11/2014	44	-€89,236.37	-€18,016.46	
21/11/2014	45	-€726,843.59	-€105,801.85	
28/11/2014	46	-€504,700.82	-€60,211.13	
05/12/2014	47	-€783,945.26	-€105,665.85	
12/12/2014	48	-€481,481.35	-€72,270.22	
19/12/2014	49	€485,102.80	€53,433.64	
31/12/2014	50	€980,523.50	€ 148,117.94	
06/01/2015	51	€1,093,199.99	-€115,434.63	
09/01/2015	52	€1,320,639.28	-€ 84,567.47	
16/01/2015	1	€1,142,575.16	-€178,714.26	
23/01/2015	2	€496,291.68	-€87,488.46	
30/01/2015	3	-€871,479.91	€86,389.82	

Table 34 – Full Balancing Costs for Trading Charges and Payments

Note: SEM Balancing Costs are provided based on daily exchange rates; VAT Balancing Costs are based on the Invoicing Date Trading Day exchange rate. VAT Balancing costs exclude Currency Cost related VAT.

Capacity Market

Invoice Month	SEM Balancing Costs	VAT Balancing Costs		
October 2014	-€361.28	-€ 968.24		
November 2014	-€348.12	-€0.03		
December 2014	-€393.11	€0.00		
January 2015	-€416.65	€0.04		

Table 35 - Balancing Costs for Capacity Settlement

Note: SEM Capacity Balancing Costs and VAT Balancing Costs are provided based on Annual Capacity exchange rate. VAT Balancing costs exclude Currency Cost related VAT.

16 Appendix I: MSP Algorithms

The Market Operator has two different certified solvers used to determine Unit Commitment. These solvers use the Lagrangian Relaxation (LR) and Mixed Integer Programming (MIP) methodologies.

The primary algorithm used in the SEM is Lagrangian Relaxation (LR). Under certain schedule outcomes this solution is compared to results achieved using MIP. The SEMO policy on the use of MIP has been updated and is available from the SEMO website <a href="https://example.com/her-semonth-semon

Historical information on runs and dates where the MIP algorithm has been used for published results is provided below.

Month	Ex-Ante	Ex-Ante 2	Ex-Post Indicative	Ex-Post Initial	Within Day
October 2014	10/10/2014	03/10/2014 15/10/2014 28/10/2014	06/10/2014 13/10/2014 29/10/2014	06/10/2014 13/10/2014 27/10/2014	<u>19/10/2014</u>
November 2014	=	02/11/2014 11/11/2014 15/11/2014 25/11/2014	20/11/2014 24/11/2014 26/11/2014	12/11/2014 20/11/2014 26/11/2014	Ξ
December 2014	14/12/2014	04/12/2014 14/12/2014 25/12/2014	01/12/2014	04/12/2014	
January 2015	06/01/2015	12/01/2015 15/01/2015 21/01/2015 23/01/2015	03/01/2015	28/01/2015	<u>16/01/2015</u>

Table 36 - MIP Algorithms

Operational				MIP Peak	
Date	Trade Date	Run Type	LR Peak SMP	SMP	Published
02/10/2014	03/10/2014	EA2	€1,000	€298.79	MIP
07/10/2014	06/10/2014	EP1	€1,000	€287.16	MIP
10/10/2014	06/10/2014	EP2	€1,000	€288.65	MIP
09/10/2014	10/10/2014	EA1	€1,000	€338.11	MIP
14/10/2014	13/10/2014	EP1	€1,000	€141.67	MIP
17/10/2014	13/10/2014	EP2	€1,000	€269.41	MIP
14/10/2014	15/10/2014	EA2	€1,000	€219.27	MIP
19/10/2014	19/10/2014	WD1	€1,000	€117.07	MIP
31/10/2014	27/10/2014	EP2	€567.43	€452.53	MIP
27/10/2014	28/10/2014	EA2	€1,000	€255.85	MIP
30/10/2014	29/10/2014	EP1	€1,000	€436.71	MIP

01/11/2014	02/11/2014	EA2	€1,000	€215.23	MIP
10/11/2014	11/11/2014	EA2	€1,000	€229.26	MIP
14/11/2014	15/11/2014	EA2	€1,000	€369.02	MIP
24/11/2014	25/11/2014	EA2	€572.13	€424.16	MIP
21/11/2014	20/11/2014	EP1	€1,000	€228.86	MIP
27/11/2014	26/11/2014	EP1	€1,000	€380.87	MIP
25/11/2014	24/11/2014	EP1	€630.52	€560.63	MIP
16/11/2014	12/11/2014	EP2	€1,000	€357.67	MIP
24/11/2014	20/11/2014	EP2	€1,000	€228.14	MIP
30/11/2014	26/11/2014	EP2	€1,000	€455.21	MIP
01/12/2014	30/11/2014	EP1	€554.66	€841.81	MIP
04/12/2014	05/12/2014	EA2	€1,000	€271.08	MIP
04/12/2014	30/11/2014	EP2	€554.65	€439.23	MIP
14/12/2014	15/12/2014	EA1	€585.68	€241.97	MIP
14/12/2014	15/12/2014	EA2	€585.68	€242.87	MIP
25/12/2014	26/12/2014	EA2	€584.33	€71.42	MIP
03/01/2015	02/01/2015	EP1	€560.46	€244.25	MIP
06/01/2015	07/01/2015	EA1	€550.32	€230.74	MIP
12/01/2015	13/01/2015	EA2	€1000	€162.06	MIP
15/01/2015	16/01/2015	EA2	€1000	€210.05	MIP
16/01/2015	16/01/2015	WD1	€557.82	€176.01	MIP
21/01/2015	22/01/2015	EA2	€554.69	€183.59	MIP
23/01/2015	24/01/2015	EA2	€1000	€361.30	MIP
28/01/2015	24/01/2015	EP2	€1000	€358.00	MIP

Table 37 - MIP Vs LR Peak Price Comparison