



Market Operator Monthly Report

October 2015

Table of Contents

1. EXECUTIVE SUMMARY	4
2. MONTHLY STATISTICS	5
CODE BREACHES.....	5
JOINING AND TERMINATING PARTIES AND UNITS	6
SUSPENSION OF PARTICIPANTS	6
3. FINANCIAL STATISTICS.....	7
TOTAL CHARGES FOR EACH CURRENCY	7
TOTAL PAYMENTS FOR EACH CURRENCY.....	8
TOTAL BALANCING COSTS	8
TOTAL CURRENCY COSTS	10
CUMULATIVE IMPERFECTIONS COSTS VS BUDGET.....	12
FINANCIAL CHANGES BETWEEN INITIAL SETTLEMENT AND SUBSEQUENT RERUNS	12
3.1.1 <i>Energy Market.....</i>	13
3.1.2 <i>Capacity Market.....</i>	16
4. HELPDESK CALL STATISTICS	21
5. DISPUTES AND QUERIES	22
5.1.2 <i>Data Queries.....</i>	22
5.1.3 <i>Settlement Queries</i>	22
6. CENTRAL SYSTEMS	23
6.1 PROPORTION OF DEFAULT DATA USED.....	23
6.2 PROPORTION OF ESTIMATED METER DATA USED IN INITIAL SETTLEMENT AND RESETTLEMENT.....	23
6.3 LIST OF SYSTEM ERRORS AND RE-RUNS	23
6.3.1 <i>Re-Pricing and Resettlement Runs</i>	23
6.3.2 <i>System Errors</i>	23
6.4 OPERATIONAL TIMINGS	23
6.4.1 <i>MSP Postings October 2015</i>	24
6.4.2 <i>MSP Algorithms</i>	29
6.4.3 <i>Settlement Postings October 2015.....</i>	30
6.5.1 <i>Release SEM R2.7.0 (Deployed: October 2nd 2015)</i>	31
6.5.2 <i>Release SEM R2.8.0 (TBC May 2015)</i>	31
7. OCCASIONAL COMPONENTS	32
7.1 DISASTER RECOVERY/BUSINESS CONTINUITY TESTS.....	32
7.3 COMMUNICATIONS OR SYSTEMS FAILURES.....	32
7.4 DENIAL OF SERVICE ATTACKS	32
7.5 SUBMISSION OF PARAMETERS TO RAs FOR APPROVAL	32
8. APPENDIX A: DETAIL OF TRADING AND SETTLEMENT CODE BREACHES.....	33
MARKET PARTICIPANT	33
DATA PROVIDER	33
SEMO - PRICING AND SCHEDULING.....	33
SEMO – SETTLEMENTS	34
SEMO - FUNDS TRANSFER	34
SEMO - CREDIT MANAGEMENT	34
SEMO – OTHER	34
9. APPENDIX B: LIST OF QUERIES BY TYPE	35
10. APPENDIX C: LIST OF ALL SYSTEM ERRORS AND FAILURES	36
11. APPENDIX D: DETAILS OF OPERATIONAL TIMINGS	37
MARKET SCHEDULE AND PRICE RUNS	37
SETTLEMENT RUNS.....	38

Market Operator Monthly Report

12. APPENDIX E: IMPERFECTIONS CHARGE	39
13. APPENDIX F: DEFAULT COMMERCIAL OFFER DATA USED	43
14. APPENDIX G: TOTAL CHARGES AND PAYMENTS DATA	47
15. APPENDIX H: FULL BALANCING COSTS.....	50
TRADING MARKET	50
CAPACITY MARKET	50
16. APPENDIX I: MSP ALGORITHMS	51

1. Executive Summary

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

During the month of October 2015, Settlements had five late publications as per the Trading and Settlement code.

166 general queries were received in October 2015. During the same period 175 general queries were resolved.

There were 10 defaults by Participants during October 2015. The largest of these was an Energy Initial invoice for €1382.84 which was remedied the same day.

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

2. Monthly Statistics

Trading and Settlement Code Breaches

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

Trading and Settlement Code Breaches			
Area		Major	Minor
Data Providers		-	1
Market Participants	Pricing & Scheduling	-	-
	Settlement	-	-
	Funds Transfer	10	-
	Credit Risk Management	-	-
SEMO	Pricing & Scheduling	-	2
	Settlement	-	5
	Funds Transfer	1	-
	Credit Risk Management	-	-
	Other	-	-
Total		11	8

Table 1 – Trading and Settlement Code Breaches

Further details of each of the Trading and Settlement 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 no financial implication to Participants. This includes late posting of pricing and settlement runs.

Joining and Terminating Parties and Units

Three new Parties joined the Market in October 2015.

- PY_000147 - Edenderry Supply Company Limited
- PY_000148 – Pinergy
- PY_000149 – Gaelectric Interconnector Trading ROI Limited

There were no terminating parties in October 2015.

There were four new units effective in the Market in October 2015.

- PT_400157/ PT_400157_I_RIEWIC Brookfield EWIC
- PT_500081/PT_500081_I_NIMOYLE Brookfield Moyle
- PT_500082/SU_500081 – Open Electric Limited
- PT_500084/SU_500082 - Project Plug Limited 'TA' ClickEnergy

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

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

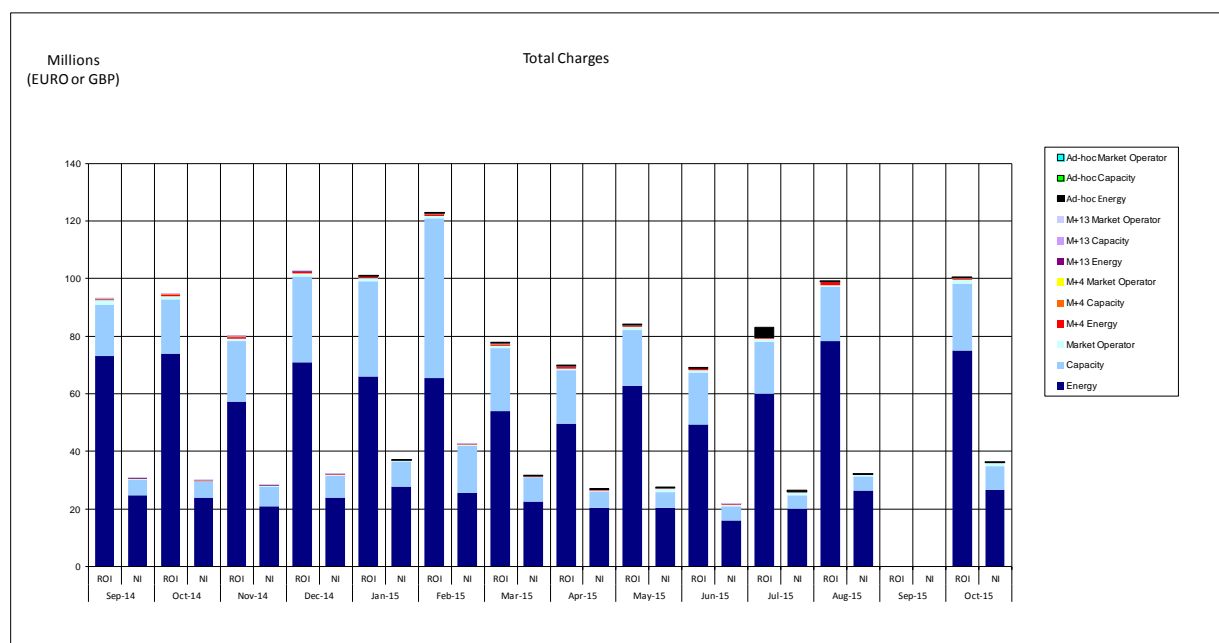


Figure 1 - Total Charges for Each Currency

Market	October 2015	
	ROI	NI
Energy	€75,155,546	£26,889,337
Capacity	€23,128,442	£8,142,114
Market Operator	€1,295,476	£1,245,920
M+4 Energy	€443,105	£54,920
M+4 Capacity	€86,421	£9,562
M+4 Market Operator	€2,807	£360
M+13 Energy	€180,398	£15,469
M+13 Capacity	€11,168	£2,190
M+13 Market Operator	€655	£129
Ad-hoc Energy	€270,259	£12,198
Ad-hoc Capacity	€0	£0
Ad-hoc Market Operator	€0	£0
Total	€100,574,278	£36,372,198

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](#).

Total Payments for Each Currency

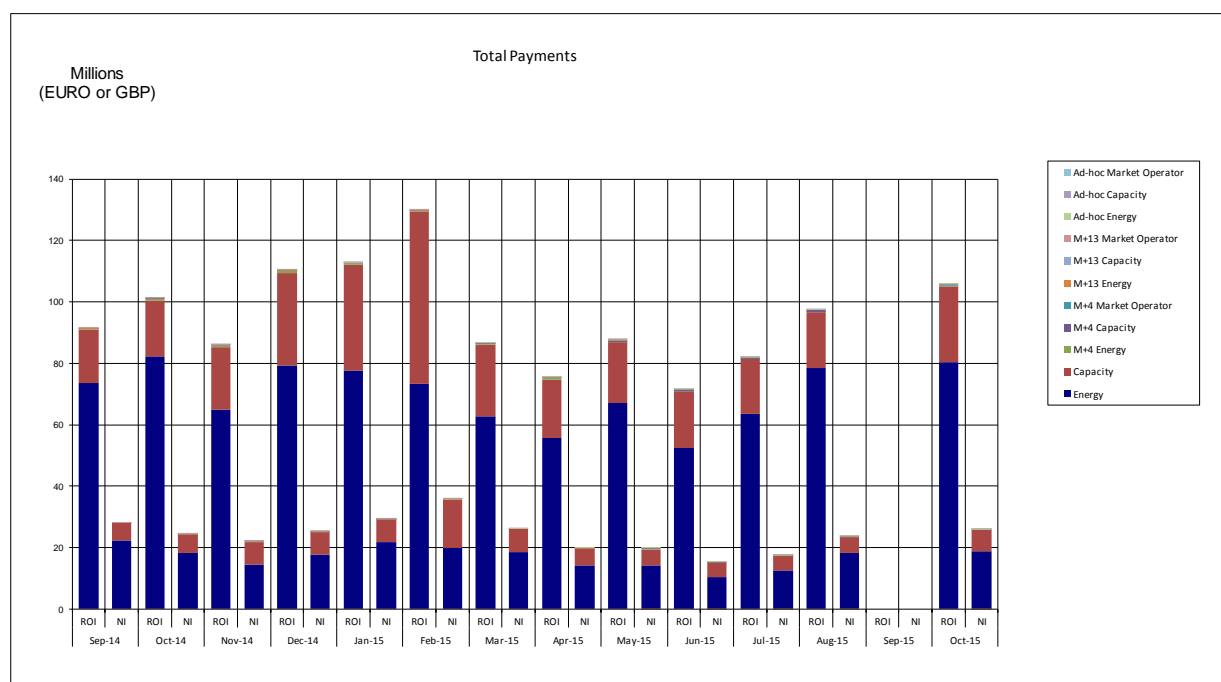


Figure 2 - Total Payments for Each Currency

Market	October 2015	
	ROI	NI
Energy	€80,371,871	£18,903,010
Capacity	€24,802,345	£7,020,974
M+4 Energy	€66,995	£17,439
M+4 Capacity	€443,664	£54,066
M+4 Market Operator	€86,979	£9,514
M+13 Energy	€2,770	-£351
M+13 Capacity	€180,398	£15,469
M+13 Market Operator	€11,178	£2,194
Ad-hoc Energy	€662	£130
Ad-hoc Capacity	€0	£0
Ad-hoc Market Operator	€0	£0
Total	€105,966,863	€26,022,444

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.

Market Operator Monthly Report

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:

October 2015	
Imbalance (Energy Only)	-€8,943,836.27

Table 4 - Balancing Costs for Energy Settlement

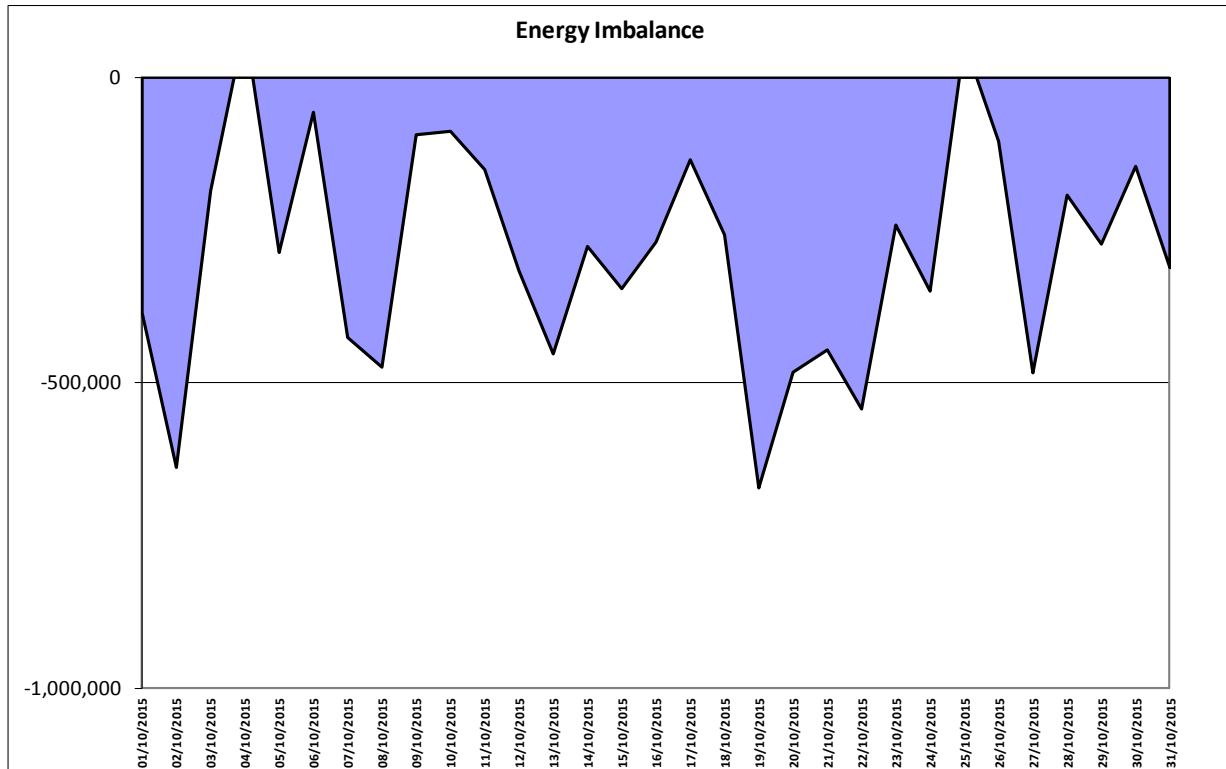


Figure 3 – Energy Imbalances

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.

Market Operator Monthly Report

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
02/10/2015	38	-€1,655,942.38	€ 162,994.80
09/10/2015	39	-€1,135,216.68	€177,381.90
16/10/2015	40	€507,903.08	€106,382.04
23/10/2015	41	€681,099.48	€131,096.53
30/10/2015	42	€405,933.93	-€25,867.40

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 Trading and Settlement Code.

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

October 2015	
Capacity Charges	-€50,999,275.99
Capacity Payments	€50,998,935.65
Balancing Costs	-€340.35
VAT	-€ 7,800.91

Table 6 - Balancing Costs for Capacity Settlement

Historical figures, the current financial year full Balancing Costs for both Trading and Capacity are provided in [Appendix H](#). 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)

Market Operator Monthly Report

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 Trading and Settlement 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
26/09/2015	02/10/2015	38	£6,033.59	-£12,517.13	-£ 6,483.54
03/10/2015	09/10/2015	39	£6,432.62	-£1,905.28	£4,527.34
10/10/2015	16/10/2015	40	£27,001.15	-£15,493.34	£11,507.81
17/10/2015	23/10/2015	41	£27,910.55	£7,830.43	£35,740.98
24/10/2015	30/10/2015	42	£249.38	£22,022.84	£22,272.22

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 Inter-jurisdictional SRA Currency Costs.

Over the period of this report Currency Costs for each week represented a benefit to Participants of up to £35,740.98 and a cost of £ 6,483.54. 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
10/11/2015	Oct 2015	£178,424.53

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 2015. 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 Payments	Total Uninstructed Imbalance	Total Make Whole Payments	Total Imperfections
€14,594,254.49	-€290,151.38	€230,463.25	-€12,518,829.51

Table 9 – Cumulative Imperfections Costs Vs Budget

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

This is demonstrated in the figure below.

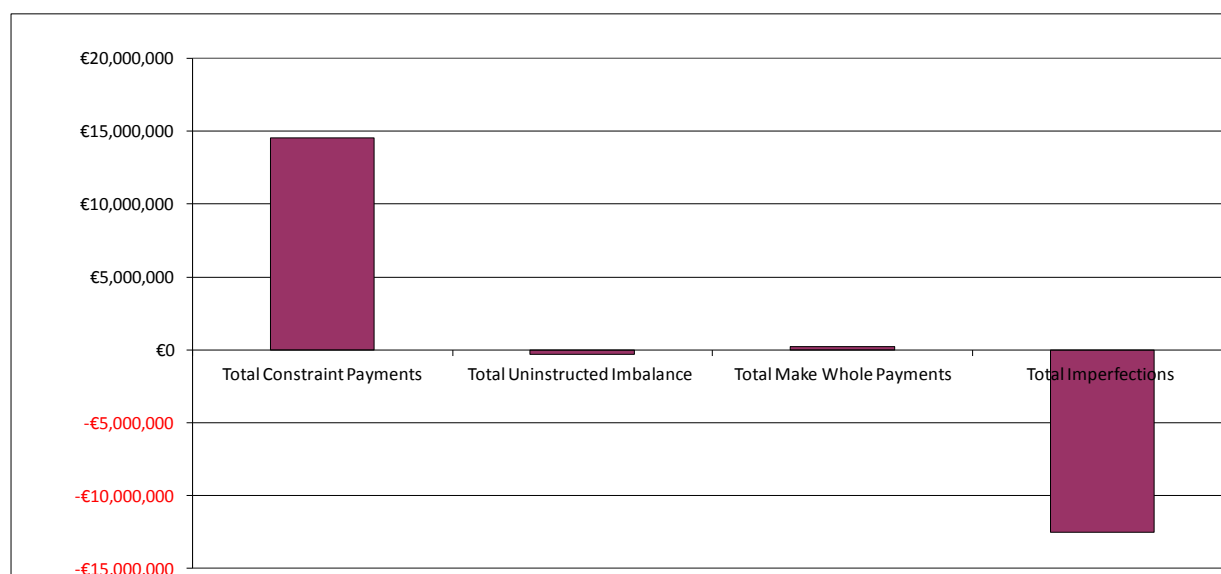


Figure 4 - Cumulative Imperfections Costs Vs Budget

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 June 2015 and M+13 resettlement period of September 2014 for Energy and Capacity.

Market Operator Monthly Report

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 to Participants (Payments).

The reverse is true for Figure 7 & 10

M+4 Resettlement

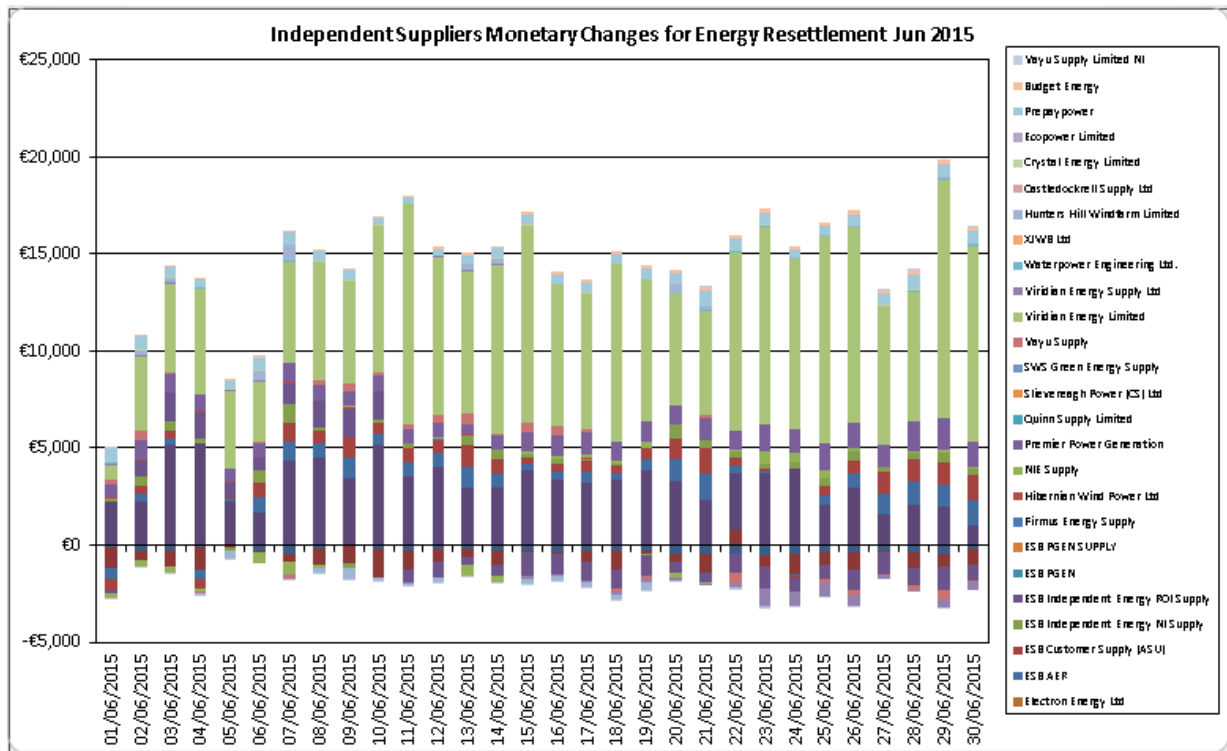


Figure 5 – Independent Suppliers Monetary Changes for Energy Resettlement – Jun 2015

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

Market Operator Monthly Report

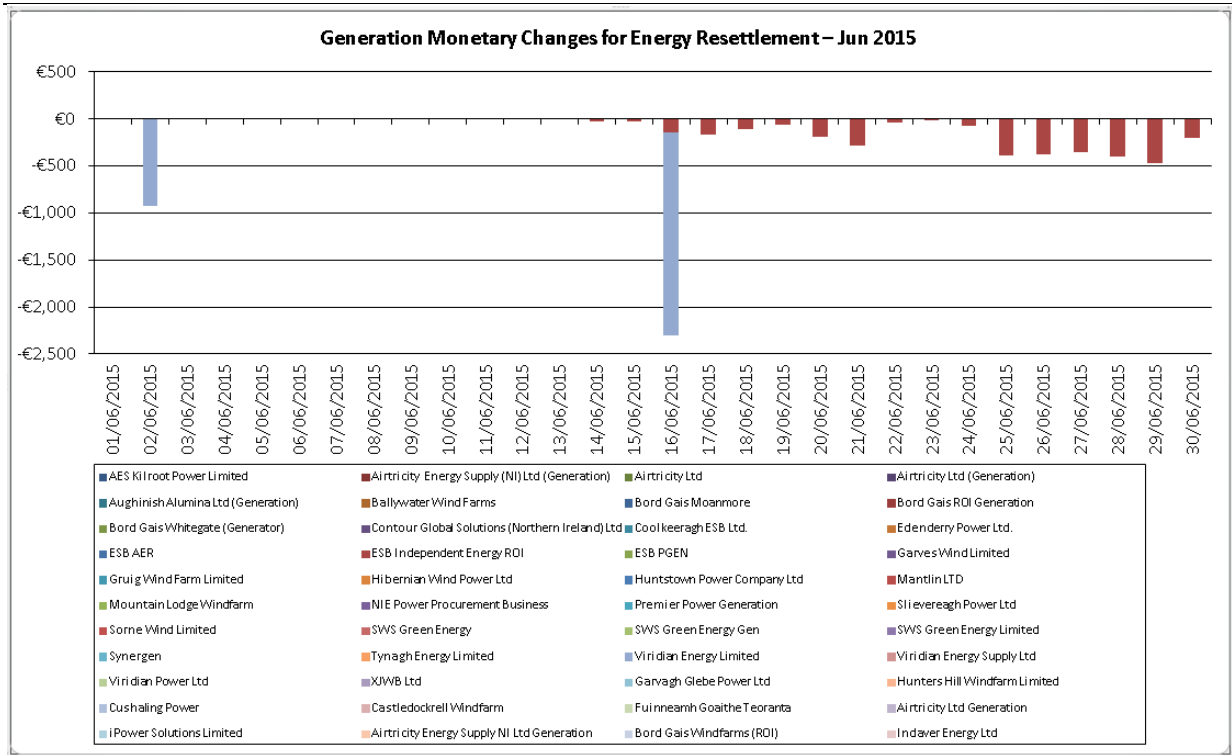


Figure 6 – Generation Monetary Changes for Energy Resettlement – Jun 2015

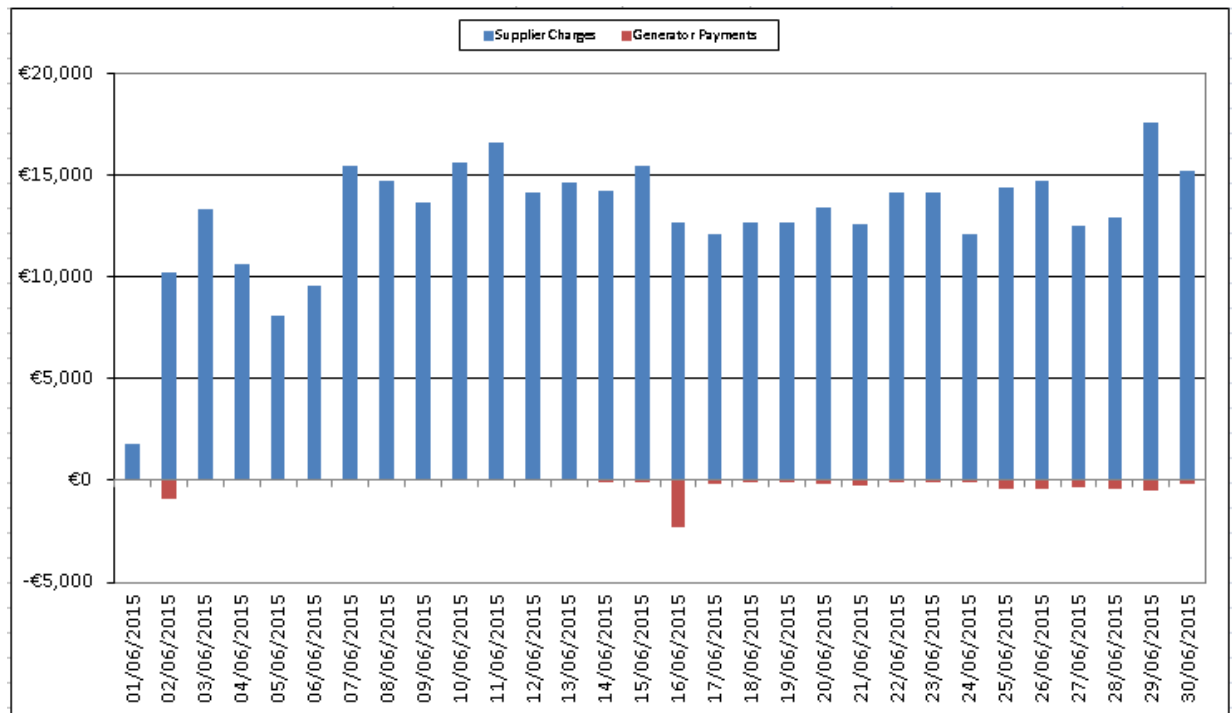


Figure 7 – Total Monetary Changes for Energy Resettlement – Jun 2015

M+13 Resettlement

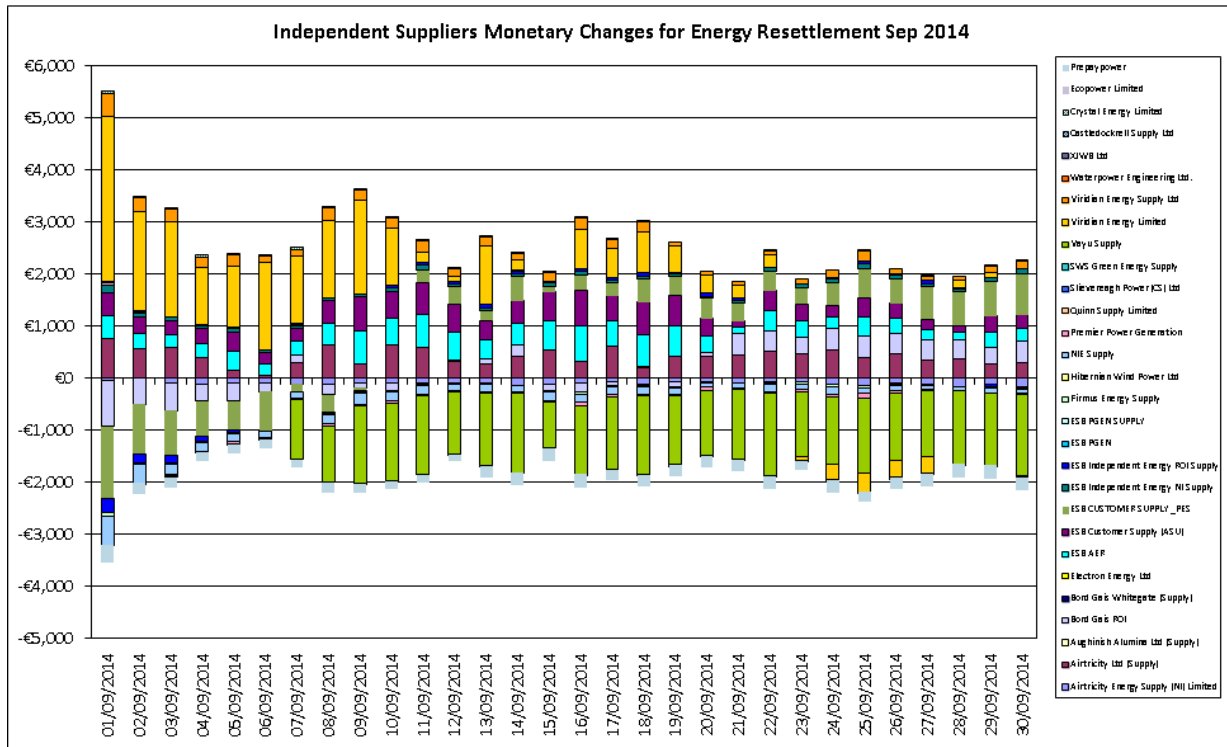


Figure 8 - Independent Suppliers Monetary Changes for Energy Resettlement – Sep 2014

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

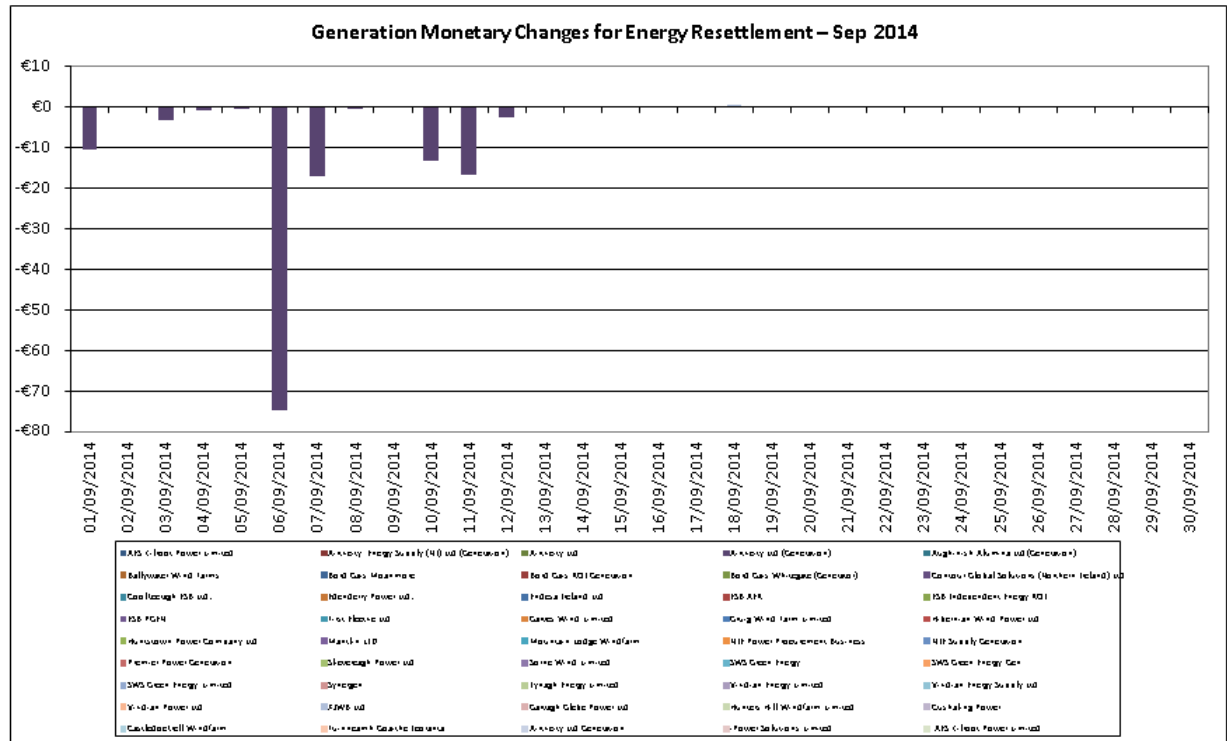


Figure 9 - Generation Monetary Changes for Energy Resettlement – Sep 2014

Market Operator Monthly Report

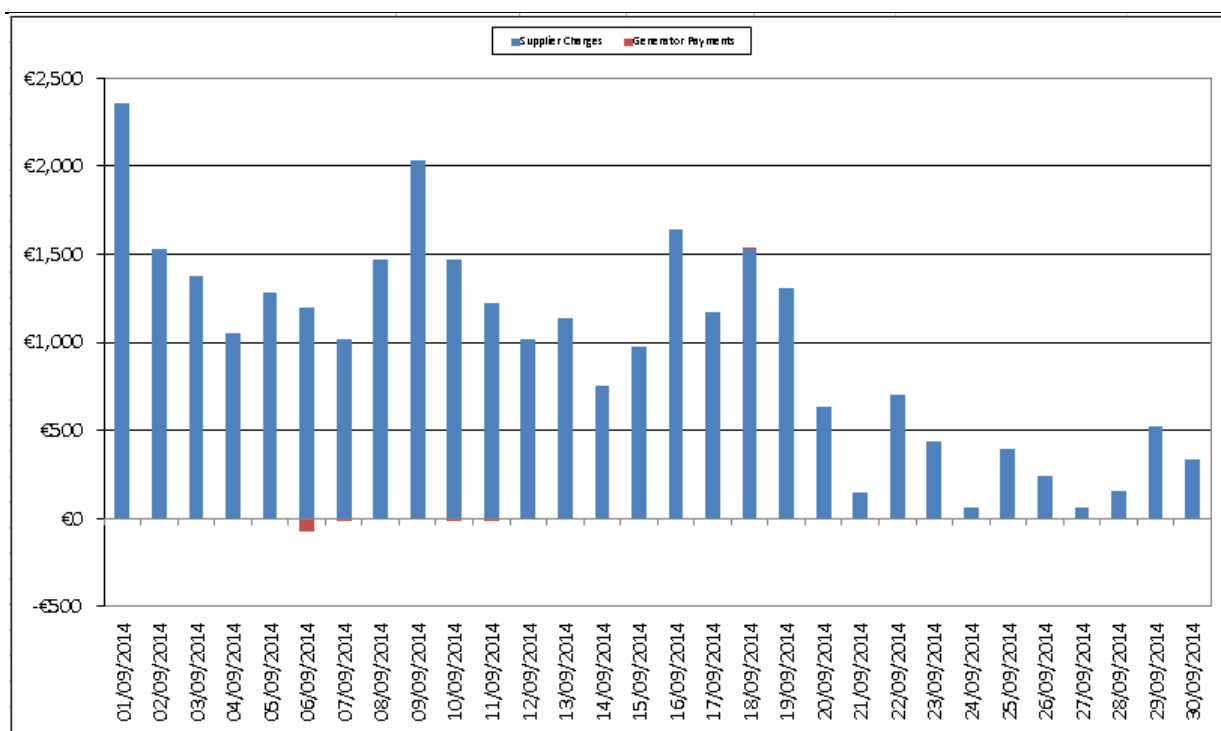


Figure 10 - Total Monetary Changes for Energy Resettlement – Sep 2014

3.1.2 Capacity Market

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

- Positive amounts indicate net additional payments by Participants (Charges).
- Negative amounts indicate net additional payment to be made to 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.

Market Operator Monthly Report

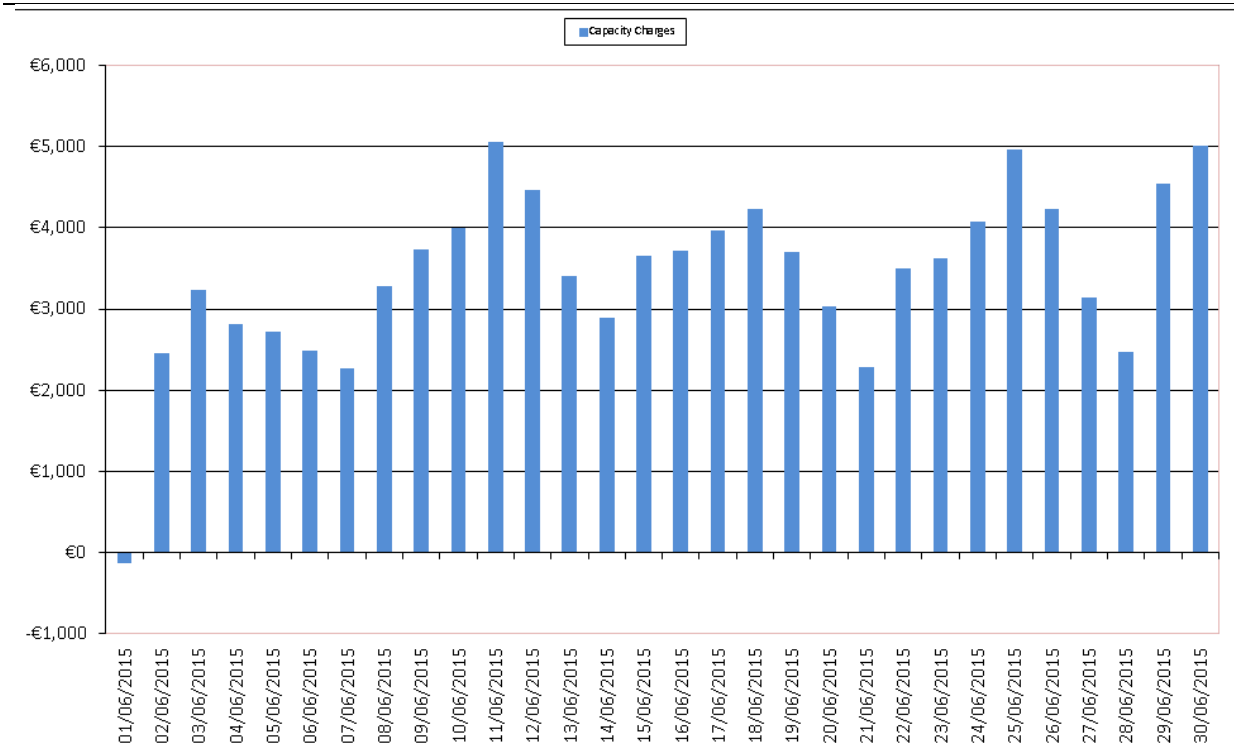


Figure 11 - Independent Suppliers Monetary Changes for Capacity Resettlement – Jun 2015

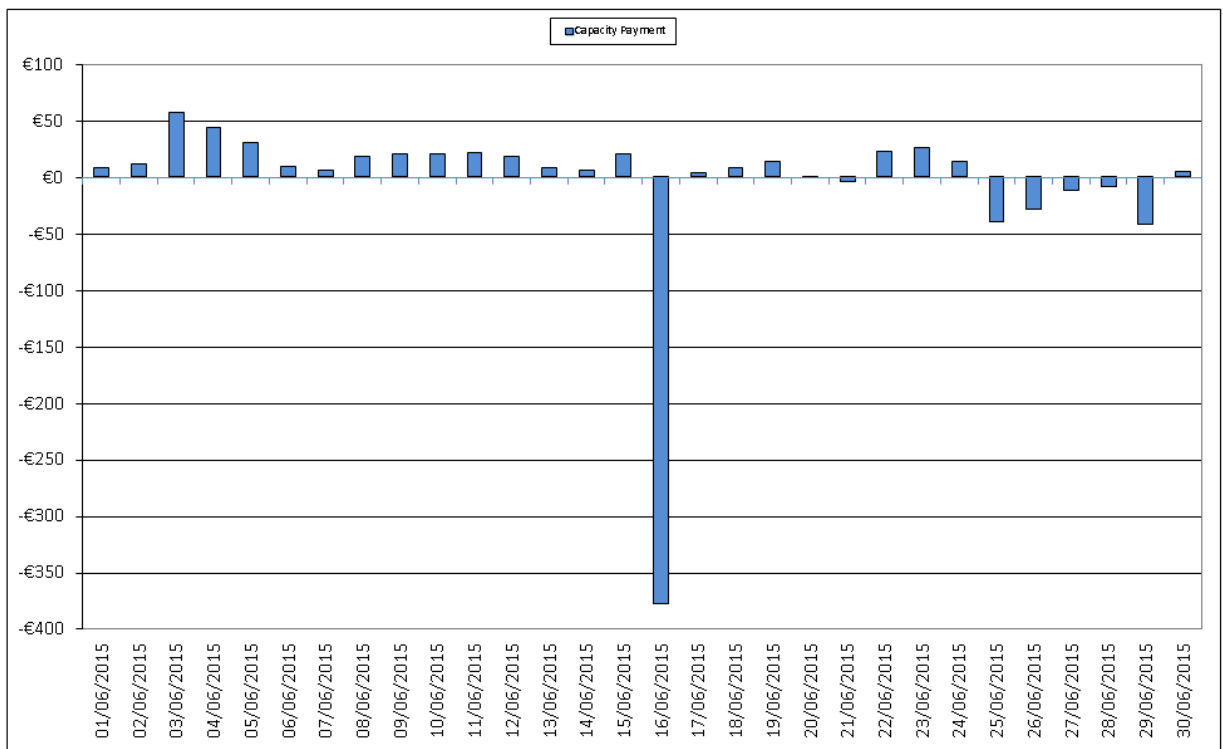


Figure 12 - All Generation Monetary Change for Capacity Resettlement – Jun 2015

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

Market Operator Monthly Report

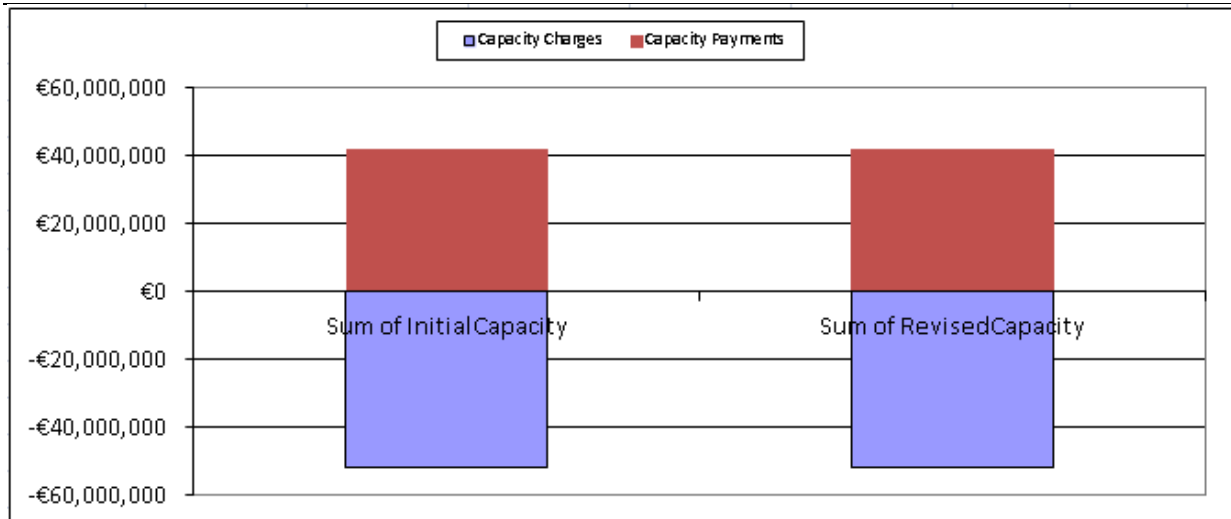


Figure 13 - Comparison of Distribution of Monetary Amounts between Capacity Initial and Resettlement Jun 2015

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

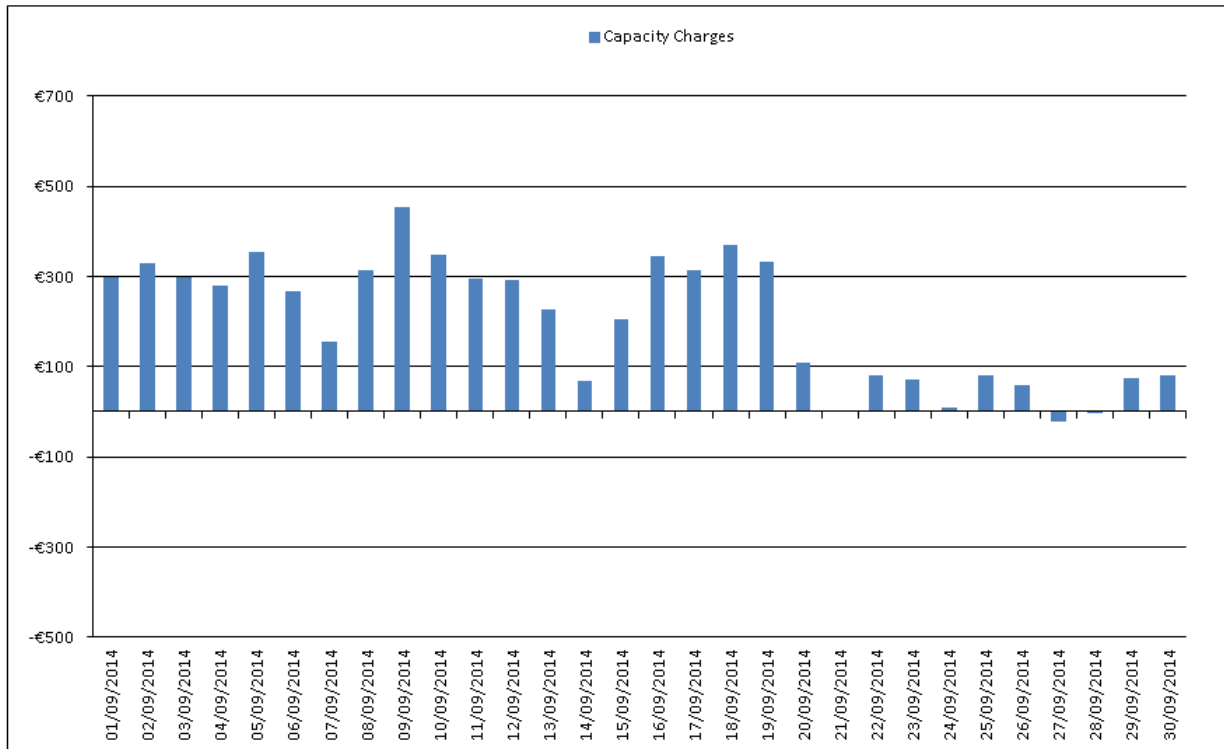


Figure 14 - Independent Suppliers Monetary Changes for Capacity Resettlement – Sep 2014

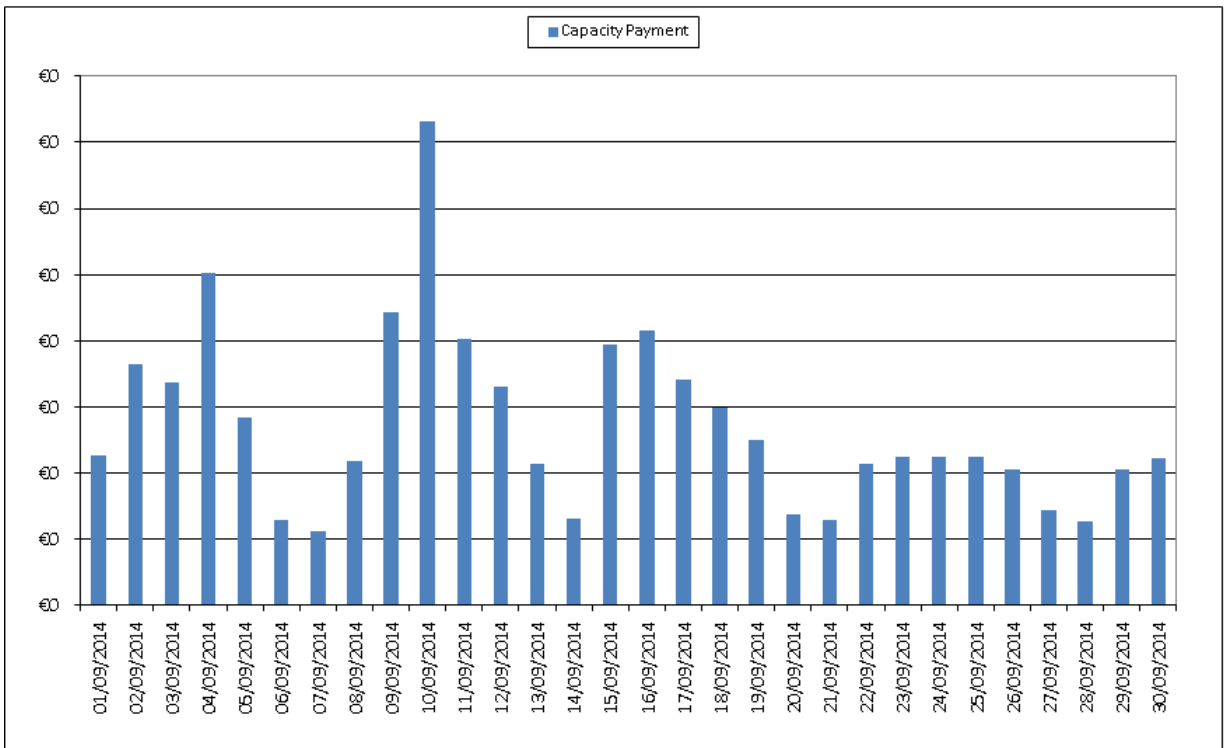


Figure 15 – All Generation Monetary Change for Capacity Resettlement – Sep 2014

Market Operator Monthly Report

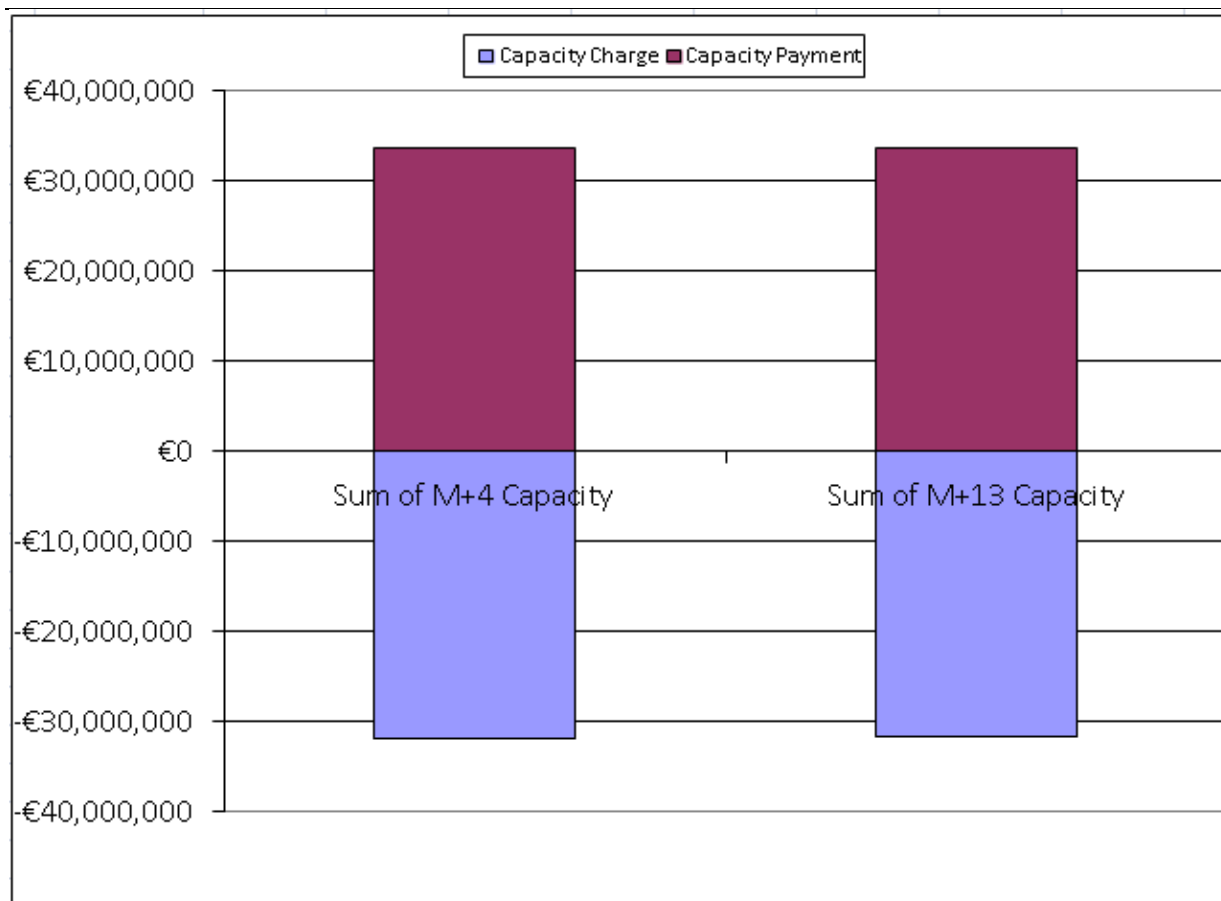


Figure 16 - Comparison of Distribution of Monetary Amounts between M+4 Capacity Resettlement and M+13 Capacity Resettlement – Sep 2014

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 October 2015.

Market Helpdesk Report: 01/10/15 to 31/10/15

	Received	Resolved within the period	Not Resolved	Resolved in the period	Resolution Time (Working Days)	Resolved On Time
Normal	164	152	12	172	1.43	165
Important	1	1	0	2	2.83	1
Urgent	1	1	0	1	0.24	1
Settlement	6	4	2	6	5.61	5
Credit	0	0	0	0	0.00	0
Dispute	0	0	0	0	0.00	0
Data	0	0	0	0	0.00	0
Total/Average	172	158	14	181	2.02	172

Table 10 – Helpdesk Statistics

Definitions:

- *Resolved within the Period* refers to queries raised and resolved within the calendar month of October 2015.
- *Resolved in the Period* refers to queries resolved within October 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 October 2015.
- *Not Resolved* refers to queries raised but not resolved within October 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 and 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 increased slightly by 0.53 working days in October 2015 to 1.43 from 0.90 working days in September 2015. 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 October 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 Trading and Settlement Code, i.e. one calendar month. No Formal Query timeline extensions were required during October 2015 with regard to formal Settlement Queries.

5. Disputes and Queries

5.1.1 Disputes

There was no Dispute raised during the month of October 2015.

5.1.2 Data Queries

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

5.1.3 Settlement Queries

There were six formal Settlement Queries raised in October 2015. All six raised were upheld and have been resolved.

Topic	Number Of Queries
SO- SO Trades	1
Actual Availability	1
MIUNs	1
Dispatch Instructions	1
CLAFs	1
Application of Heat States	1

Upheld Settlement Queries by topic

- One query relating to System Operator Trades was raised. This was deemed to be of low materiality and will be corrected within M+4 Resettlement.
- One query relating to Actual Availability was raised but had zero materiality and no further action was required for Resettlement.
- One query relating to MIUNs was raised. This was deemed to be of low materiality and was corrected within M+13 Resettlement.
- One query relating to Dispatch Instructions was raised. This was deemed to be of low materiality and will be corrected within M+4 Resettlement.
- One query relating to CLAFs was raised. This was deemed to be of low materiality and was corrected within Ad-Hoc Resettlement.
- One query relating to Heat States was raised. This was deemed to be of low materiality and will be corrected within M+13 Resettlement.

Unresolved Queries

There are no unresolved data queries and one settlement query as at the 9th October 2015.

A full list of all the Data and Settlement queries raised is contained in [Appendix B](#).

6. Central Systems

6.1 Proportion of Default Data Used

On review of the Commercial Offer Data used in the MSP runs, 69.90% of data used was submitted by Participants through the normal Bid-Offer process. 30.10% of the data used was based on Standing Commercial Offer Data. 0.0% 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](#).

6.2 Proportion of Estimated Meter Data used in Initial Settlement and Resettlement

This is not calculable presently.

6.3 List of System Errors and Re-runs

6.3.1 Re-Pricing and Resettlement Runs

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

There were nine Resettlement runs carried out in October 2015.

6.3.2 System Errors

There were three Settlement defects and two Market Application defects found in October 2015.

ABB2015-142262	IART report not excluding cancelled bids 3-Medium
ABB2015-142933	UUT - Duplicate Rows
SET-SEMO158	URGENT - no values against variables MWPIUCC_X & MWPIU_CI
SET-SEMO159	Aggregates ignoring PST-MAN values
SET-SEMO160	HPUGDOGTARIFF not importing values for long hour

Table 11 – System Errors

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

6.4 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,

Market Operator Monthly Report

- 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 October 2015.

6.4.1 MSP Postings October 2015

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

Table 12 - 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	100%	0%	0%	0%
Post WD1	100%	0%	0%	0%
Post EP1	100%	0%	0%	0%
Post EP2	100%	0%	0%	0%

Table 13 - Operational Timings (% on time)

Market Operator Monthly Report

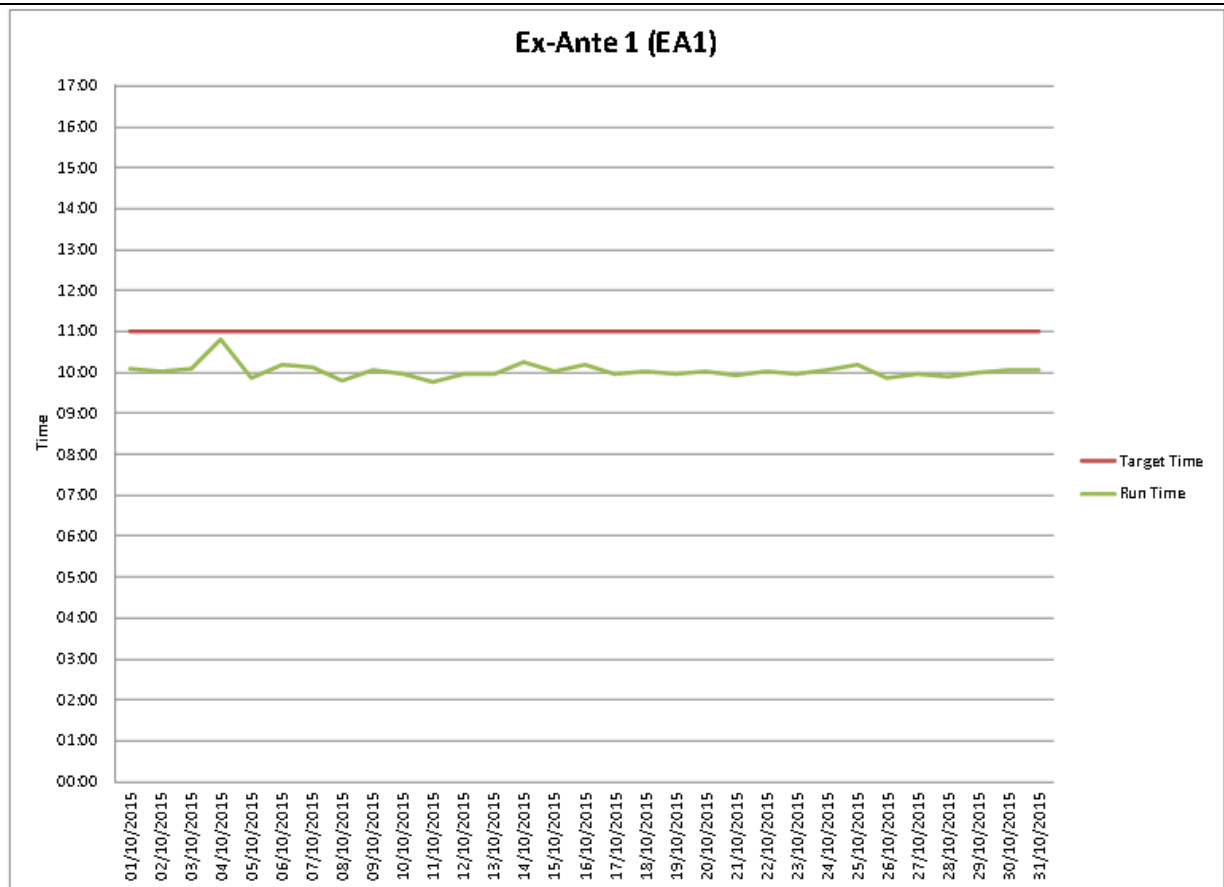


Figure 17 – Ex-Ante 1

Market Operator Monthly Report

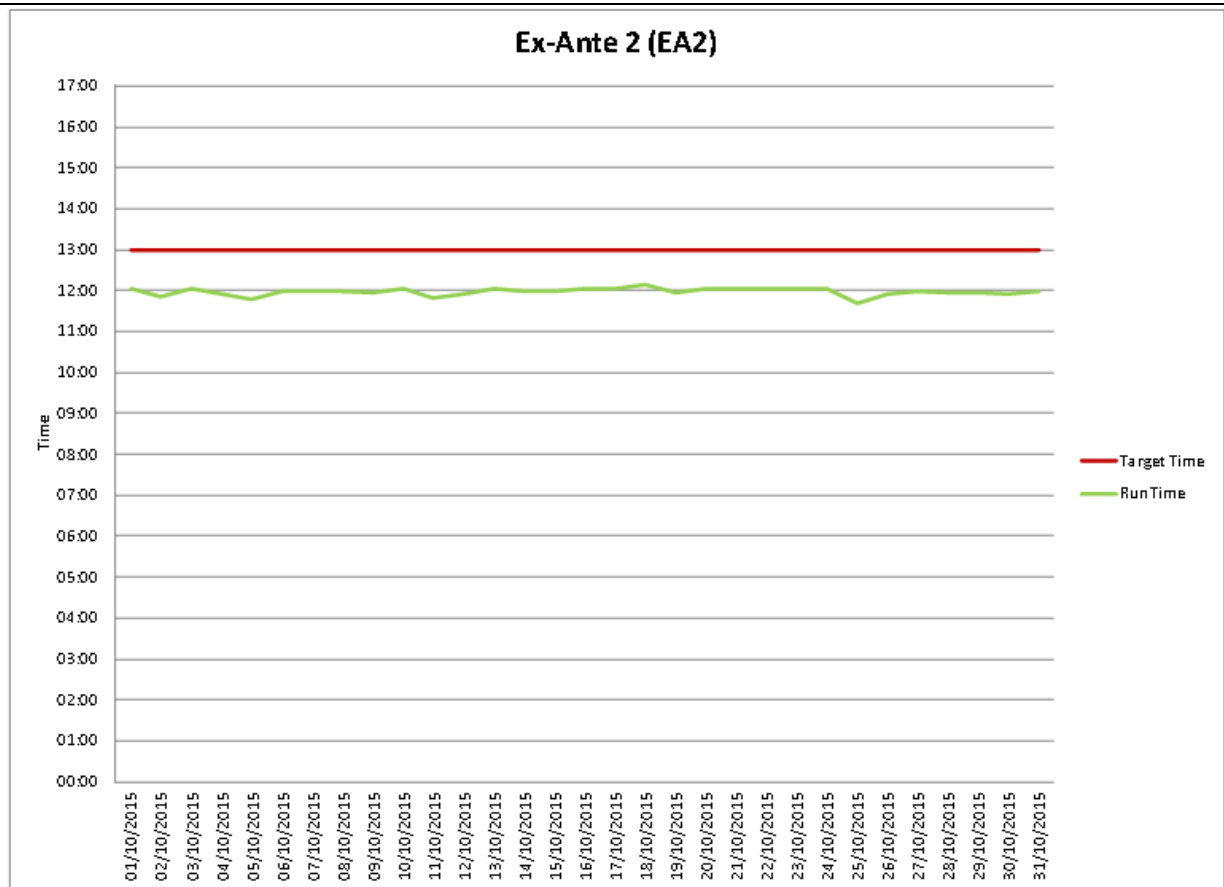


Figure 18 – Ex-Ante 2

Market Operator Monthly Report

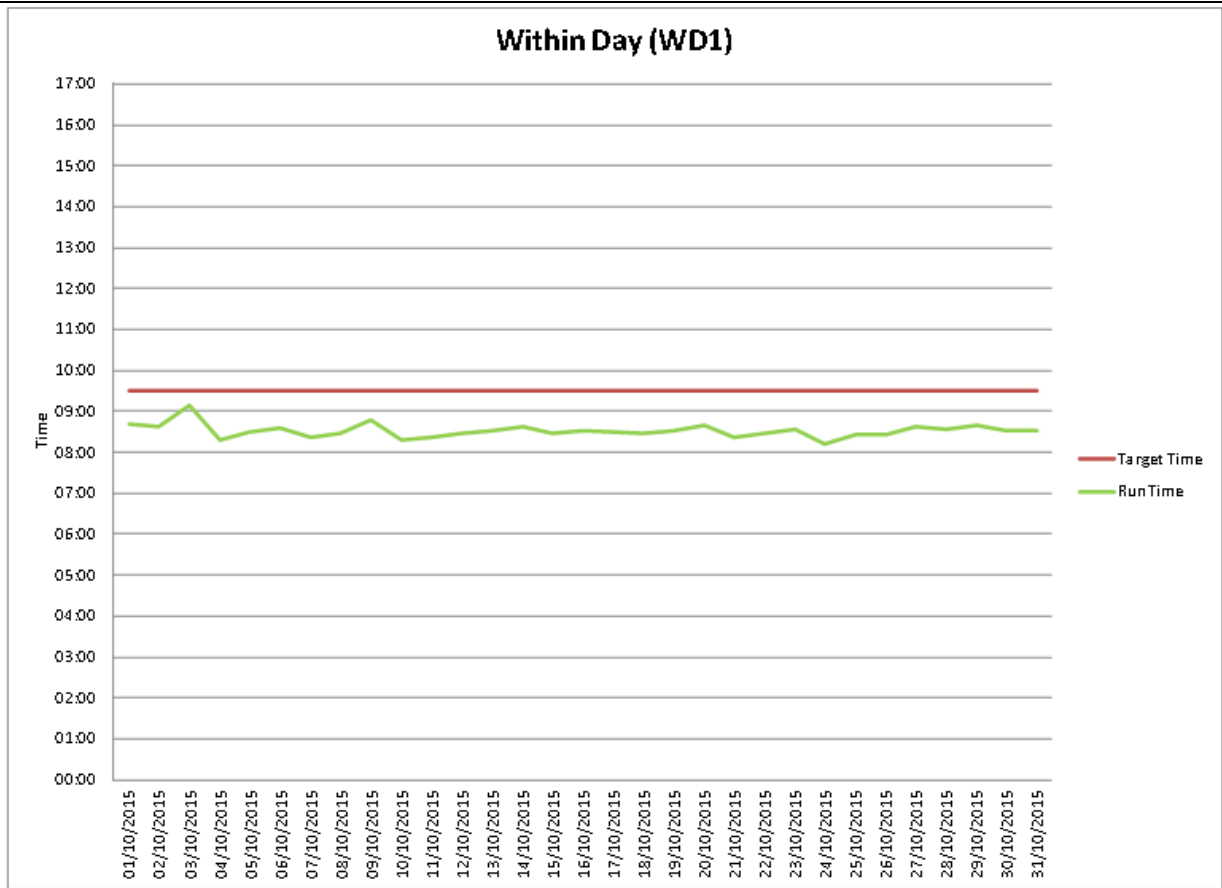


Figure 19 – Within Day 1

Market Operator Monthly Report

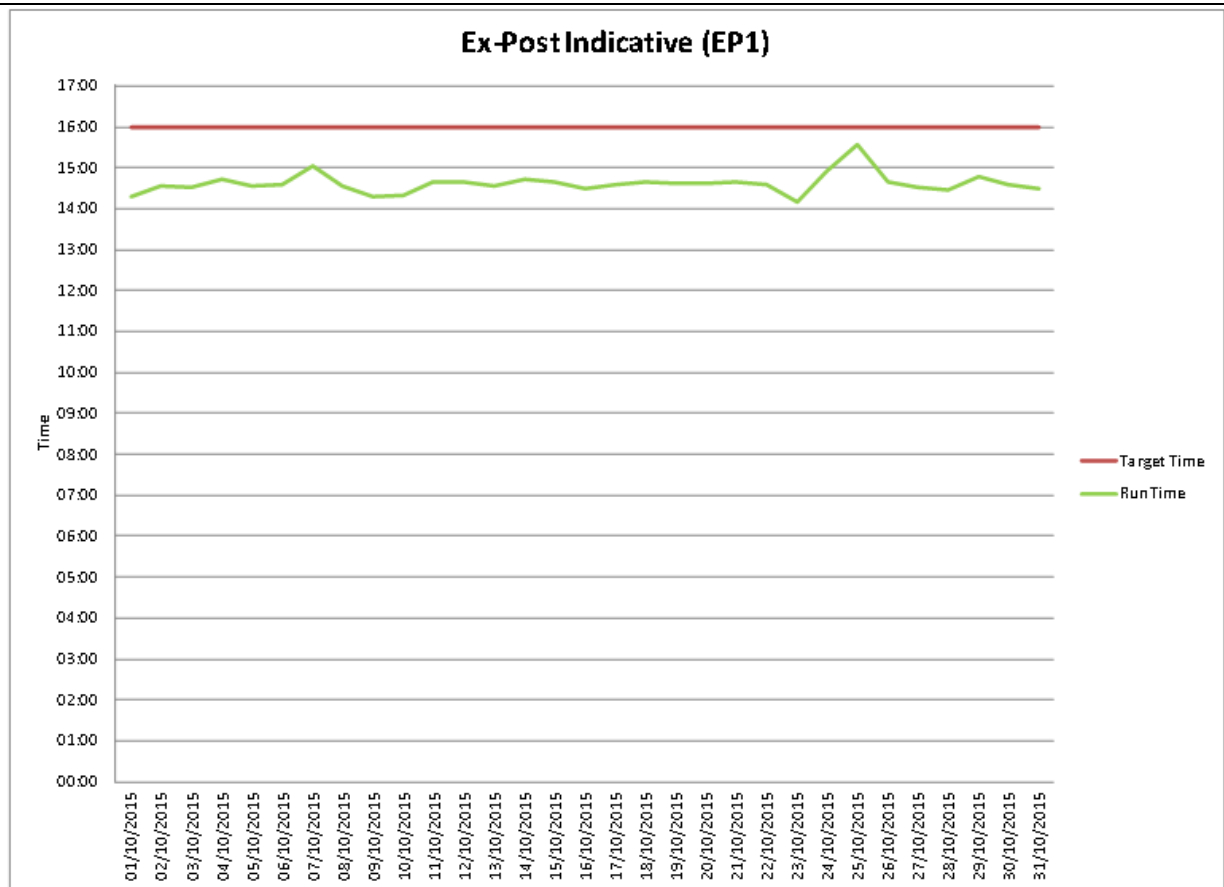


Figure 20 - Ex-Post Indicative

Market Operator Monthly Report

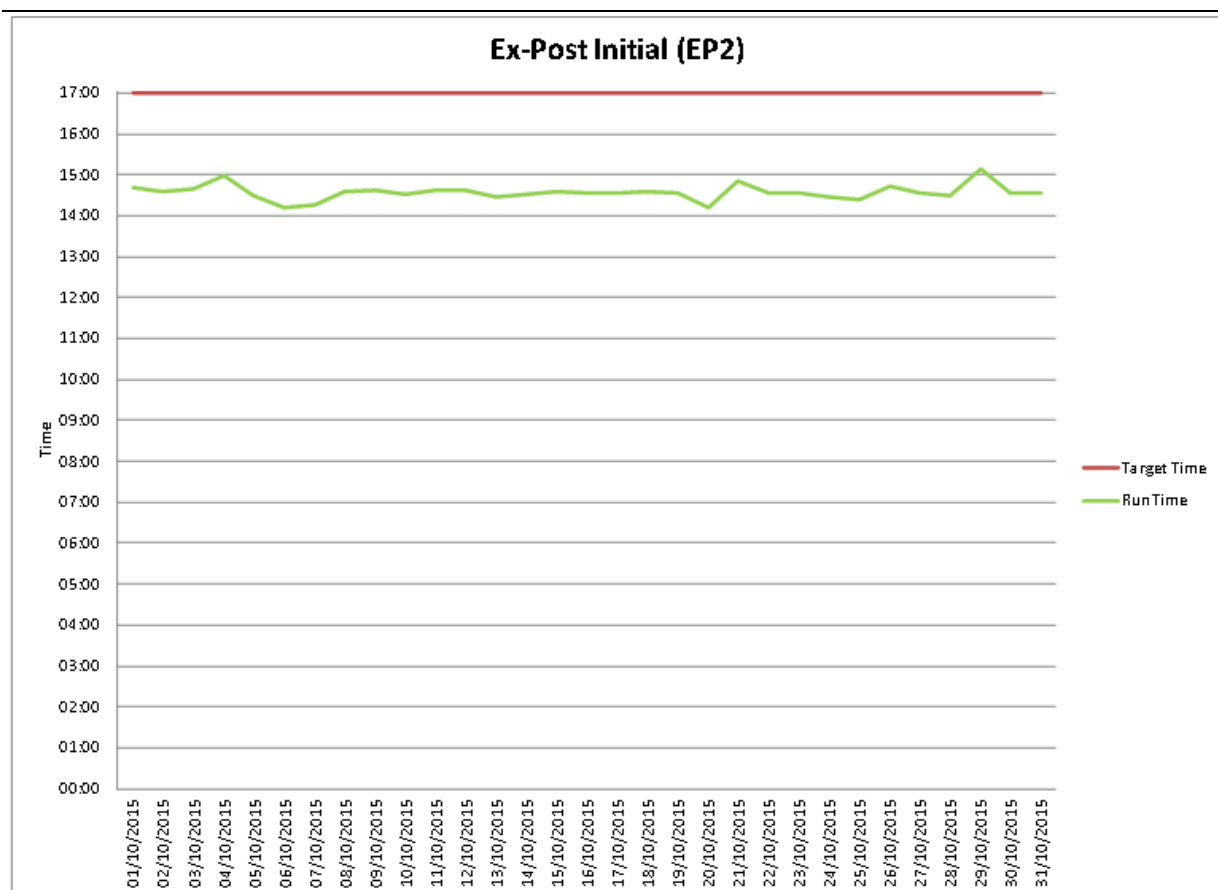


Figure 21 - Ex-Post Initial

Details of the operational timings of the Market System and Price (MSP) runs and Gate Closure are provided in [Appendix D](#).

6.4.2 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 October 2015, there was one instance 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 [Appendix I](#).

6.4.3 Settlement Postings October 2015

The publication timings for Settlement runs are provided below.

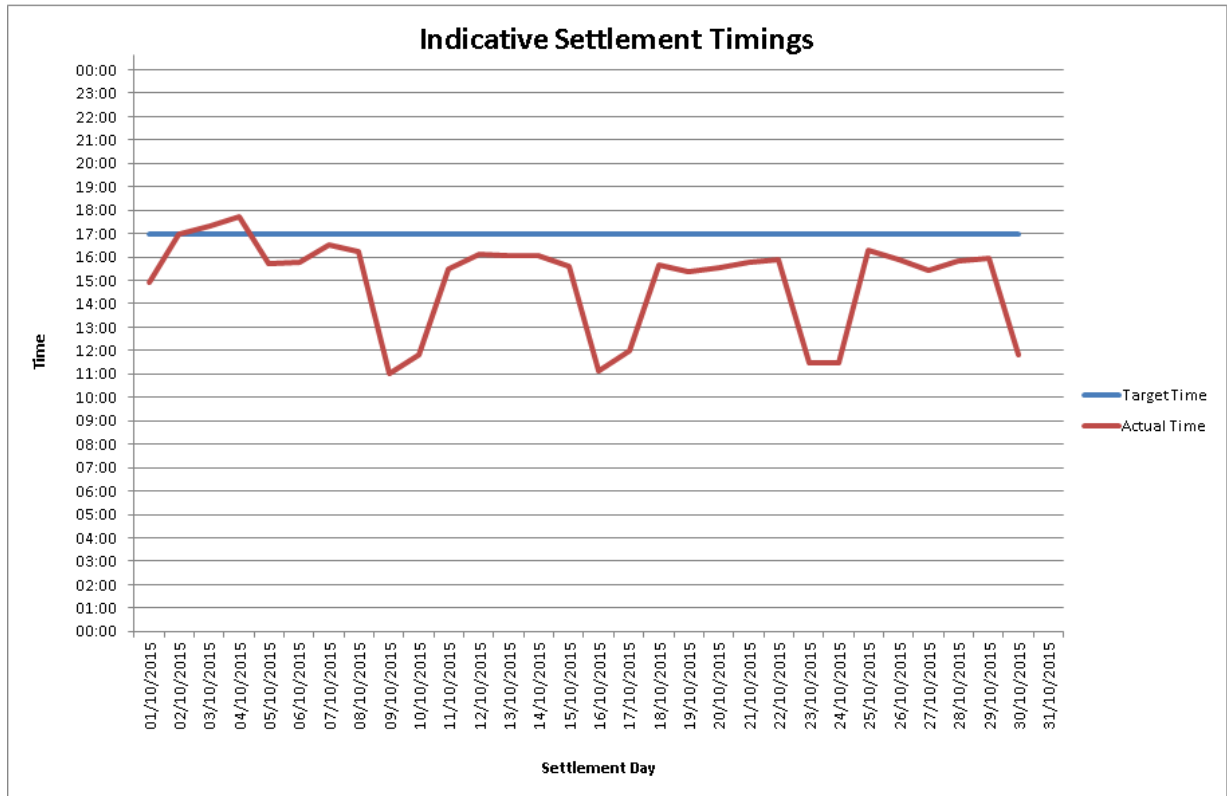


Figure 22 - Indicative Settlement Postings

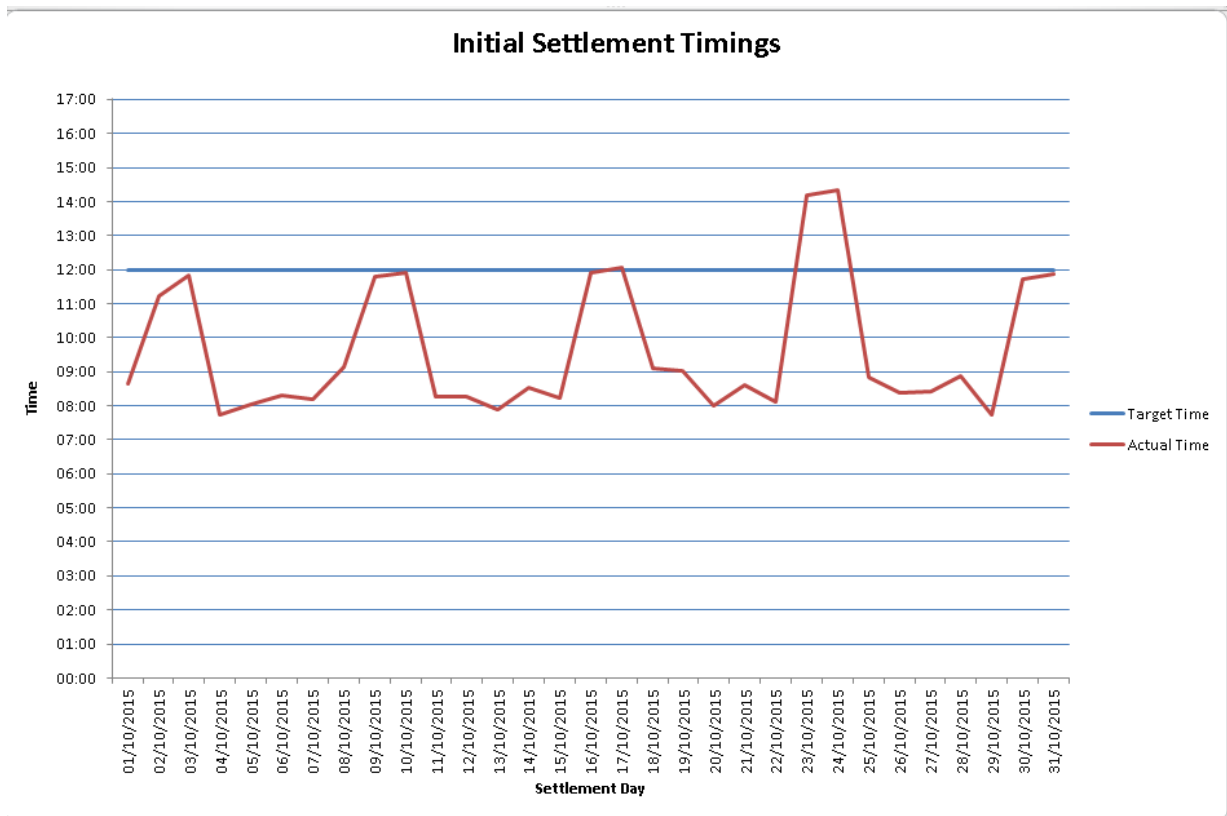


Figure 23 - Initial Settlement Postings

Further details of any delays noted above are provided in [Appendix A](#)

6.5.1 Release SEM R2.7.0 (Deployed: October 2nd 2015)

SEM R2.7.0 went live on Friday October 2nd with no issues

6.5.2 Release SEM R2.8.0 (TBC May 2015)

SEM 2.8.0 cut-off date for participants was November 6th 2015:

So far one Change Request has been raised internally

- **CR351 Eligible Availability** - The PRE-ELIGIBLE-AVAIL and ELIGIBLE-AVAIL preprocessing modules in Pomax involve the calculation of a FACTOR value for each interval of the Trading Day. These values are then sorted in decreasing order for later use in the algorithms. The algorithm does not handle the scenario where the FACTOR calculation involves a division by zero. This change request requires that when this scenario occurs, the FACTOR value should be treated as a zero for the purposes of sorting.

7. Occasional Components

7.1 Disaster Recovery/Business Continuity Tests

There were no scheduled Business Continuity tests performed during October 2015.

7.3 Communications or Systems Failures

There was 1 system issue during October 2015:

On October 19th, it was reported that there were intermittent connectivity issues for bids and submissions on the SEM Systems. This was investigated and found to be an issue with the Dublin external webserver. A reboot of the server resolved this issue. This was logged with the vendor for root cause analysis and a fix was identified. This fix was implemented week starting November 9th 2015. During this time, the CMS was fully available for all other functionality.

7.4 Denial of Service Attacks

There was no Denial of Service Attacks during October 2015.

7.5 Submission of Parameters to RAs for Approval

There was no submission required in October 2015.

8. Appendix A: Detail of Trading and Settlement Code Breaches

Market Participant

Ops Date Identified	Run Type	Quality or Timing	Party	Issue Type	Description	Cause	Resolution	T and SC Breach
07/10/2015	Money In	Timing	Participant	Payment Default	Panda Power Ltd (PT_400161) defaulted on a Week 22 2015 M+4 Energy Invoice.	Participant Error	A default letter was issued to the Participant.	Major
09/10/2015	Money In	Timing	Participant	Payment Default	Aughrim Power Ltd (PT_400049) defaulted on a September 2015 FMOC invoice.	Participant Error	A default letter was issued to the Participant.	Major
09/10/2015	Money In	Timing	Participant	Payment Default	Endeco Technologies (PT_400133) defaulted on a September 2015 FMOC invoice.	Participant Error	A default letter was issued to the Participant.	Major
09/10/2015	Money In	Timing	Participant	Payment Default	LCC Power Limited (PT_400137) defaulted on a September 2015 FMOC invoice.	Participant Error	A default letter was issued to the Participant.	Major
09/10/2015	Money In	Timing	Participant	Payment Default	Powerhouse Generation Ltd (PT_500078 & PT_500079) defaulted on September 2015 FMOC invoices.	Participant Error	A default letter was issued to the Participant.	Major
14/10/2015	Money In	Timing	Participant	Payment Default	Aughrim Power Supply Ltd (PT_400119) defaulted on a Week 39 2015 Initial Energy invoice.	Participant Error	A default letter was issued to the Participant.	Major
14/10/2015	Money In	Timing	Participant	Payment Default	Aughrim Power Supply Ltd (PT_400119) defaulted on a September 2015 Initial Capacity invoice	Participant Error	A default letter was issued to the Participant.	Major
14/10/2015	Money In	Timing	Participant	Payment Default	Arden Energy Ltd (PT_400149) defaulted on a Week 39 2015 Initial Energy invoice.	Participant Error	A default letter was issued to the Participant.	Major
29/10/2015	Money In	Timing	Participant	Payment Default	Mount Lucas Supply Limited (PT_400135) defaulted on a Week 38 2014 M+13 Energy Invoice.	Participant Error	A default letter was issued to the Participant.	Major
29/10/2015	Money In	Timing	Participant	Payment Default	Open Electric Ireland (PT_500082) defaulted on a Week 41 2015 Initial Energy Invoice.	Participant Error	A default letter was issued to the Participant.	Major

Table 14 – Trading and Settlement Code Breaches – Market Participants

Data Provider

Ops Date Identified	Run Type	Quality or Timing	Party	Issue Type	Description	Cause	Resolution	T and SC Breach
01/10/2015	SE1	Timing	EirGrid TSO	File Submission	The 2015/2016 EirGrid Transmission Loss Adjusted Factors (TLAF) submission was received after the Trading and Settlement Code (T&SC) deadline.	EirGrid TSO experienced a technical issue when making the TLAF submission for 2015/2016.	October 2015 TLAF's were received by 30/09/2015. November to September TLAF's missed the deadline and were not received until 05/11/2015.	Minor

Table 15 - Trading and Settlement Code Breaches – Data Providers

SEMO - Pricing and Scheduling

Ops Date Identified	Run Type	Quality or Timing	Party	Issue Type	Description	Cause	Resolution	T and SC Breach
01/10/2015	EA1	Timing	SEMO	System	A revision was required for Ex-Ante (EA1) EWIC MIUNs for Trade Date 02/06/2015.	The MIUN calculator produced an error requiring a revision to EWIC MIUNs.	EWIC MIUNs were revised to zero and published at 11:25.	Minor
03/10/2015	WD1	Timing	SEMO	System	A revision was required for Within Day (WD1) EWIC Modified Interconnector Unit Nominations (MIUNs) for Trading Day 03/10/2015.	The MIUN calculator produced an error requiring a revision to EWIC MIUNs.	EWIC MIUNs were revised to zero and published at 09:58.	Minor

Table 16 - Trading and Settlement Code Breaches – Pricing and Scheduling

Market Operator Monthly Report

SEMO – Settlements

Ops Date Identified	Run Type	Quality or Timing	Party ▼	Issue Type	Description	Cause	Resolution	T and SC Breach
05/10/2015	Indicative Statements and PIRs	Timing	SEMO	System	Indicative Settlement Statements and Participant Information Reports (PIRs) for Settlement Day 02/10/2015 were published after the 17:00 deadline.	The delay was due to a system issue.	Indicative Settlement Statements and PIRs were published at 17:04.	Minor
05/10/2015	Indicative Statements and PIRs	Timing	SEMO	System	Indicative Settlement Statements and Participant Information Reports (PIRs) for Settlement Day 03/10/2015 were published after the 17:00 deadline.	The delay was due to a system issue.	Indicative Settlement Statements and PIRs were published at 17:25.	Minor
05/10/2015	Indicative Statements and PIRs	Timing	SEMO	System	Indicative Settlement Statements and Participant Information Reports (PIRs) for Settlement Day 04/10/2015 were published after the 17:00 deadline.	The delay was due to a system issue.	Indicative Settlement Statements and PIRs were published at 17:50.	Minor
06/10/2015	SE2	Timing	SEMO	System	Initial Settlement Statements and Participant Information Reports (PIRs) for Settlement Day 29/09/2015 were published after the 12:00 deadline.	The delay was due to a system issue.	Initial Settlement Statements and PIRs were published at 13:21.	Minor
07/10/2015	SE2	Timing	SEMO	Operational	Initial Settlement Statements and Participant Information Reports (PIRs) for Settlement Day 30/09/2015 were published after the 12:00 deadline.	The delay was due to an operational error.	Initial Settlement Statements and PIRs were published at 13:10.	Minor

Table 17 - Trading and Settlement Code Breaches – Settlements

SEMO - Funds Transfer

Ops Date Identified	Run Type	Quality or Timing	Party ▼	Issue Type	Description	Cause	Resolution	T and SC Breach
16/10/2015	Money In	Timing	SEMO	Payment	A Cash Collateral Drawdown for a Payment Default was not processed by the 12:00 deadline on 14/10/2015.	An invoice was incorrectly marked as received.	The payment was received on 16/10/2015 and the Participant was issued a default notice.	Major

Table 18 - Trading and Settlement Code Breaches – Funds Transfer

SEMO - Credit Management

There were no issues to report in October 2015

SEMO – Other

There were no issues to report in October 2015

9. Appendix B: List of Queries by Type

Summary Title	Description	ID	Logged On	Date sent to MP	Type
SO-SO Trades	Incorrect volumes and costs were provided to SEMO for an EWIC SO Trade for 24.09.2015. EWIC trade volumes and costs were submitted to SEMO at D+3 and these were incorrect. The amended volumes and costs are included with this query.	IA_ROIEWIC	2015-10-09	2015-10-13	Settlement
Actual Availabilities	GU_500130: <input type="checkbox"/> Min gen declaration was incorrect from 12:39 until 13:04. Now corrected in EDIL <input type="checkbox"/> OCMODE DI flag at 09:04 and CCMODE DI flag at 12:39 were missing, now entered in EDIL Please assess materiality of this change and let SONI know when a resubmission of Actual Availabilities and Dispatch Instructions will be required.	TSO_SONI	2015-10-20	2015-10-23	Settlement
MIUN issue	following some final M+13 checks on query F0060728 it has come to our attention that another period of EWIC error report dose not match the proposed M+13 PIR. Querying the MGEU_ROIEWIC values in PIR for settlement date 2.10.2014 for trading period 18:30-19:00. The values in the error rport in AMP are different to the PIR for this settlement date. The WVD MIUNs were set to zero. This period has a WD value in error. Can you please confirm this will be caught in m+13 and advise us when to do final check.	Interconnector Administrator	2015-10-21	2015-10-22	Settlement
Dispatch Instructions	Incorrect Dispatch Instructions issued for iPower AGU (GU_501130) for T.D. 08/10/2015 and 09/10/2015. Please see supporting document attached. Please assess materiality of this change and let SONI know when a resubmission of Dispatch Instructions will be required.	PT_500053	2015-10-23	2015-10-27	Settlement
CLAFs	The CLAFs for the following NI generating units (L_NIMOYLE, GU_500900, GU_500822, GU_501130, GU_500284, GU_500283 and GU_500904) appear to have been updated for 01/10/2014. CLAF re-submissions may be required after further analysis is completed.	SONI	2015-10-28	2015-11-03	Settlement
Defect	Unit GU_400271 (MP2). Incorrect start-up payment paid as a result of a Sync instruction. Unit GU_400271 received a sync instruction at 04:23 to go to 99mw exported. The unit was off for less that 12 hours therefore a Hot start payment should apply. It appears that Market Operator applied a Warm Start. Please advise.	PT_400039 (ESB PGN)	2015-10-28	2015-11-02	Settlement

Table 19 - Formal 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
ABB2015-142262	IART report not excluding cancelled bids 3-Medium	-	-	N	N	In progress
ABB2015-142933	UUT - Duplicate Rows	-	-	N	N	In progress
SET-SEMO158	URGENT - no values against variables MWPIUCC_X & MWPIU_CI	-	-	N	N	Resolved
SET-SEMO159	Aggregates ignoring PST-MAN values	-	-	N	N	Resolved
SET-SEMO160	HPUGDOGTARIFF not importing values for long hour	-	-	N	N	Resolved

Table 20 - List of System Errors and Failures

11. Appendix D: Details of Operational Timings

Market Schedule and Price Runs

Operational Day	EA1 Postings		EA2 Postings		WD1 Postings		EP1 Postings		EP2 Postings	
	Target	Actual	Target	Actual	Target	Actual	Target	Actual	Target	Actual
01/10/2015	11:00	10:05	13:00	12:02	09:30	08:41	16:00	14:17	17:00	14:40
02/10/2015	11:00	10:01	13:00	11:51	09:30	08:38	16:00	14:34	17:00	14:36
03/10/2015	11:00	10:05	13:00	12:03	09:30	09:08	16:00	14:32	17:00	14:38
04/10/2015	11:00	10:48	13:00	11:54	09:30	08:17	16:00	14:43	17:00	14:58
05/10/2015	11:00	09:51	13:00	11:47	09:30	08:29	16:00	14:33	17:00	14:29
06/10/2015	11:00	10:12	13:00	11:58	09:30	08:35	16:00	14:36	17:00	14:12
07/10/2015	11:00	10:07	13:00	11:59	09:30	08:22	16:00	15:03	17:00	14:16
08/10/2015	11:00	09:48	13:00	11:58	09:30	08:28	16:00	14:34	17:00	14:36
09/10/2015	11:00	10:04	13:00	11:57	09:30	08:48	16:00	14:17	17:00	14:37
10/10/2015	11:00	09:58	13:00	12:03	09:30	08:17	16:00	14:20	17:00	14:31
11/10/2015	11:00	09:46	13:00	11:48	09:30	08:21	16:00	14:38	17:00	14:37
12/10/2015	11:00	09:57	13:00	11:55	09:30	08:27	16:00	14:39	17:00	14:37
13/10/2015	11:00	09:58	13:00	12:03	09:30	08:32	16:00	14:33	17:00	14:27
14/10/2015	11:00	10:15	13:00	11:58	09:30	08:38	16:00	14:43	17:00	14:31
15/10/2015	11:00	10:02	13:00	11:59	09:30	08:27	16:00	14:38	17:00	14:36
16/10/2015	11:00	10:12	13:00	12:02	09:30	08:32	16:00	14:30	17:00	14:34
17/10/2015	11:00	09:58	13:00	12:03	09:30	08:30	16:00	14:35	17:00	14:34
18/10/2015	11:00	10:01	13:00	12:08	09:30	08:27	16:00	14:39	17:00	14:35
19/10/2015	11:00	09:57	13:00	11:56	09:30	08:31	16:00	14:37	17:00	14:33
20/10/2015	11:00	10:01	13:00	12:03	09:30	08:39	16:00	14:37	17:00	14:11
21/10/2015	11:00	09:56	13:00	12:03	09:30	08:22	16:00	14:38	17:00	14:50
22/10/2015	11:00	10:01	13:00	12:02	09:30	08:28	16:00	14:36	17:00	14:34
23/10/2015	11:00	09:57	13:00	12:03	09:30	08:33	16:00	14:10	17:00	14:34
24/10/2015	11:00	10:03	13:00	12:02	09:30	08:12	16:00	14:54	17:00	14:27
25/10/2015	11:00	10:11	13:00	11:42	09:30	08:25	16:00	15:33	17:00	14:24
26/10/2015	11:00	09:52	13:00	11:54	09:30	08:25	16:00	14:38	17:00	14:42
27/10/2015	11:00	09:57	13:00	11:59	09:30	08:38	16:00	14:31	17:00	14:33
28/10/2015	11:00	09:54	13:00	11:57	09:30	08:34	16:00	14:28	17:00	14:30
29/10/2015	11:00	10:00	13:00	11:57	09:30	08:40	16:00	14:46	17:00	15:08
30/10/2015	11:00	10:03	13:00	11:54	09:30	08:32	16:00	14:35	17:00	14:34
31/10/2015	11:00	10:03	13:00	11:58	09:30	08:31	16:00	14:29	17:00	14:33

Table 21 – MSP Runs

Market Operator Monthly Report

Settlement Runs

Trading Day	INDICATIVE				INITIAL			
	Target Date	Actual Date	Target Time	Actual Time	Trading Day	Actual Date	Target Time	Actual Time
01/10/2015	02/10/2015	03/10/2015	17:00	14:56	01/10/2015	08/10/2015	12:00	08:38
02/10/2015	03/10/2015	04/10/2015	17:00	16:58	02/10/2015	09/10/2015	12:00	11:13
03/10/2015	04/10/2015	05/10/2015	17:00	17:19	03/10/2015	09/10/2015	12:00	11:49
04/10/2015	05/10/2015	06/10/2015	17:00	17:44	04/10/2015	09/10/2015	12:00	07:45
05/10/2015	06/10/2015	07/10/2015	17:00	15:42	05/10/2015	12/10/2015	12:00	08:02
06/10/2015	07/10/2015	08/10/2015	17:00	15:46	06/10/2015	13/10/2015	12:00	08:19
07/10/2015	08/10/2015	09/10/2015	17:00	16:31	07/10/2015	14/10/2015	12:00	08:11
08/10/2015	09/10/2015	10/10/2015	17:00	16:14	08/10/2015	15/10/2015	12:00	09:08
09/10/2015	10/10/2015	11/10/2015	17:00	11:00	09/10/2015	16/10/2015	12:00	11:48
10/10/2015	11/10/2015	12/10/2015	17:00	11:51	10/10/2015	16/10/2015	12:00	11:55
11/10/2015	12/10/2015	13/10/2015	17:00	15:30	11/10/2015	16/10/2015	12:00	08:16
12/10/2015	13/10/2015	14/10/2015	17:00	16:06	12/10/2015	19/10/2015	12:00	08:17
13/10/2015	14/10/2015	15/10/2015	17:00	16:03	13/10/2015	20/10/2015	12:00	07:53
14/10/2015	15/10/2015	16/10/2015	17:00	16:05	14/10/2015	21/10/2015	12:00	08:31
15/10/2015	16/10/2015	17/10/2015	17:00	15:37	15/10/2015	22/10/2015	12:00	08:14
16/10/2015	17/10/2015	18/10/2015	17:00	11:09	16/10/2015	23/10/2015	12:00	11:55
17/10/2015	18/10/2015	19/10/2015	17:00	11:58	17/10/2015	23/10/2015	12:00	12:04
18/10/2015	19/10/2015	20/10/2015	17:00	15:39	18/10/2015	23/10/2015	12:00	09:06
19/10/2015	20/10/2015	21/10/2015	17:00	15:21	19/10/2015	26/10/2015	12:00	09:02
20/10/2015	21/10/2015	22/10/2015	17:00	15:33	20/10/2015	27/10/2015	12:00	07:59
21/10/2015	22/10/2015	23/10/2015	17:00	15:45	21/10/2015	28/10/2015	12:00	08:37
22/10/2015	23/10/2015	24/10/2015	17:00	15:52	22/10/2015	29/10/2015	12:00	08:06
23/10/2015	24/10/2015	25/10/2015	17:00	11:28	23/10/2015	30/10/2015	12:00	14:11
24/10/2015	25/10/2015	26/10/2015	17:00	11:29	24/10/2015	30/10/2015	12:00	14:20
25/10/2015	26/10/2015	27/10/2015	17:00	16:18	25/10/2015	30/10/2015	12:00	08:51
26/10/2015	27/10/2015	28/10/2015	17:00	15:55	26/10/2015	02/11/2015	12:00	08:23
27/10/2015	28/10/2015	29/10/2015	17:00	15:27	27/10/2015	03/11/2015	12:00	08:24
28/10/2015	29/10/2015	30/10/2015	17:00	15:49	28/10/2015	04/11/2015	12:00	08:53
29/10/2015	30/10/2015	31/10/2015	17:00	15:58	29/10/2015	05/11/2015	12:00	07:45
30/10/2015	31/10/2015	01/11/2015	17:00	11:50	30/10/2015	06/11/2015	12:00	11:44
31/10/2015	01/11/2015	02/11/2015	17:00	11:51	31/10/2015	06/11/2015	12:00	11:53

Table 22 – 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	Constraint Payments	Uninstructed Imbalance Payments	Imperfections Charges
01/10/2015	€184,048.17	-€2,821.59	-€417,294.17
02/10/2015	€236,003.67	-€8,758.78	-€418,385.31
03/10/2015	€447,568.14	-€8,429.85	-€381,381.79
04/10/2015	€355,210.41	-€24,773.87	-€349,405.45
05/10/2015	€403,998.22	-€16,845.94	-€406,685.67
06/10/2015	€408,090.09	-€11,370.17	-€409,451.55
07/10/2015	€396,852.65	-€1,016.51	-€416,499.23
08/10/2015	€833,027.77	-€21,031.97	-€419,217.67
09/10/2015	€571,135.00	-€23,911.84	-€409,985.99
10/10/2015	€426,624.39	-€275.88	-€376,563.72
11/10/2015	€590,507.33	-€216.51	-€366,642.39
12/10/2015	€615,907.40	-€2,922.19	-€408,081.59
13/10/2015	€488,323.11	-€17,640.65	-€428,288.19
14/10/2015	€323,841.39	-€15,630.17	-€430,023.84
15/10/2015	€570,171.09	-€34,678.33	-€435,691.74
16/10/2015	€504,000.21	€18,400.98	-€429,027.80
17/10/2015	€539,706.96	-€10,829.35	-€390,086.25
18/10/2015	€266,275.31	-€19,394.40	-€378,763.32
19/10/2015	€691,729.65	-€1,637.61	-€431,384.59
20/10/2015	€416,398.00	-€16,742.61	-€431,705.80
21/10/2015	€432,672.89	€2,922.97	-€414,059.84
22/10/2015	€641,039.51	-€16,128.91	-€417,064.06
23/10/2015	€459,729.27	-€2,884.82	-€406,407.83
24/10/2015	€402,573.36	-€210.62	-€371,022.63
25/10/2015	€555,628.53	-€9,138.35	-€360,591.55
26/10/2015	€564,608.59	-€10,138.06	-€363,999.10
27/10/2015	€330,626.10	-€5,378.00	-€424,726.29
28/10/2015	€336,368.51	€2,317.42	-€421,130.98
29/10/2015	€695,460.11	-€15,712.74	-€418,305.21
30/10/2015	€614,928.96	-€7,082.05	-€407,138.37
31/10/2015	€291,199.69	-€8,191.01	-€379,817.58

Table 23 - Constraint Payments, Uninstructed Imbalance Payments, and Imperfections Charges

Market Operator Monthly Report

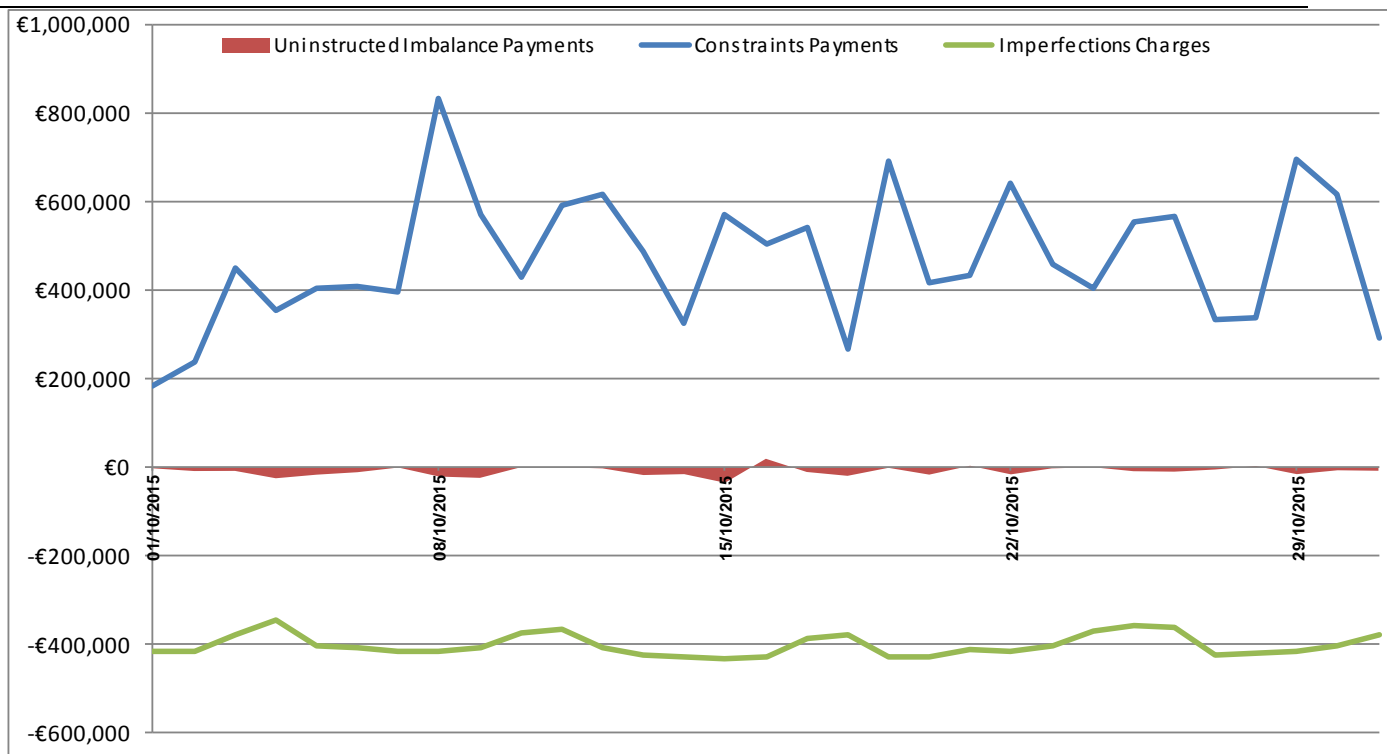


Figure 24 - Constraint Payments, Uninstructed Imbalance Payments, and Imperfections Charges

Week No	Make Whole Payments
38	€156,663.13
39	€99,549.05
40	€104,371.05
41	€9,305.58
42	€17,237.57

Table 24 - Make Whole Payments

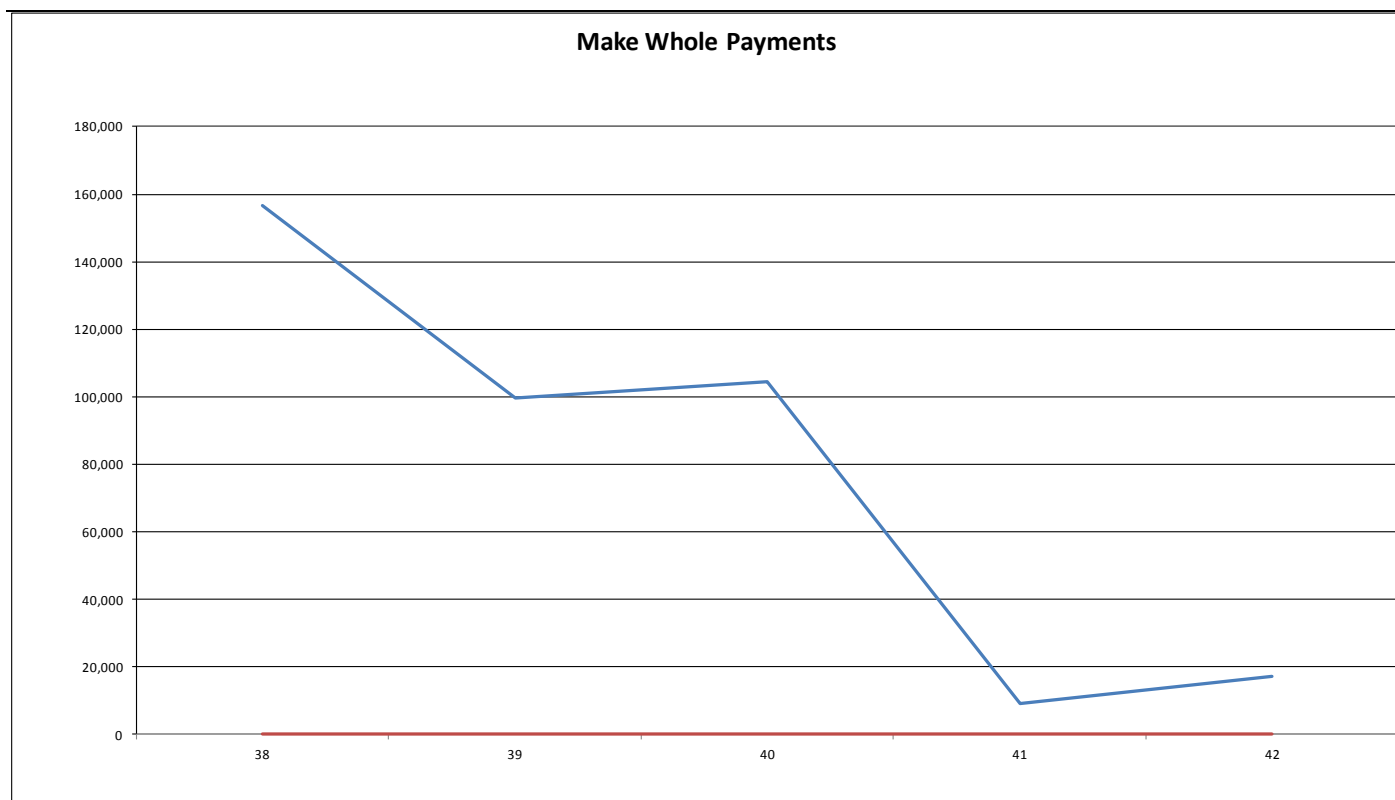


Figure 25 - Make Whole Payments

Week No	Testing Charges
38	-€12,688.71
39	-€1,257.57
40	-€19,812.53
41	-€21,021.55
42	-€10,419.94

Table 25 - Testing Charges

Testing Charges

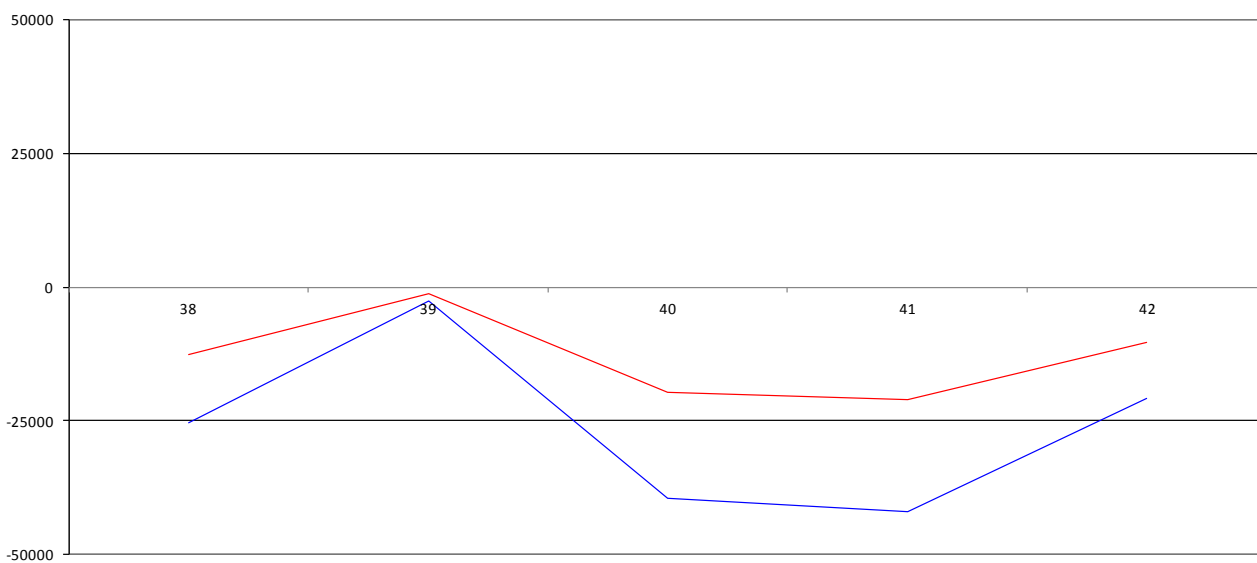


Figure 26 - Testing Charges

13. Appendix F: Default Commercial Offer Data Used

The table below lists for each unit the number of times in operations during October 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_401610	28			28
PT_400138	DSU_401590	31			31
PT_500078	DSU_501330	7			7
PT_400090	DSU_401620	28			28
PT_400116	DSU_401400	31			31
PT_400090	DSU_401270	31			31
PT_400106	DSU_401330	33			33
PT_400133	DSU_401530	16			16
PT_400124	DSU_401490	31			31
PT_400090	DSU_401620			3	3
PT_400144	DSU_401660			31	31
PT_500078	DSU_501330			25	25
PT_400090	DSU_401610			3	3
PT_400111	DSU_401390			31	31
PT_400133	DSU_401530			16	16
PT_400024	GU_400120	31			31
PT_400024	GU_400121	31			31
PT_400026	GU_400140	31			31
PT_400030	GU_400180	39			39
PT_400030	GU_400181	41			41
PT_400030	GU_400182	41			41
PT_400030	GU_400183	40			40
PT_400030	GU_400200	38			38
PT_400030	GU_400201	38			38
PT_400030	GU_400202	37			37
PT_400030	GU_400203	39			39
PT_400030	GU_400210	38			38
PT_400030	GU_400211	38			38
PT_400030	GU_400220	38			38
PT_400030	GU_400221	38			38
PT_400030	GU_400240	38			38
PT_400030	GU_400250	38			38
PT_400030	GU_400251	38			38
PT_400030	GU_400252	37			37
PT_400030	GU_400260	38			38
PT_400030	GU_400270	42			42
PT_400030	GU_400271	39			39
PT_400030	GU_400272	39			39
PT_400030	GU_400280	38			38
PT_400030	GU_400281	38			38
PT_400030	GU_400290	37			37
PT_400030	GU_400300	39			39
PT_400030	GU_400311	39			39
PT_400030	GU_400323	39			39
PT_400030	GU_400360	38			38
PT_400030	GU_400361	38			38

Market Operator Monthly Report

PT_400030	GU_400362	38		38
PT_400030	GU_400363	38		38
PT_400030	GU_400370	38		38
PT_400030	GU_400850	39		39
PT_400032	GU_400430	31		31
PT_400034	GU_400940	31		31
PT_400034	GU_401090	31		31
PT_400034	GU_401440	31		31
PT_400035	GU_400480	53		53
PT_400037	GU_400500	31		31
PT_400041	GU_400530	56		56
PT_400044	GU_400540	53		53
PT_400054	GU_400620	31		31
PT_400055	GU_400630	31		31
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_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	68		68
PT_400077	GU_400950	31		31
PT_400078	GU_401010	31		31
PT_400078	GU_401011	31		31
PT_500024	GU_500040	32		32
PT_500024	GU_500041	31		31
PT_500027	GU_500130	84		84
PT_500027	GU_500131	84		84
PT_500027	GU_500140	84		84
PT_500034	GU_501350	31		31
PT_500040	GU_500280	32		32
PT_500040	GU_500281	32		32
PT_500040	GU_500282	31		31
PT_500040	GU_500283	32		32
PT_500040	GU_500284	32		32
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	53		53
PT_500050	GU_501040	31		31
PT_500050	GU_501050	31		31
PT_500050	GU_501150	31		31
PT_500050	GU_501190	31		31
PT_500053	GU_501130	32		32
PT_500066	GU_501210	31		31
PT_400021	GU_400021		31	31
PT_400021	GU_400050		31	31
PT_400021	GU_400060		31	31

Market Operator Monthly Report

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_400271			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_401280			31	31
PT_400050	GU_401290			31	31
PT_400050	GU_401360			31	31
PT_400050	GU_401790			31	31
PT_400062	GU_400730			31	31
PT_400062	GU_400731			31	31
PT_400062	GU_400840			31	31
PT_400082	GU_401100			31	31
PT_400087	GU_401230			31	31
PT_400148	GU_401690			31	31
PT_400150	GU_401700			31	31
PT_400151	GU_401770			31	31
PT_400151	GU_401780			31	31
PT_400152	GU_401710			31	31
PT_400152	GU_401720			31	31
PT_400152	GU_401730			31	31
PT_400152	GU_401740			31	31
PT_400152	GU_401750			31	31
PT_400152	GU_401760			31	31
PT_500021	GU_500010			31	31
PT_500021	GU_500740			31	31
PT_500021	GU_501160			31	31
PT_500032	GU_500211			31	31
PT_500032	GU_501120			31	31
PT_500032	GU_501280			31	31
PT_500032	GU_501290			31	31
PT_500039	GU_500270			31	31
PT_500044	GU_500720			31	31
PT_500047	GU_500790			31	31
PT_500061	GU_501170			31	31
PT_500062	GU_501180			31	31
PT_500073	GU_501230			31	31
PT_500074	GU_501250			31	31
PT_500083	I_NIMOYLE	61			61

Market Operator Monthly Report

PT_400021	I_ROIEWIC	31			31
PT_500024	I_NIMOYLE	31			31
PT_500075	I_NIMOYLE	31			31
PT_500021	I_NIMOYLE	31			31
PT_400163	I_ROIEWIC	91			91
PT_500058	I_NIMOYLE	30			30
PT_500031	I_NIMOYLE	31			31
PT_500069	I_NIMOYLE	93			93
PT_400096	I_ROIEWIC	91			91
PT_400113	I_ROIEWIC	30			30
PT_500037	I_NIMOYLE	31			31
PT_400115	I_ROIEWIC	31			31
PT_400168	I_ROIEWIC	32			32
PT_400136	I_ROIEWIC	52			52
PT_400108	I_ROIEWIC	73			73
PT_500070	I_NIMOYLE	70			70
PT_400030	I_ROIEWIC	31			31
PT_400099	I_ROIEWIC	31			31
	Total	4214	0	1815	6029
	Percentage	69.90%	0.00%	30.10%	100.00%

Table 26 – Commercial Offer 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.

Market Operator Monthly Report

Market		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
Nov-13	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
Dec-13	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
Jan-14	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
Feb-14	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
Mar-14	ROI	£70,041,213.49	£26,285,336.21	£1,449,159.95	£261,906.17	£61,216.38	£2,226.19	£61,216.38	£92,283.95	£30,407.22	£960.16	£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
Apr-14	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
May-14	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
Jun-14	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
Jul-14	ROI	£48,255,770.91	£22,988,780.17	£1,292,701.68	£332,606.61	£88,357.34	£8,292.72	£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
Aug-14	ROI	£75,858,678.54	£17,424,467.63	£1,576,396.05	£255,748.90	£41,217.98	£1,835.23	£112,980.92	£0.00	£1,327.55	£123,147.19	£0.00	£0.00	73,064,976.28
	NI	£20,792,697.59	£5,164,101.59	£404,571.34	£73,223.02	£16,729.14	£695.03	£40,446.87	£0.00	£491.99	£10.52	£0.00	£0.00	22,440,085.62
Sep-14	ROI	£73,166,499.86	£17,774,079.00	£1,638,145.68	£285,506.09	£62,431.70	£3,367.28	£92,320.85	£30,020.38	£728.19	£0.00	£0.00	£0.00	93,053,999.01
	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
Oct-14	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
Nov-14	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
Dec-14	ROI	£70,930,088.87	£29,867,271.70	£888,221.25	£635,976.36	£143,088.63	£7,086.94	£116,364.21	£26,279.71	£995.87	£0.00	£0.00	£0.00	102,615,373.54
	NI	£24,123,259.48	£7,725,422.06	£238,369.94	£58,794.95	£14,543.55	£696.33	£34,690.50	£7,234.36	£296.35	£0.00	£0.00	£0.00	32,203,307.52
Jan-15	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	£1,398.36	£0.00	36,941,383.70
Feb-15	ROI	£65,650,453.03	£55,349,682.44	£856,456.83	£281,934.15	£56,929.88	£1,558.86	£451,006.63	£29,817.73	£839.90	£68,857.79	£0.00	£0.00	122,747,537.24
	NI	£25,773,047.64	£16,395,217.13	£213,118.58	£112,874.22	£37,025.56	£783.98	£25,242.43	£5,150.11	£140.40	£0.00	£0.00	£0.00	42,562,600.05
Mar-15	ROI	£53,956,274.88	£21,836,040.18	£861,676.05	£453,661.43	£115,779.65	£2,416.32	£355,096.34	£39,172.70	£877.23	£111,462.50	£0.00	£0.00	77,732,457.28
	NI	£22,615,725.41	£8,408,410.93	£207,225.41	£147,466.81	£46,471.14	£825.82	£39,513.02	£6,098.32	£183.02	£282.78	£0.00	£0.00	31,472,202.66
Apr-15	ROI	£49,671,449.35	£18,463,469.38	£767,415.15	£442,875.61	£132,859.46	£2,617.91	£174,481.42	£24,018.61	£806.67	£34,066.85	£0.00	£0.00	69,714,060.41
	NI	£20,444,248.38	£5,917,010.08	£191,002.36	£178,167.11	£60,451.34	£1,059.11	£38,565.73	£8,077.48	£245.07	£24,964.25	£0.00	£0.00	26,863,790.91
May-15	ROI	£62,682,234.81	£19,502,808.85	£978,929.74	£496,789.41	£113,309.65	£2,668.35	£257,691.56	£37,913.64	£947.65	£105,628.08	£0.00	£0.00	84,178,921.74
	NI	£20,656,049.28	£5,471,708.22	£941,978.73	£284,714.17	£81,721.34	£1,530.01	£28,297.30	£5,740.95	£255.12	£458.23	£0.00	£0.00	27,472,453.35
Jun-15	ROI	£49,441,454.53	£18,011,748.07	£768,412.90	£525,988.89	£125,343.18	£3,068.91	£83,564.13	£14,743.93	£639.06	£24,047.90	£0.00	£0.00	68,999,011.50
	NI	£16,086,817.66	£4,881,262.27	£731,152.70	£190,327.69	£56,176.06	£1,108.32	£14,086.52	£3,263.83	£136.37	£4.82	£0.00	£0.00	21,964,336.24
Jul-15	ROI	£60,081,065.67	£18,106,345.49	£938,580.42	£392,863.94	£100,250.95	£2,281.34	£70,409.41	£14,571.40	£801.22	£3,383,812.96	£0.00	£0.00	83,090,982.80
	NI	£20,399,899.80	£4,559,620.30	£901,179.27	£122,425.31	£34,196.36	£798.99	£13,983.16	£3,041.83	£170.87	£560,424.72	£0.00	£0.00	26,595,740.61
Aug-15	ROI	£78,361,586.44	£18,780,406.68	£706,070.38	£980,269.55	£57,624.58	£1,113.70	£78,106.89	£15,466.63	£704.85	£100,608.41	£0.00	£0.00	99,081,958.11
	NI	£26,593,706.25	£4,803,877.25	£717,392.01	£96,278.24	£20,145.75	£293.79	£11,711.41	£2,659.00	£109.44	£1,579.59	£0.00	£0.00	32,247,752.73
Sep-15	ROI	£56,880,935.07	£19,007,006.26	£785,930.22	£310,026.85	£107,852.47	£1,796.61	£36,597.16	£9,587.72	£443.17	£15,420.42	£0.00	£0.00	77,155,655.95
	NI	£16,638,373.40	£5,599,036.84	£750,313.33	£28,072.71	£9,405.58	£194.47	£6,674.12	£1,949.58	£89.21	£1,839.74	£0.00	£0.00	23,035,948.98
Oct-15	ROI	£75,155,545.75	£23,128,442.30	£1,295,475.88	£443,105.48	£86,420.77	£2,807.08	£180,398.48	£11,167.69	£655.39	£270,259.36	£0.00	£0.00	100,574,278.18
	NI	£26,889,337.22	£8,142,113.54	£1,245,919.76	£54,919.85	£9,562.47	£359.88	£15,468.54	£2,190.21	£128.91	£12,197.72	£0.00	£0.00	36,372,198.10

Table 27 - Total Charges by Month

Market Operator Monthly Report

Market		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
	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
	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
	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
	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
	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
Apr-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
	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
	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
	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
	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
	NI	€17,954,420.41	€5,911,052.65	€74,371.07	€15,553.63	€863.74	€54,424.97	€0.00	€488.54	€7.43	€0.00	€0.00	€24,011,182.44
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
	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	€82,250,495.91	€18,220,219.93	€584,729.92	€104,687.01	€6,507.05	€125,335.38	€9,519.24	€1,313.25	€0.00	€0.00	€0.00	€101,302,807.69
	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
	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	€79,262,340.64	€30,252,803.13	€636,211.01	€143,171.30	€7,087.15	€116,495.94	€25,330.11	€995.97	€0.00	€0.00	€0.00	€110,444,435.25
	NI	€17,625,339.05	€7,511,303.13	€58,743.90	€14,475.87	€679.17	€34,724.44	€7,982.34	€296.61	€0.00	€0.00	€0.00	€25,253,544.51
Jan-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
	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
Feb-15	ROI	€73,470,092.53	€55,924,536.86	€296,450.78	€68,641.91	€1,587.00	€108,844.27	€30,840.66	€843.06	€0.00	€0.00	€0.00	€129,901,837.07
	NI	€19,828,437.97	€15,954,828.70	€108,022.71	€28,545.69	€367.07	€16,957.65	€4,432.19	€141.23	€0.00	€0.00	€0.00	€35,941,733.21
Mar-15	ROI	€62,833,350.60	€23,162,278.12	€454,954.34	€115,622.74	€2,409.00	€95,140.99	€35,705.38	€876.34	€33.87	€0.00	€0.00	€86,700,371.38
	NI	€18,497,389.79	€7,572,263.19	€147,525.82	€46,556.55	€825.97	€19,215.14	€8,635.89	€182.86	€726.16	€0.00	€0.00	€26,293,321.37
Apr-15	ROI	€55,596,682.04	€19,228,984.53	€447,913.03	€132,018.11	€2,588.47	€93,342.92	€23,125.23	€794.27	€27,655.34	€0.00	€0.00	€75,553,103.94
	NI	€14,229,748.35	€5,312,669.68	€178,040.01	€60,667.89	€1,059.24	€28,971.47	€8,624.89	€241.56	€20,785.23	€0.00	€0.00	€19,840,808.32
May-15	ROI	€67,111,651.41	€19,797,771.76	€51,325.57	€496,344.48	€113,479.16	€2,634.87	€257,691.56	€32,517.87	€947.37	€0.00	€0.00	€87,864,364.05
	NI	€14,205,268.80	€5,300,854.82	€14,374.56	€284,573.32	€81,498.12	€-1,531.15	€28,297.30	€9,511.56	€255.00	€0.00	€0.00	€19,923,102.33
Jun-15	ROI	€52,399,988.22	€18,449,916.98	€50,329.66	€524,214.44	€125,353.28	€2,989.03	€83,564.13	€15,091.05	€633.94	€0.00	€0.00	€71,652,080.73
	NI	€10,536,540.86	€4,561,917.57	€13,069.46	€190,224.00	€56,986.34	€-1,109.52	€14,086.52	€3,197.29	€136.59	€0.00	€0.00	€15,375,049.11
Jul-15	ROI	€63,619,222.88	€17,795,388.83	€50,900.02	€368,804.77	€98,198.30	€2,207.87	€70,409.41	€14,587.16	€801.29	€0.00	€0.00	€82,020,520.53
	NI	€12,711,689.30	€4,703,936.76	€13,498.87	€121,756.24	€35,884.73	€-799.78	€13,983.16	€3,045.41	€170.96	€0.00	€0.00	€17,603,165.65
Aug-15	ROI	€78,593,341.57	€17,976,726.62	€1,941.74	€806,815.82	€62,841.79	€1,062.49	€78,106.89	€15,446.53	€704.90	€0.00	€0.00	€97,536,988.35
	NI	€18,174,076.35	€5,392,403.96	€13,263.37	€191,650.14	€15,985.64	€-294.74	€11,711.41	€2,643.17	€109.50	€0.00	€0.00	€23,801,548.80
Sep-15	ROI	€53,901,821.24	€19,234,943.47	€48,776.08	€306,959.54	€78,980.31	€1,722.88	€36,597.16	€9,593.94	€440.27	€0.00	€0.00	€73,619,834.89
	NI	€12,814,817.71	€5,453,049.86	€13,099.19	€28,119.15	€30,434.20	€-195.13	€6,674.12	€1,961.83	€89.22	€0.00	€0.00	€18,348,050.15
Oct-15	ROI	€80,371,870.63	€24,802,345.08	€66,995.40	€443,663.82	€86,979.14	€2,769.77	€180,398.48	€11,178.41	€661.95	€0.00	€0.00	€105,966,862.68
	NI	€18,903,009.90	€7,020,973.74	€17,439.28	€54,065.62	€9,513.69	€-630.70	€15,468.54	€2,194.18	€129.58	€0.00	€0.00	€26,022,443.83

Table 28 - 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
02/10/2015	38	-€1,655,942.38	€ 162,994.80
09/10/2015	39	-€1,135,216.68	€177,381.90
16/10/2015	40	€507,903.08	€106,382.04
23/10/2015	41	€681,099.48	€131,096.53
30/10/2015	42	€405,933.93	-€25,867.40

Table 29 – 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 2015	-€340.35	-€ 7,800.91

Table 30 - 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 [here](#).

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
<u>November 2014</u>	=	<u>02/11/2014</u> <u>11/11/2014</u> <u>15/11/2014</u> <u>25/11/2014</u>	<u>20/11/2014</u> <u>24/11/2014</u> <u>26/11/2014</u>	<u>12/11/2014</u> <u>20/11/2014</u> <u>26/11/2014</u>	=
<u>December 2014</u>	<u>14/12/2014</u>	<u>04/12/2014</u> <u>14/12/2014</u> <u>25/12/2014</u>	<u>01/12/2014</u>	<u>04/12/2014</u>	=
<u>January 2015</u>	<u>06/01/2015</u>	<u>12/01/2015</u> <u>15/01/2015</u> <u>21/01/2015</u> <u>23/01/2015</u>	<u>03/01/2015</u>	<u>28/01/2015</u>	<u>16/01/2015</u>
<u>February 2015</u>	=	<u>06/02/2015</u> <u>07/02/2015</u> <u>09/02/2015</u> <u>13/02/2015</u> <u>18/02/2015</u> <u>23/02/2015</u>	<u>24/02/2015</u>	<u>28/02/2015</u>	<u>05/02/2015</u> <u>10/02/2015</u>
<u>March 2015</u>	=	=	=	<u>15/03/2015</u>	<u>24/03/2015</u>
<u>April 2015</u>	=	=	<u>20/04/2015</u>	<u>20/04/2015</u>	<u>25/04/2015</u>
<u>May 2015</u>	=	<u>13/05/2015</u>	<u>03/05/2015</u>	=	=

Market Operator Monthly Report

Month	Ex-Ante	Ex-Ante 2	Ex-Post Indicative	Ex-Post Initial	Within Day
<u>June 2015</u>	-	<u>01/07/2015</u>	<u>22/06/2015</u>	<u>26/06/2015</u>	<u>11/06/2015</u>
<u>August 2015</u>	-	-	<u>23/07/2015</u>	-	-
<u>August 2015</u>	-	-	<u>11/08/2015</u>	<u>11/08/2015</u>	<u>07/08/2015</u> <u>31/08/2015</u>
<u>September 2015</u>	-	<u>18/09/2015</u>	-	<u>10/09/2015</u>	-
<u>October 2015</u>	-	-	-	-	<u>04/10/2015</u>

Table 31 - MIP Algorithms

Operational Date	Trade Date	Run Type	LR Peak SMP	MIP Peak SMP	Published
01/11/2014	02/11/2014	EA2	€1000	€215.23	MIP
10/11/2014	11/11/2014	EA2	€1000	€229.26	MIP
14/11/2014	15/11/2014	EA2	€1000	€369.02	MIP
24/11/2014	25/11/2014	EA2	€572.13	€424.16	MIP
21/11/2014	20/11/2014	EP1	€1000	€228.86	MIP
27/11/2014	26/11/2014	EP1	€1000	€380.87	MIP
25/11/2014	24/11/2014	EP1	€630.52	€560.63	MIP
16/11/2014	12/11/2014	EP2	€1000	€357.67	MIP
24/11/2014	20/11/2014	EP2	€1000	€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	€1000	€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

Market Operator Monthly Report

23/01/2015	24/01/2015	EA2	€1000	€361.30	MIP
28/01/2015	24/01/2015	EP2	€1000	€358.00	MIP
05/02/2015	05/02/2015	WD1	€583.65	€461.14	MIP
06/02/2015	07/02/2015	EA2	€1000	€201.17	MIP
07/02/2015	08/02/2015	EA2	€1000	€238.69	MIP
09/02/2015	10/02/2015	EA2	€1000	€211.44	MIP
10/02/2015	10/02/2015	WD1	€1000	€206.00	MIP
13/02/2015	14/02/2015	EA2	€1000	€920.77	MIP
18/02/2015	19/02/2015	EA2	€1000	€475.15	MIP
23/02/2015	24/02/2015	EA2	€1000	€239.26	MIP
24/02/2015	23/02/2015	EP1	€1000	€206.00	MIP
28/02/2015	24/02/2015	EP2	€1000	€418.22	MIP
15/03/2015	11/03/2015	EP2	€1000	€740.26	MIP
24/03/2015	24/03/2015	WD1	€586.24	€195.68	MIP
21/04/2015	20/04/2015	EP1	€589.68	€79.45	MIP
25/04/2015	24/04/2015	WD1	€1,000	€162.18	MIP
24/04/2015	20/04/2015	EP2	€589.68	€80.11	MIP
12/05/2015	13/05/2015	EA2	€590.61	€221.99	MIP
04/05/2015	03/05/2015	EP1	€574.30	€313.07	MIP
11/06/2015	11/06/2015	WD1	€576.50	€206.00	MIP
23/06/2015	22/06/2015	EP1	€579.41	€76.14	MIP
30/06/2015	26/06/2015	EP2	€578.16	€285.24	MIP
30/06/2015	01/07/2015	EA2	€574.22	€110.58	MIP
23/07/2015	22/07/2015	EP1	€1,000	€86.14	MIP
07/08/2015	07/08/2015	WD1	€579.12	€71.44	MIP
12/08/2015	11/08/2015	EP1	€567.94	€76.52	MIP
15/08/2015	11/08/2015	EP2	€576.94	€76.52	MIP
31/08/2015	31/08/2015	WD1	€1,000	€66.29	MIP
14/09/2015	10/09/2015	EP2	-€100	€85.93	MIP
17/09/2015	18/09/2015	EA2	€1,000	€86.51	MIP
08/10/2015	04/10/2015	EP2	€1000	€71.89	MIP

Table 32 - MIP Vs LR Peak Price Comparison