



Market Operator Monthly Report

June 2015

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Executive Summary

This Single Electricity Market Operator's (SEMO) report covers the month of operation of May 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 June 2015, Settlements had no late publications as per the Trading and Settlement code.

159 general queries were received in June 2015. During the same period 160 general queries were resolved.

There were 11 defaults by Participants during June 2015. The largest of these was an FMOC Initial invoice for €544 which was remedied within one working day.

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

Monthly Statistics

Code Breaches

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

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

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 no financial implication to Participants. This includes late posting of pricing and settlement runs.

Joining and Terminating Parties and Units

There were three new Parties joining the Market in June 2015.

- Project Plug TA ClickEnergy
- Axpo Trading AG
- KiWi Power Ireland

There were no terminating parties in June 2015.

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

- PT_400144 Powerhouse Generation Limited TS_400177 DSU_401660
- PT_400144 Powerhouse Generation Limited TS_400177 SU_400179
- PT_400163 Erova Energy Limited PT_400163_I_RIEWIC
- PT_500083 Erova Energy Limited PT_500083_I_NIMOYLE

No units de-registered from the Market in June 2015.

Suspension of Participants

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

Financial Statistics

Total Charges for Each Currency

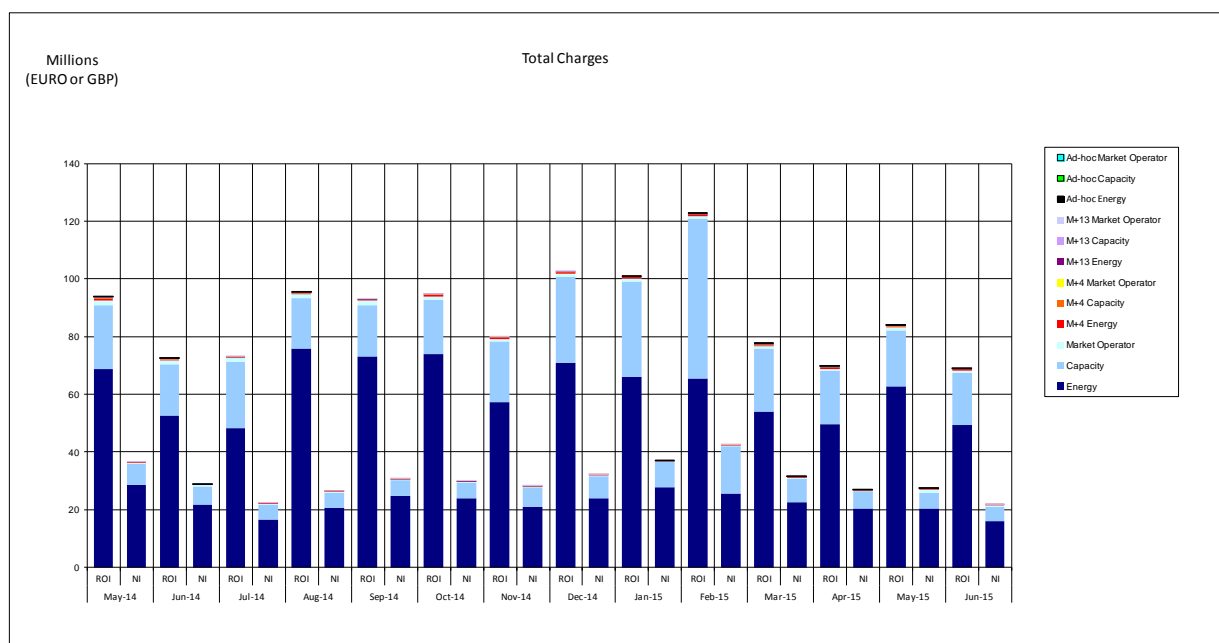


Figure 1 - Total Charges for Each Currency

Market	June 2015	
	ROI	NI
Energy	€49,441,455	£16,086,818
Capacity	€18,011,748	£4,881,262
Market Operator	€768,413	£731,153
M+4 Energy	€525,989	£190,328
M+4 Capacity	€125,343	£56,176
M+4 Market Operator	€3,069	£1,108
M+13 Energy	€83,564	£14,087
M+13 Capacity	€14,744	£3,264
M+13 Market Operator	€639	£136
Ad-hoc Energy	€24,048	£5
Ad-hoc Capacity	€0	£0
Ad-hoc Market Operator	€0	£0
Total	€68,999,012	£21,964,336

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](#).

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Total Payments for Each Currency

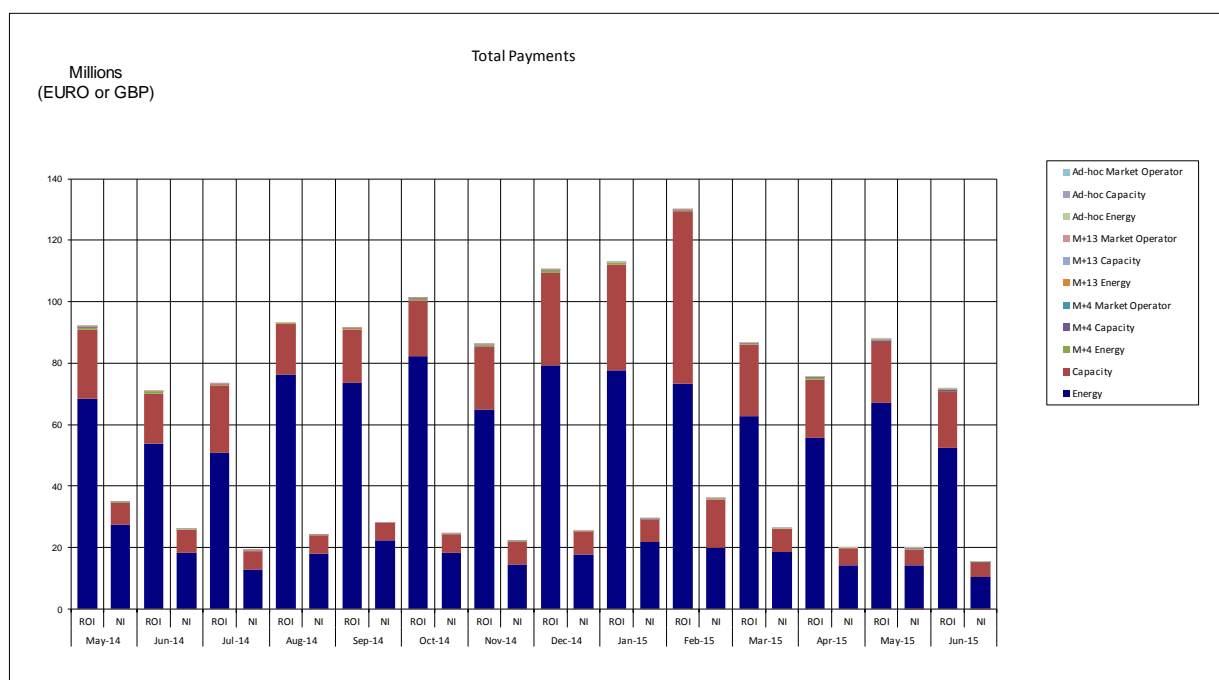


Figure 2 - Total Payments for Each Currency

Market	June 2015	
	ROI	NI
Energy	€52,399,988	£10,536,541
Capacity	€18,449,917	£4,561,918
M+4 Energy	€50,330	£13,069
M+4 Capacity	€524,214	£190,224
M+4 Market Operator	€125,353	£56,986
M+13 Energy	€2,989	-£1,110
M+13 Capacity	€83,564	£14,087
M+13 Market Operator	€15,091	£3,197
Ad-hoc Energy	€634	£137
Ad-hoc Capacity	€0	£0
Ad-hoc Market Operator	€0	£0
Total	€71,652,081	€15,375,049

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.

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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:

June 2015	
Imbalance (Energy Only)	-€389,803.85

Table 4 - Balancing Costs for Energy Settlement

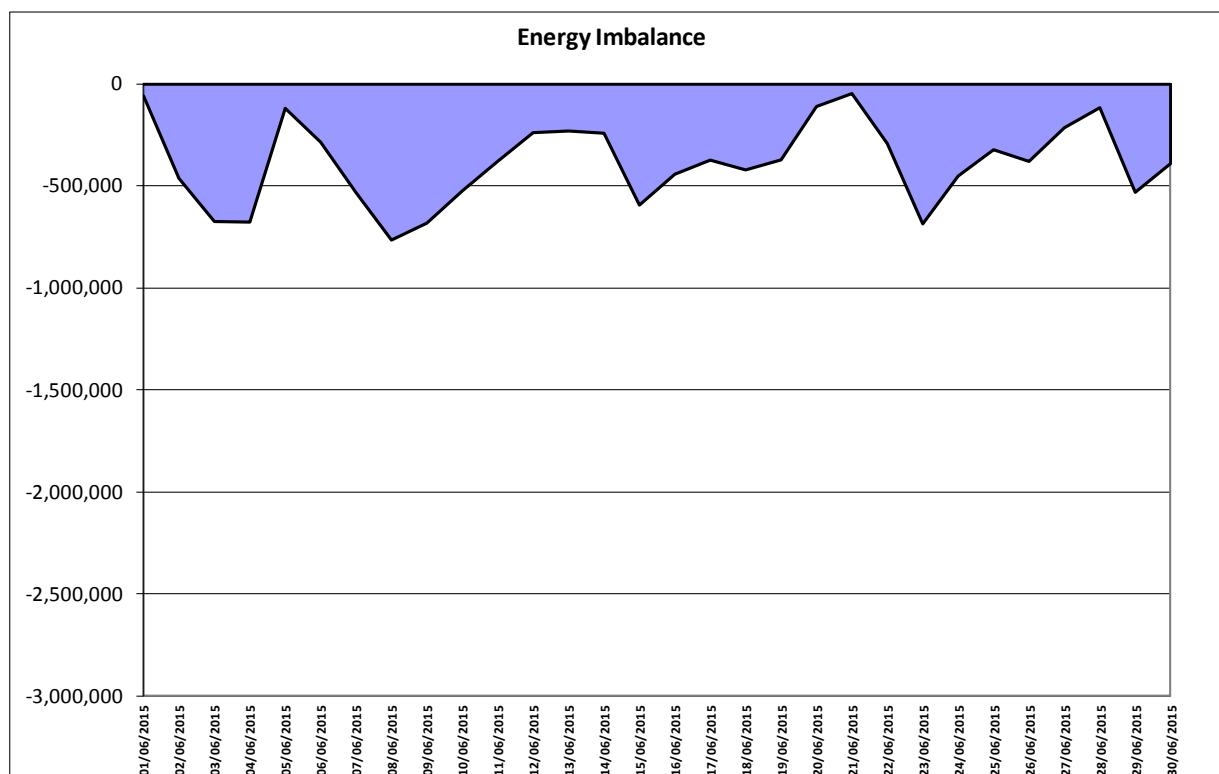


Figure 3 – Energy Imbalances

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.

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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
05/06/2015	21	-€581,933.86	€93,736.74
12/06/2015	22	€52,638.56	€34,490.35
19/06/2015	23	-€130,069.47	€150,507.27
26/06/2016	24	-€41,136.73	€180,820.70

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:

June 2015	
Capacity Charges	-€38,309,512.72
Capacity Payments	€38,309,280.3
Balancing Costs	-€232.42
VAT	€5324.64

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) and the Exchange Rate on the Date of Invoice (being the date of issue of the Invoice) for Trading Payments and Charges.

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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
30/05/2015	05/06/2015	21	-£4,840.25	-£16,314.09	-£21,154.34
06/06/2015	12/06/2015	22	£2,184.44	-£11,112.66	-£8,928.22
13/06/2015	19/06/2015	23	£1,404.63	£17,076.67	£18,481.30
20/06/2015	26/06/2015	24	-£13,055.17	£14,899.93	£1,844.76

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 £18,481.30 and a cost of £21,154.34. 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
09/07/2015	June 2015	£26,404.86

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.

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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 Payments	Total Uninstructed Imbalance	Total Make Whole Payments	Total Imperfections
€140,233,148.44	-€2,014,722.83	€4,553,973.49	-€140,558,687.38

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.

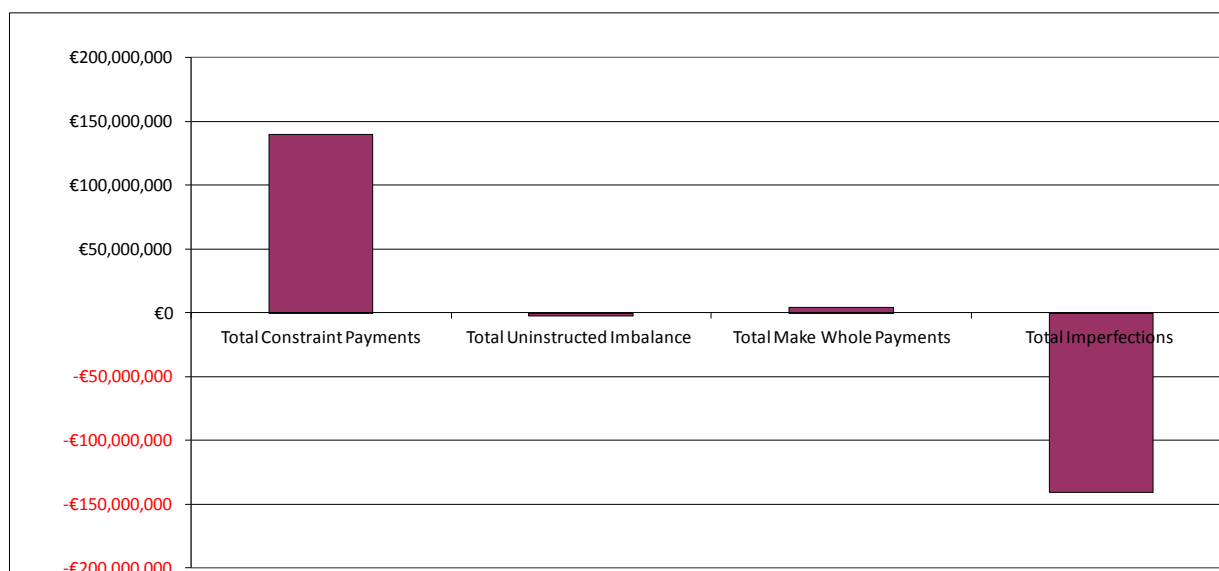


Figure 4 - Cumulative Imperfections Costs Vs Budget

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 February 2015 and M+13 resettlement period of May 2014 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 to Participants (Payments).

The reverse is true for Figure 7 & 10

M+4 Resettlement

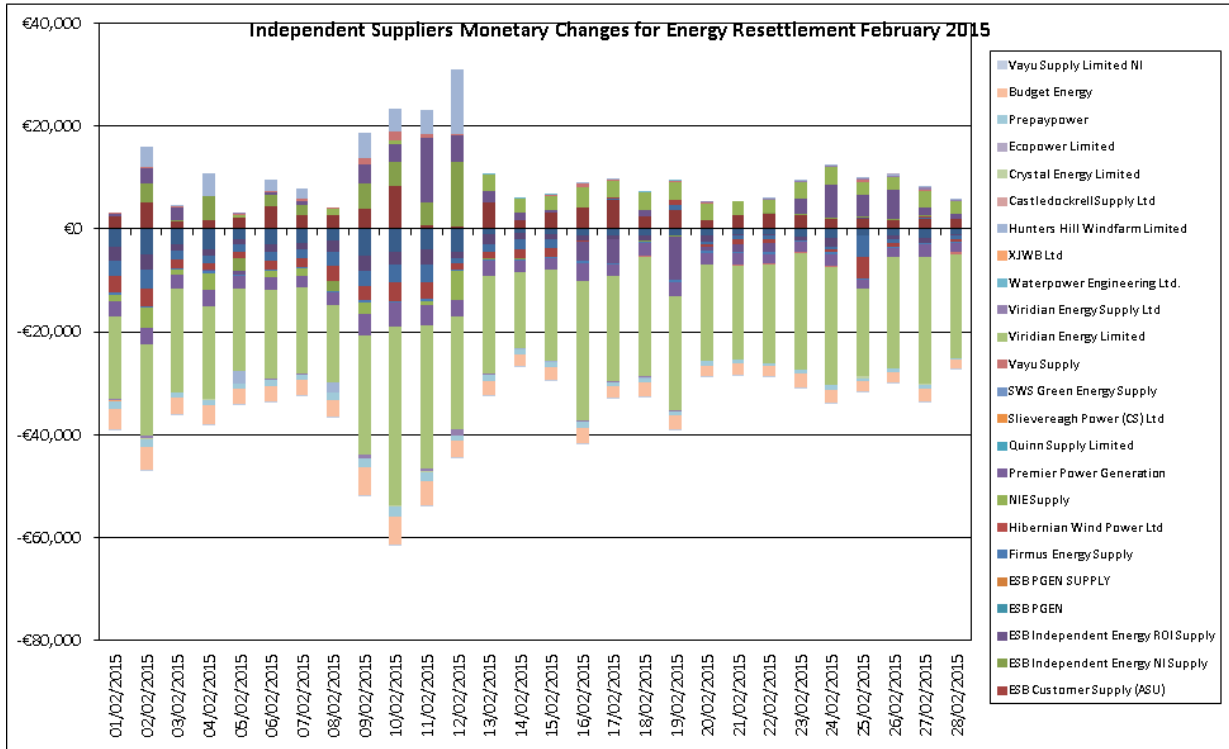


Figure 5 – Independent Suppliers Monetary Changes for Energy Resettlement – February 2015

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

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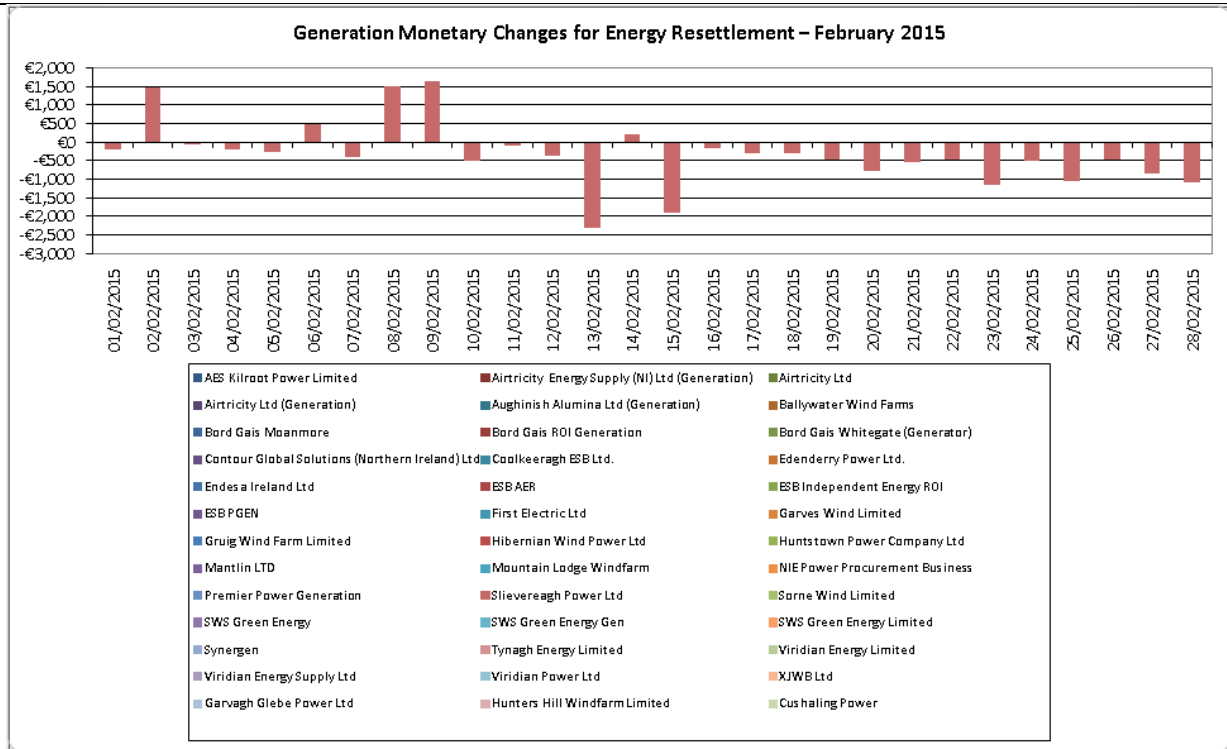


Figure 6 – Generation Monetary Changes for Energy Resettlement – February 2015

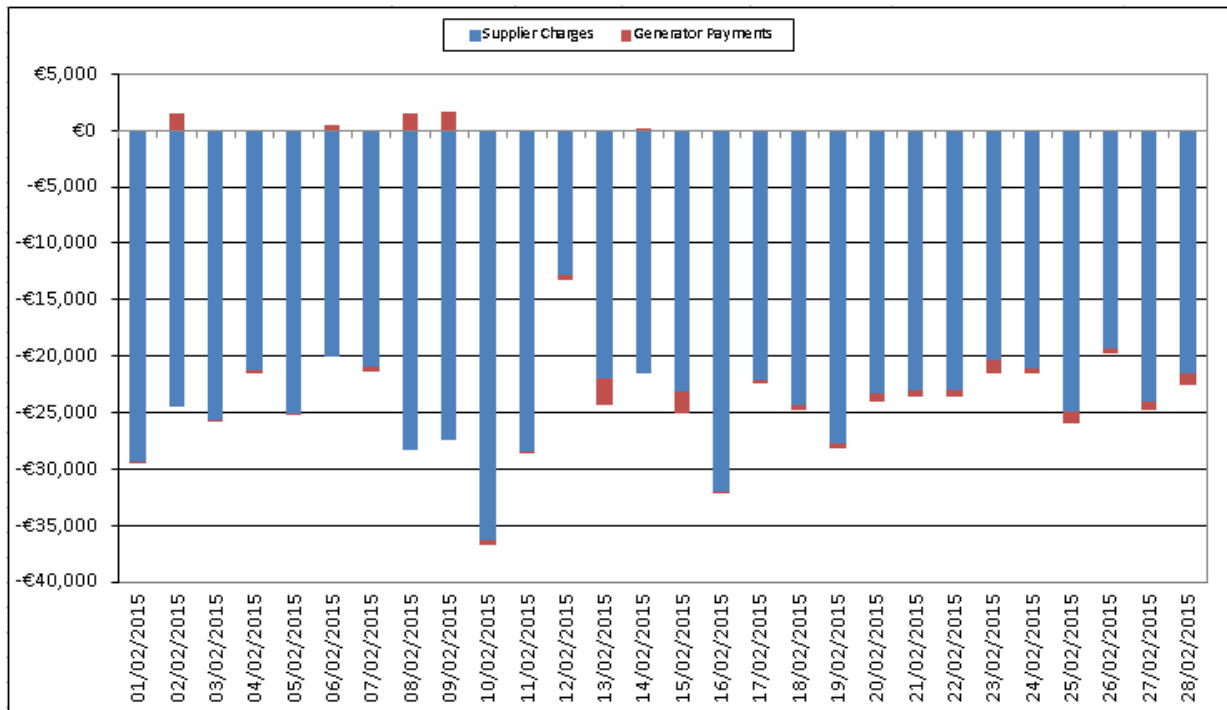


Figure 7 – Total Monetary Changes for Energy Resettlement – February 2015

M+13 Resettlement

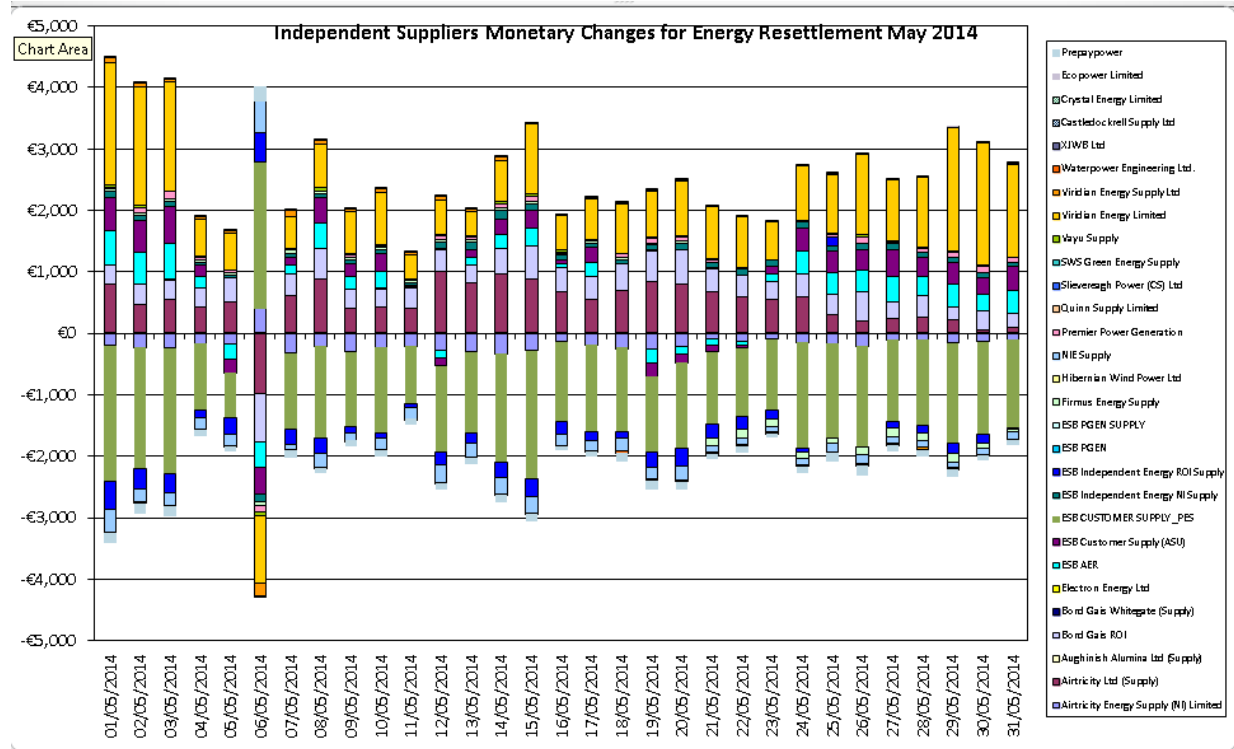


Figure 8 - Independent Suppliers Monetary Changes for Energy Resettlement – May 2014

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

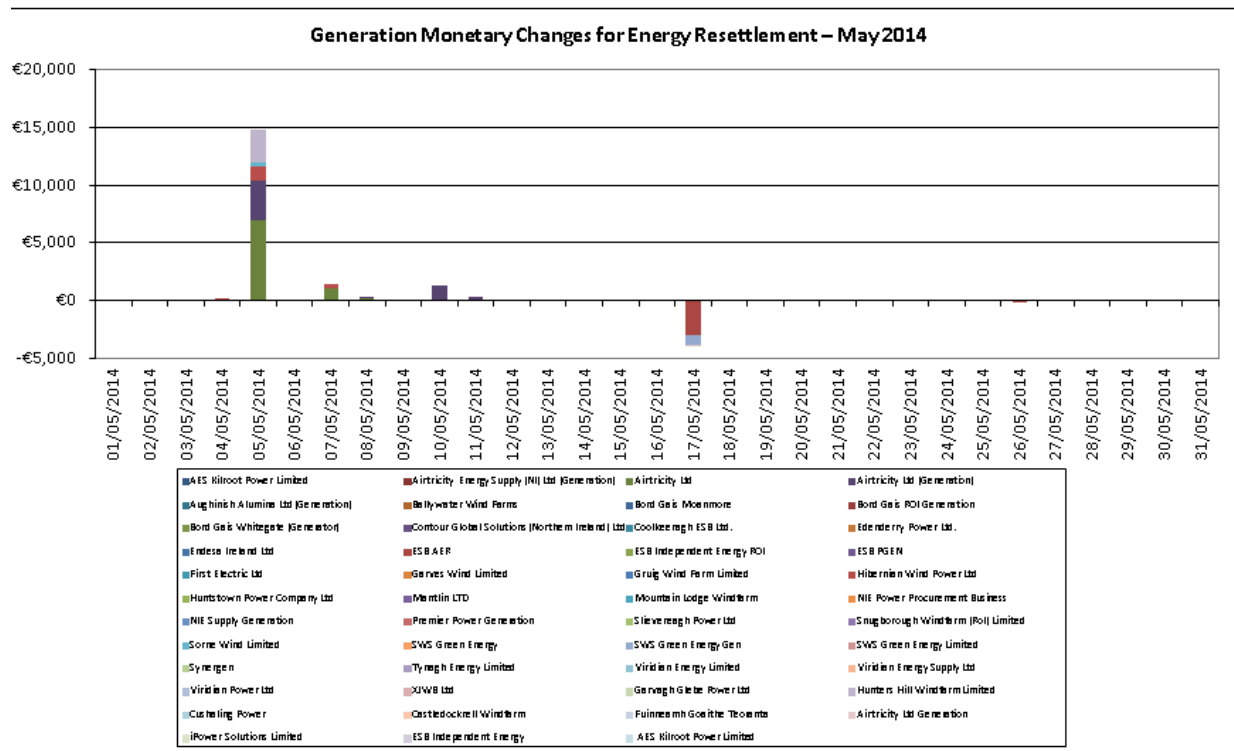


Figure 9 - Generation Monetary Changes for Energy Resettlement – May 2014

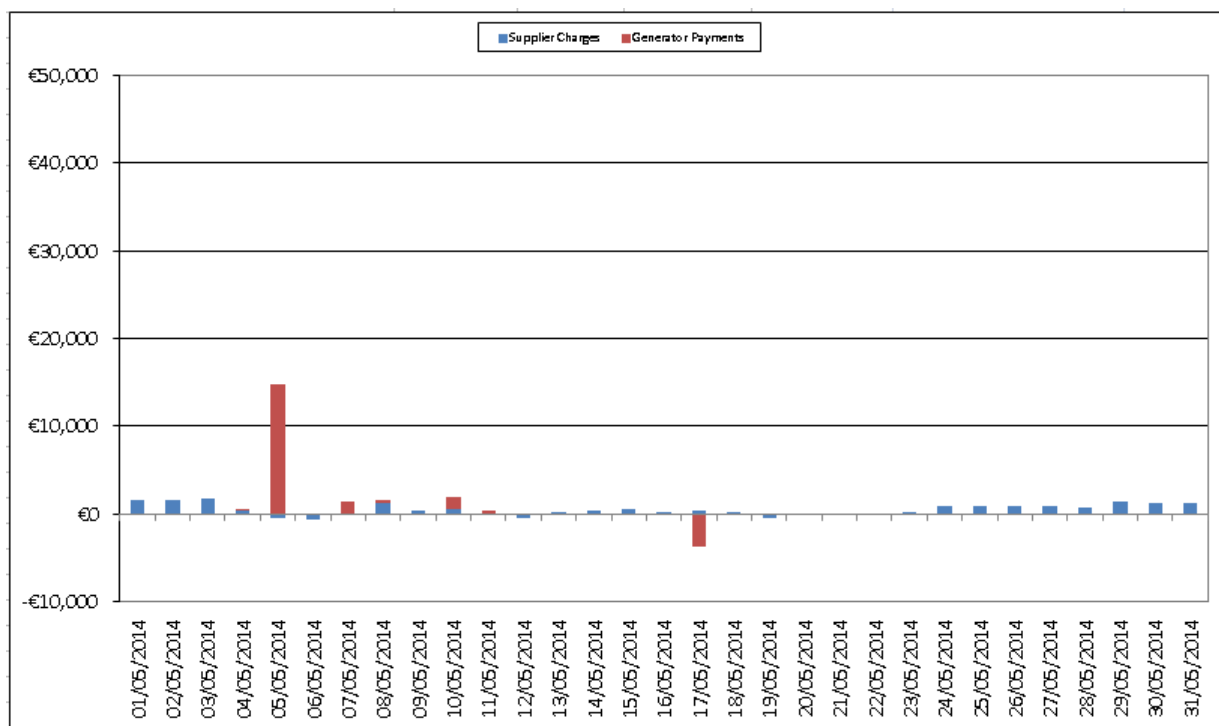


Figure 10 - Total Monetary Changes for Energy Resettlement – May 2014

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.

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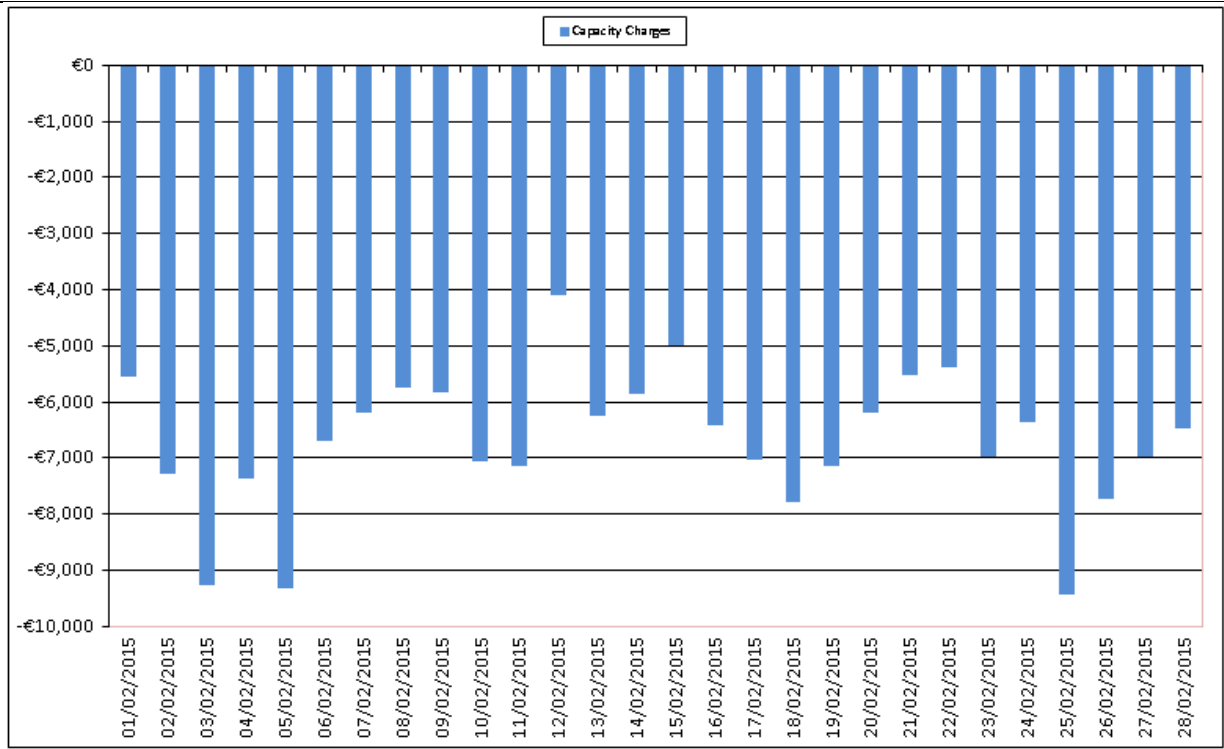


Figure 11 - Independent Suppliers Monetary Changes for Capacity Resettlement – February 2015

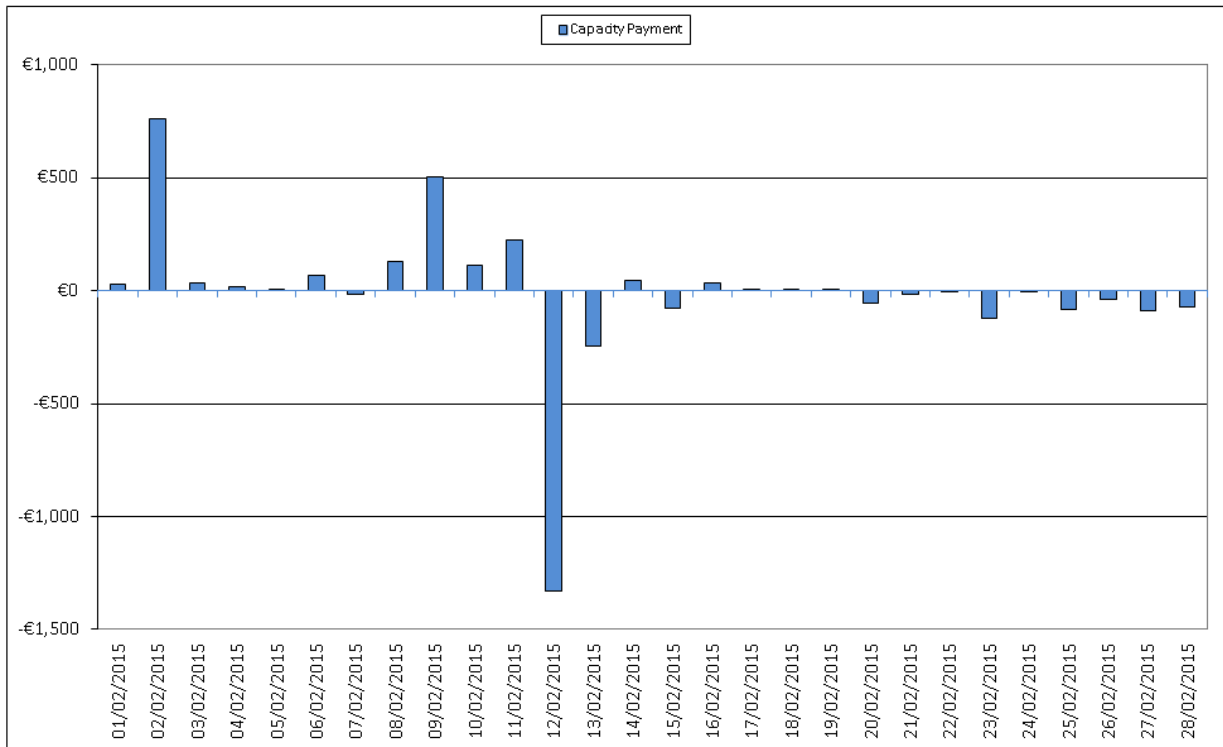


Figure 12 - All Generation Monetary Change for Capacity Resettlement – February 2015

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

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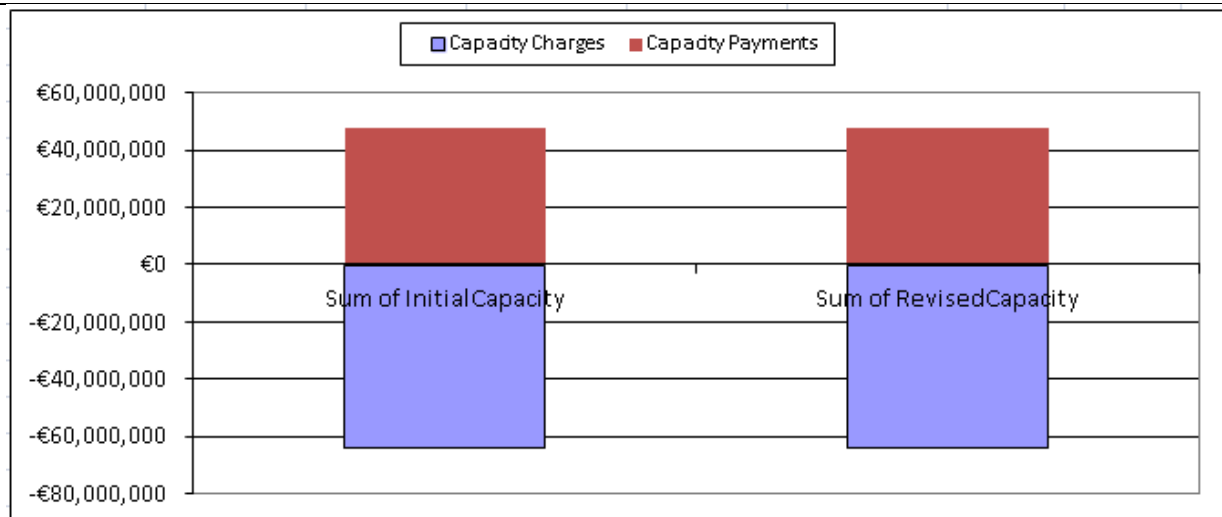


Figure 13 - Comparison of Distribution of Monetary Amounts between Capacity Initial and Resettlement February 2015

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

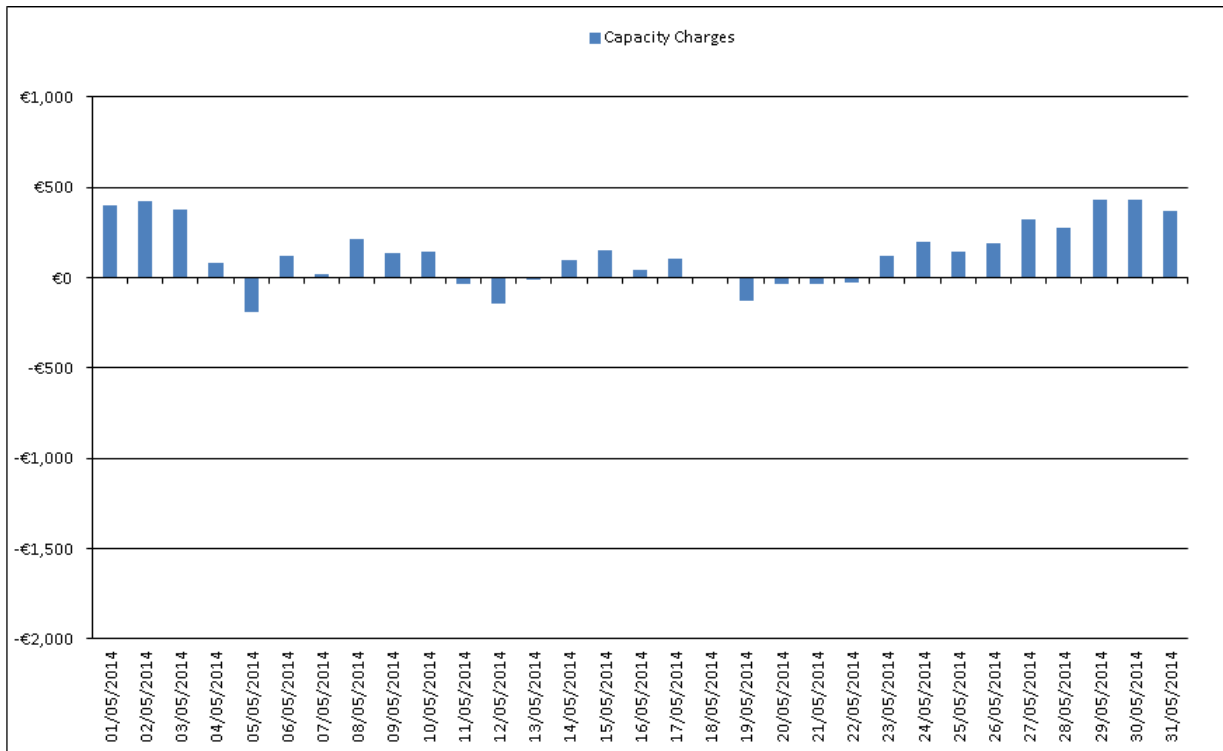


Figure 14 - Independent Suppliers Monetary Changes for Capacity Resettlement – May 2014

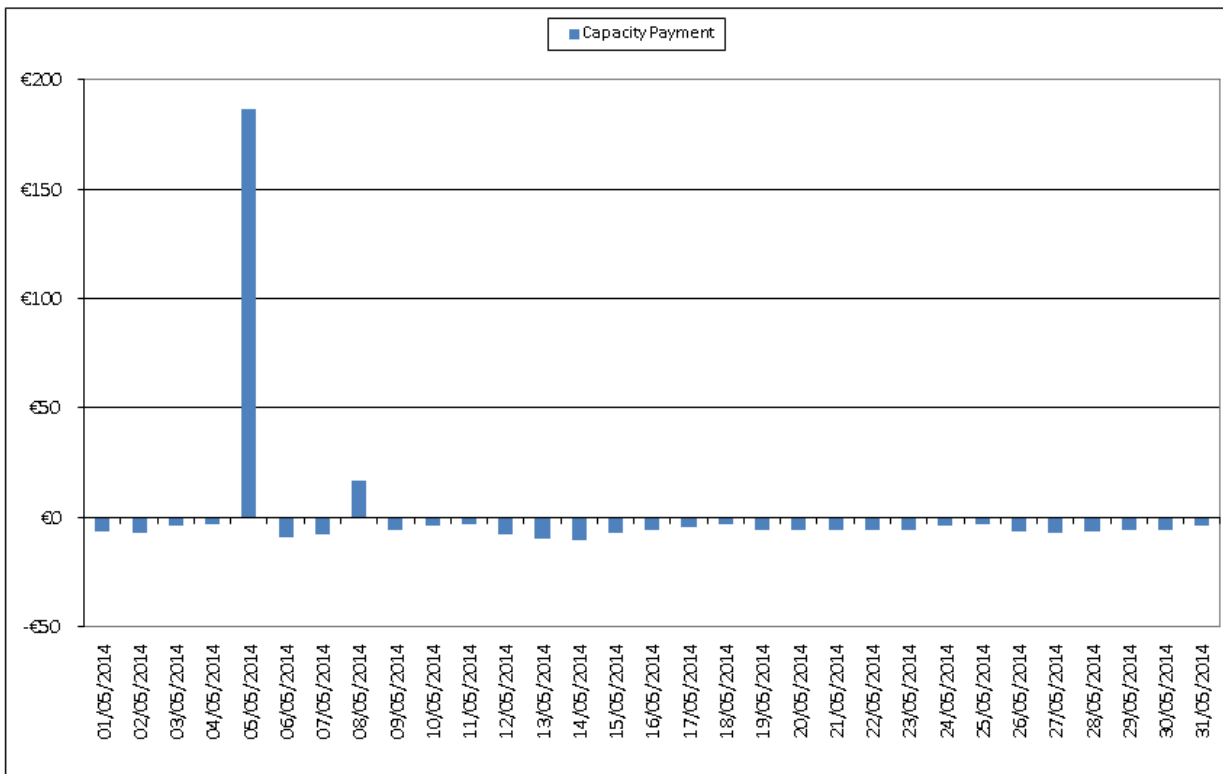


Figure 15 – All Generation Monetary Change for Capacity Resettlement – May 2014

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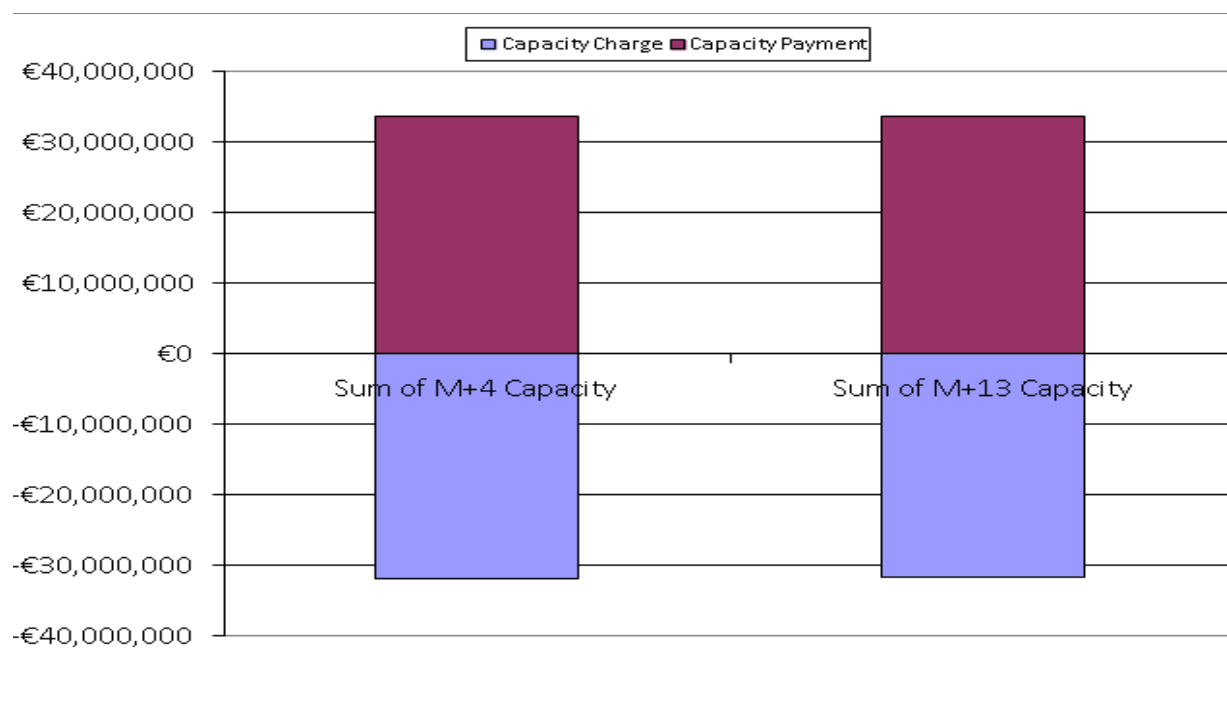


Figure 16 - Comparison of Distribution of Monetary Amounts between M+4 Capacity Resettlement and M+13 Capacity Resettlement – May 2014

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 June 2015.

Market Helpdesk Report: 01/06/15 to 30/06/15

	Received	Resolved within the period	Not Resolved	Resolved in the period	Resolution Time (Working Days)	Resolved On Time
Normal	157	141	16	159	1.33	155
Important	0	0	0	0	0.00	0
Urgent	2	1	1	1	0.82	1
Settlement	15	11	4	14	7.38	14
Credit	0	0	0	0	0.00	0
Dispute	0	0	0	1	18.35	1
Data	0	0	0	0	0.00	0
Total/Average	174	153	21	175	5.58	171

Table 10 – Helpdesk Statistics

Definitions:

- *Resolved within the Period* refers to queries raised and resolved within the calendar month of June 2015.
- *Resolved in the Period* refers to queries resolved within June 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 June 2015.
- *Not Resolved* refers to queries raised but not resolved within June 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 increased slightly by 0.05 working days in June 2015 to 1.33 from 1.28 working days in May 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 June 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 June 2015 with regard to formal Settlement Queries.

5. Disputes and Queries

5.1.1 Disputes

There were no Disputes raised during the month of June 2015.

There was one Dispute resolved during the month of June 2015 (raised in May 2015).

5.1.2 Data

Queries

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

5.1.3 Settlement Queries

There were fifteen formal Settlement Queries raised in June 2015. Of the fifteen, thirteen were upheld and have all been resolved.

Topic	Number Of Queries
Availability	6
MGEU	3
Dispatch Instructions	1
Meter Generation	1
SO-SO Trade	1
MIUNs	1

Table 11 - Upheld Settlement Queries by topic

- Six queries relating to a Actual Availability were raised, these were deemed to be of low Materiality. Two of these will be corrected within M+4 re-settlement, the remaining four will be corrected within M+13 re-settlement.
- Three queries relating to MGEU (Metered Generation for Interconnector Error Unit) were raised. All three were deemed low materiality and will be corrected within M+4 re-settlement.
- One query relating to Dispatch Instructions was raised, this was deemed to be of low materiality and will be corrected within M+13 re-settlement.
- One query relating to Meter Generation was raised, this was deemed to be of low materiality and will be corrected within M+13 re-settlement.
- One query relating to MIUNs (Modified Interconnector Unit Nominations) was raised, this was deemed to be of low materiality and will be corrected within M+4 re-settlement.
- One query relating to SO-SO Trades was raised, this was captured as part of initial settlement.

Unresolved Queries

There are no unresolved data queries and no unresolved settlement queries as at the 9th July 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, 68.69% of data used was submitted by Participants through the normal Bid-Offer process. 31.31% 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 seven Re-Price runs carried out in June 2015.

There were seven Resettlement runs carried out in June 2015.

6.3.2 System Errors

There was one Market Application defect found in June 2015.

1. ABB 140556 – Initial Conditions

Details are provided in 10 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,
- 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 June 2015.

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6.4.1 MSP Postings June 2015

Process	On Time	< 1 hr late	> 1 hr late	Not done
Gate Close EA	30-30	0-30	0-30	0
Post EA1	30-30	0-30	0-30	0
Post EA2	29-30	0-30	0-30	1
Post WD1	30-30	0-30	0-30	0
Post EP1	30-30	0-30	0-30	0
Post EP2	30-30	0-30	0-30	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	99%	0%	0%	1%
Post WD1	100%	0%	0%	0%
Post EP1	100%	0%	0%	0%
Post EP2	100%	0%	0%	0%

Table 13 - Operational Timings (% on time)

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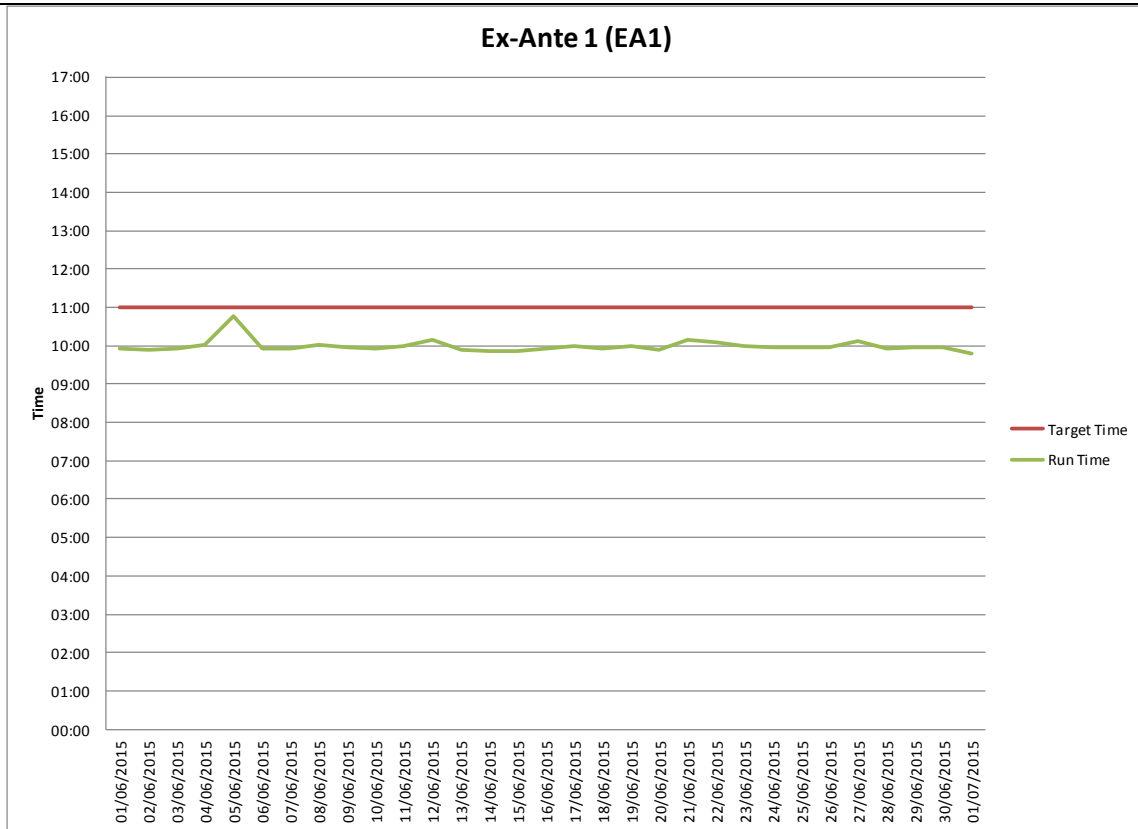


Figure 17 – Ex-Ante 1

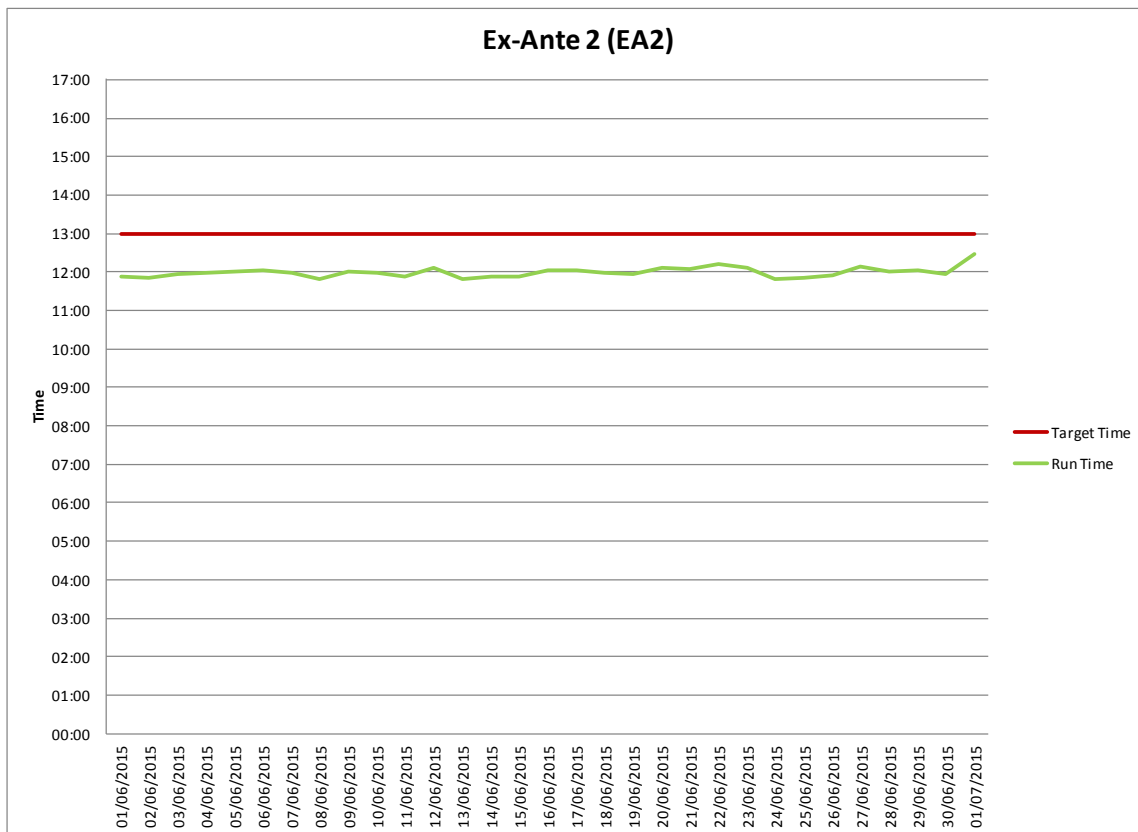


Figure 18 – Ex-Ante 2

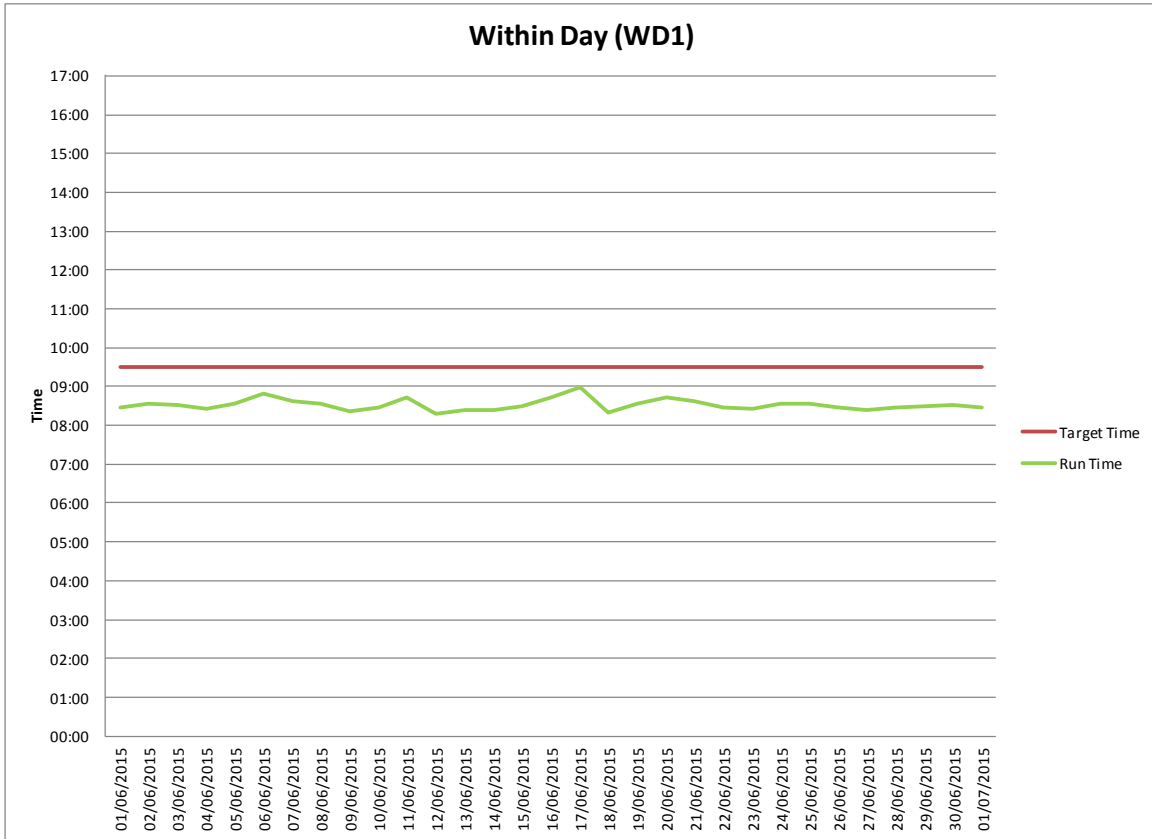


Figure 19 – Within Day 1

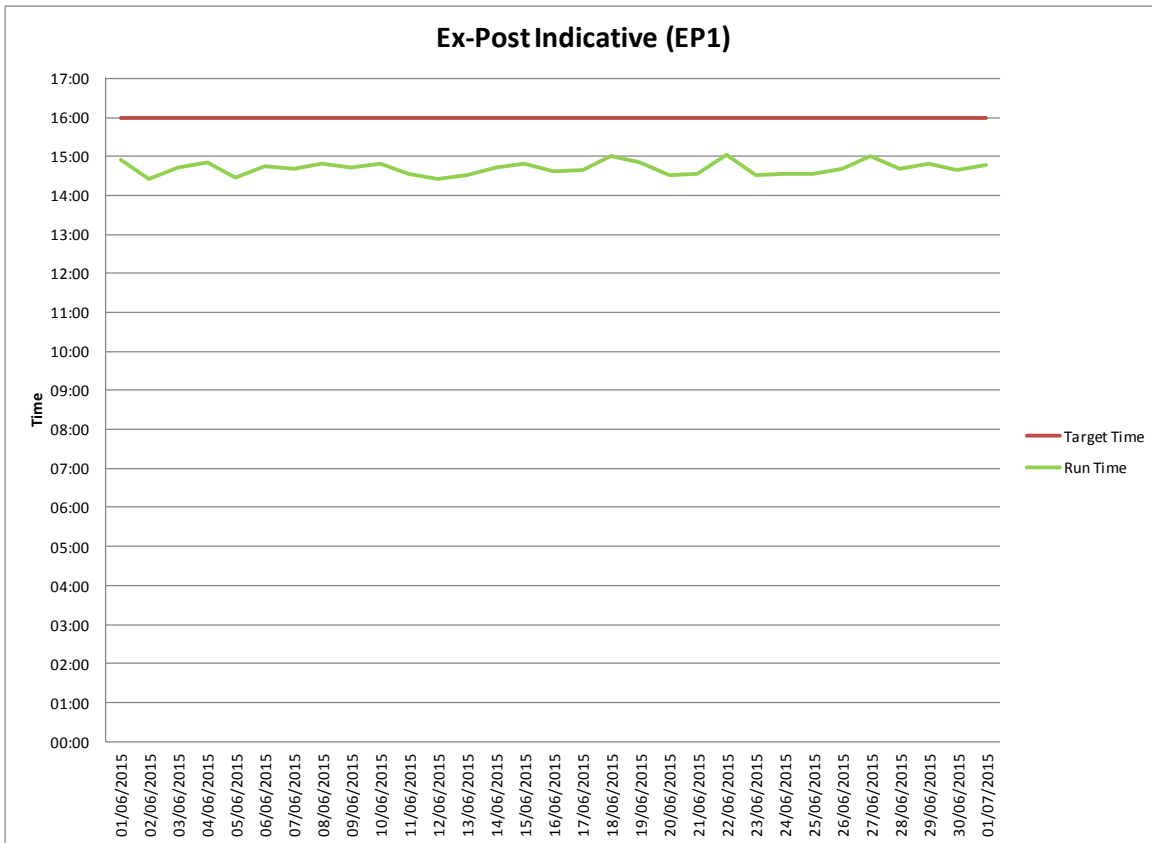


Figure 20 - Ex-Post Indicative

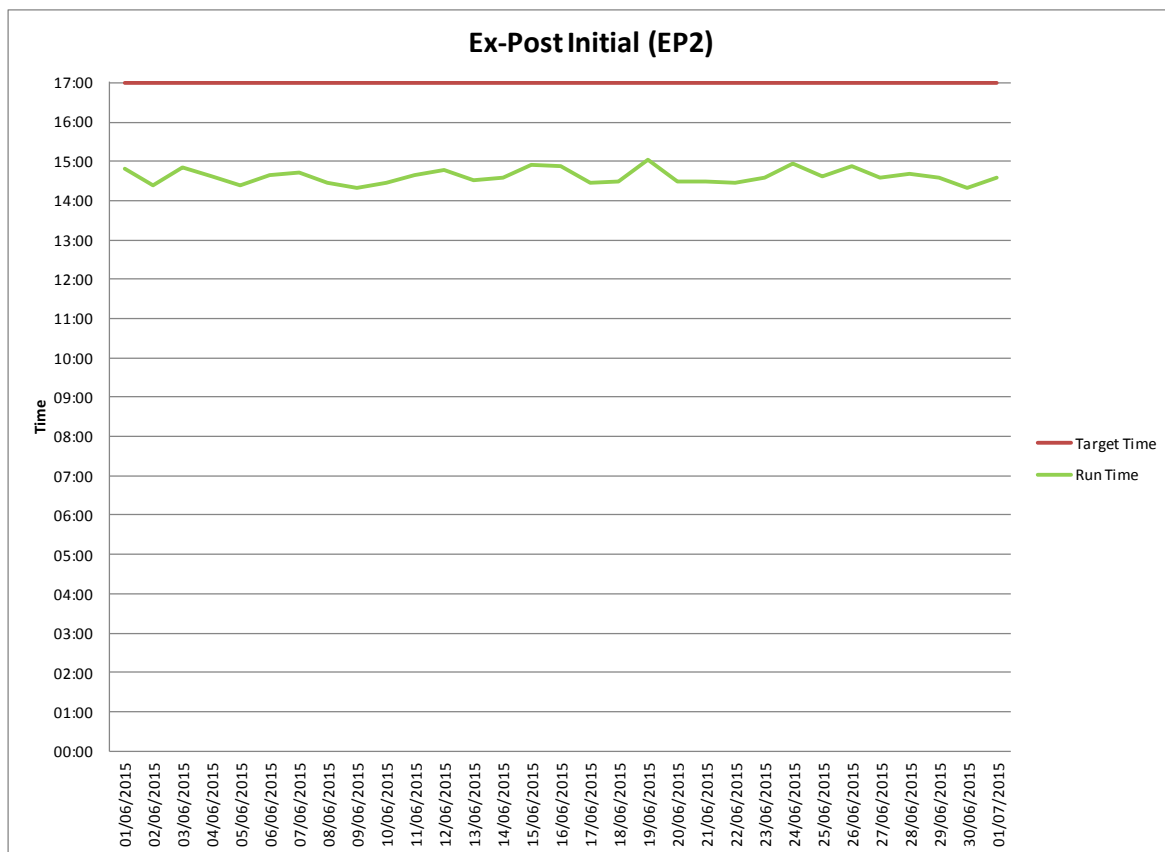


Figure 21 - Ex-Post Initial

Details of the operational timings of the Market System and Price (MSP) runs and Gate Closure are provided in [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 June 2015, there were four 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 [Appendix I](#).

Market Operator Monthly Report

6.4.3 Settlement Postings June 2015

The publication timings for Settlement runs are provided below.

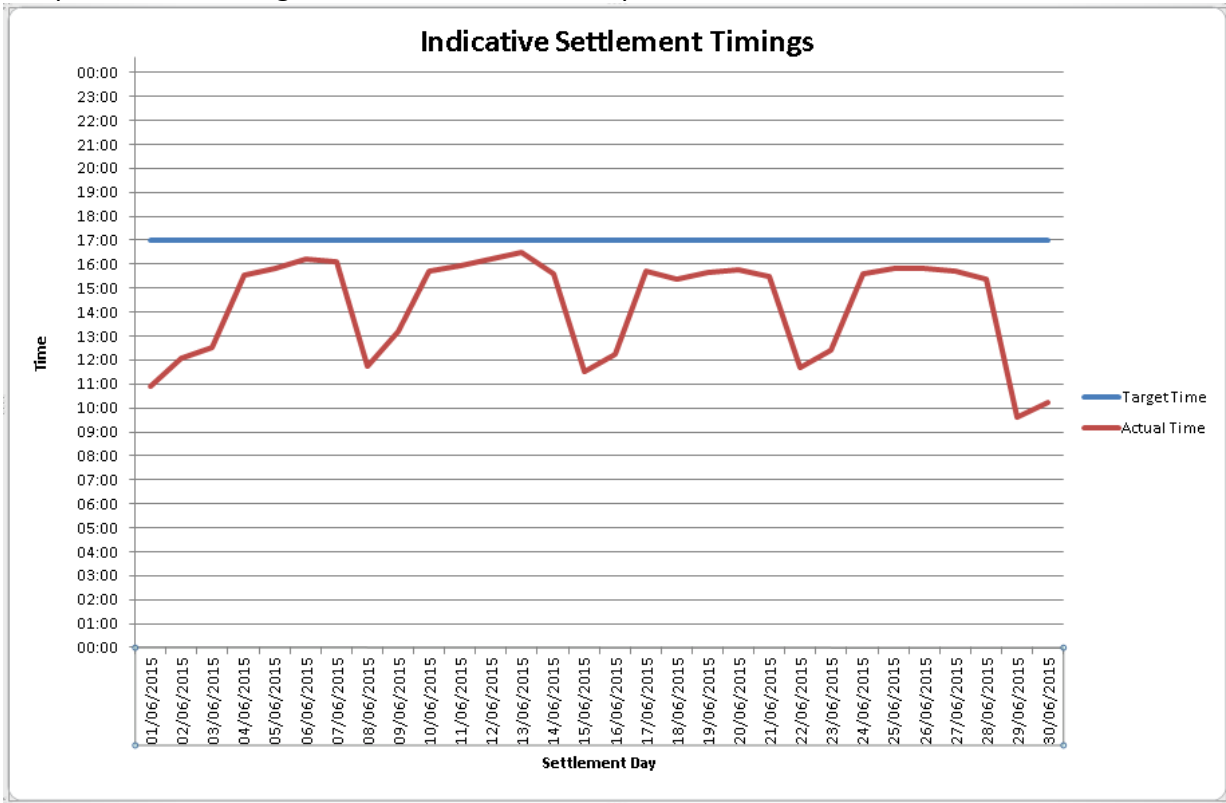


Figure 22 - Indicative Settlement Postings

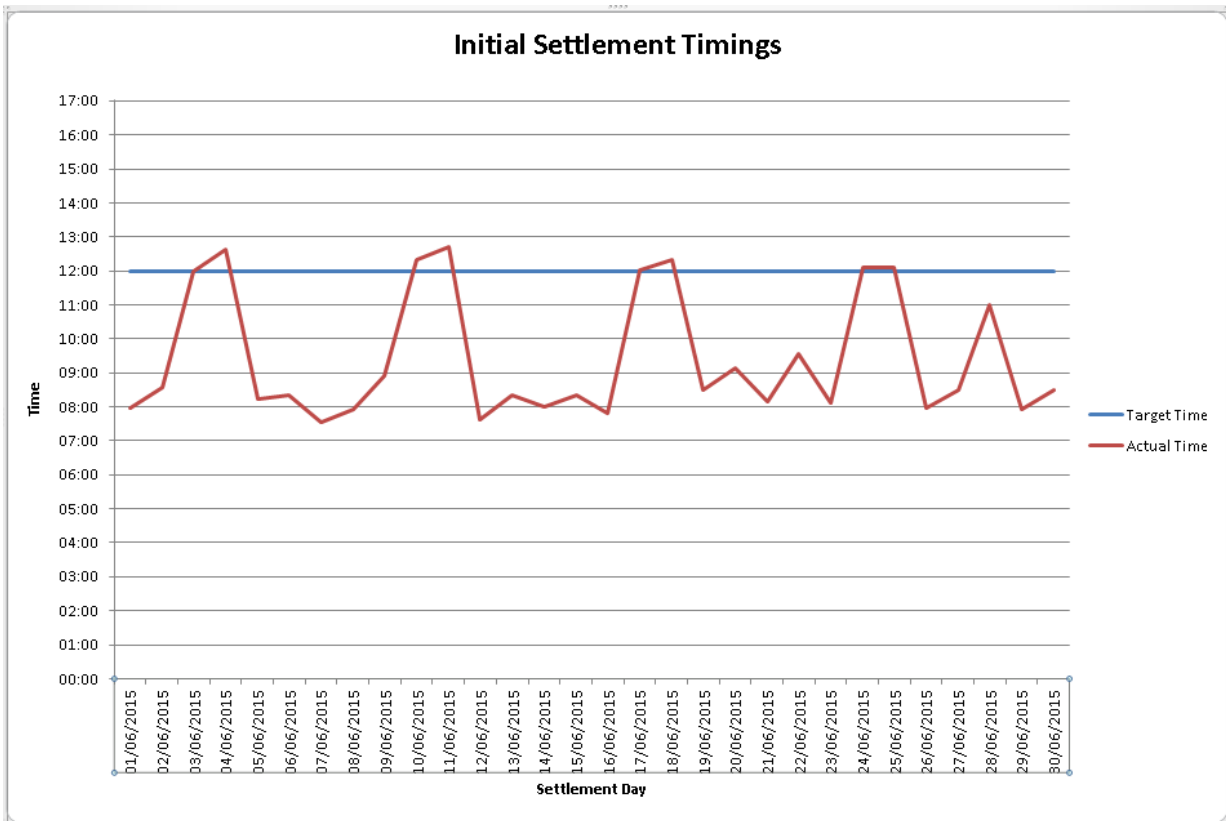


Figure 23 - Initial Settlement Postings

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

6.5 Market System Releases

6.5.1 Release SEM R2.6.0 (Proposed Deployment: May 15th 2015)

SEM R2.6.0 went live on Friday May 15th with no issues

6.5.2 Release SEM R2.7.0 (Proposed Deployment: October 2015)

The release cut-off date for the SEM R2.7.0 release to the Central Market Systems was Friday, March 6th, 2015. There were no approved Modification Proposals or new SDS sourced Change Requests as at the release cut-off date and, as a result, a Change Control Forum (CCF) meeting was not required.

However, SEMO will submit a proposed scope to the Regulatory Authorities for approval in early May. In summary the proposal will plan to deliver in the SEM R2.7.0 release:

- Data collection and reporting under REMIT, the EU Regulation on wholesale energy market integrity and transparency;
- Mod_09_14 (Amendment to Make Whole Payments for Interconnector Units) which was approved at Extraordinary Mods Meeting 60; and
- A number of technical changes to ensure the Central Market Systems remain aligned with supported third-party products.

On receipt of Regulatory approval SEMO will publish the approved scope to the industry.

7 Occasional Components

7.1 Disaster Recovery/Business Continuity Tests

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

7.3 Communications or Systems Failures

There were 4 System issues during June 2015;

On June 13th, an issue was identified with access to the MA GUI from the Dublin site. A restart of the tomcat web service at the Dublin site resolved the issue. The MA GUI was fully available from the Belfast at all times.

On June 15th, it was reported that the MIUN run files had not been processed. The issue was related to the FTP client used to transfer the files for processing and was corrected by Market Systems.

On June 26th, an issue was encountered with access to RCUC from the CHCC. A restart of the tomcat web service resolved the issue.

On June 30th, the TSO reported that they had not received EWRP files from the AMP system since the previous day. A call was logged with the vendor and the ftp service was restarted which resolved the issue.

7.4 Denial of Service Attacks

There was no Denial of Service Attacks during June 2015.

7.5 Submission of Parameters to RAs for Approval

No parameters were submitted to the Regulatory Authorities during June 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
12/06/2015	Money In	Timing	Participant	Payment Default	Cushaling Power Limited defaulted on a May 2015 Initial FMOC invoice	Participant error	A default letter was issued	Major
12/06/2015	Money In	Timing	Participant	Payment Default	Quinn Windfarm Limited defaulted on a May 2015 Initial FMOC invoice	Participant error	A default letter was issued	Major
12/06/2015	Money In	Timing	Participant	Payment Default	Energy Trading defaulted on a May 2015 Initial FMOC invoice	Participant error	A default letter was issued	Major
12/06/2015	Money In	Timing	Participant	Payment Default	Energy Trading defaulted on a Week 21 2015 Initial VMOC invoice	Participant error	A default letter was issued	Major
12/06/2015	Money In	Timing	Participant	Payment Default	Mount Lucas Supply Limited defaulted on two May 2015 Initial FMOC invoices	Participant error	A default letter was issued	Major
15/06/2015	Money In	Timing	Participant	Payment Default	Arden Energy defaulted on a May 2015 Capacity Initial invoice	Participant error	A default letter was issued	Major
15/06/2015	Money In	Timing	Participant	Payment Default	Mount Lucas Supply Company defaulted on a May 2015 Initial Capacity invoice	Participant error	A default letter was issued	Major
15/06/2015	Money In	Timing	Participant	Payment Default	Panda Power defaulted on a May 2015 Capacity Initial invoice	Participant error	A default letter was issued	Major
15/06/2015	Money In	Timing	Participant	Payment Default	Bruckana Wind Farm defaulted on a May 2015 Capacity Initial invoice	Participant error	A default letter was issued	Major
19/06/2015	Money In	Timing	Participant	Payment Default	There was a shortfall on a LCC Power Limited, PT_500057 Week 6 2015 M+4 VMOC invoice	Participant Error	A default letter was issued	Major
24/06/2015	Money In	Timing	Participant	Payment Default	Arden Energy, PT_400149 defaulted on a Week 23 2015 Initial Energy invoice	Participant Error	A default letter was issued	Major

Table 14 - Code Breaches – Market Participants

Data Provider

Ops Date Identified	Run Type	Quality or Timing	Party	Issue Type	Description	Cause	Resolution	T and SC Breach
28/06/2015	EP1	Timing	EirGrid MDP	File Submission	The SO_SYSTEM_FREQUENCY file for the Ex Post Indicative (EP1) Market Schedule for Trade Date 27/06/2015 was received after the deadline of 14:00 on operational date 28/06/2015.	The TSO_EirGrid failed to generate and send the System Frequency file in advance of the EP1 run for TD 27/06/2015	A contingency file was received by EirGrid IT and the file was uploaded successfully to the CMS at 14:39 on Operational Date 28/06/2015	Minor

Table 15 - Code Breaches – Data Providers

Market Operator Monthly Report

SEMO - Pricing and Scheduling

Ops Date Identified	Run Type	Quality or Timing	Party	Issue Type	Description	Cause	Resolution	T and SC Breach ▼
04/06/2015	EA1	Timing	SEMO	System	A revision was required for Ex-Ante 1 (EA1) EWIC MIUNs for Trade Date 05/06/2015.	The MIUN calculator produced an error and a revised file was required.	Revised EWIC MIUNs were published by 12:05.	Minor
04/06/2015	WD1	Timing	SEMO	System	A revision was required for Within Day (WD1) Moyle MIUNs for Trade Date 04/06/2015.	The MIUN calculator produced an error and a revised file was required.	Revised Moyle MIUNs were published by 10:50.	Minor
04/06/2015	WD1	Timing	SEMO	System	A revision was required for Within Day (WD1) Moyle MIUNs for Trade Date 04/06/2015.	The MIUN calculator produced an error and a revised file was required.	Revised Moyle MIUNs were published at 10:50.	Minor
04/06/2015	EA1	Timing	SEMO	System	A revision was required for Ex-Ante (EA1) EWIC MIUNs for Trade Date 05/06/2015.	The MIUN calculator produced an error and a revised file was required.	Revised EWIC MIUNs were published at 12:10.	Minor
11/06/2015	EA1	Timing	SEMO	System	A revision was required for Ex-Ante 1(EA1) Moyle MIUNs for Trade Date 12/06/2015.	The MIUN calculator produced an error and a revised file was required.	It was highlighted by SEMO IT at 11:37 that no Moyle MIUN revision was required.	Minor

Table 16 - 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
05/06/2015	SE2	Timing	SEMO	Operational	Initial Energy and VMOC Statements and Participant Information Reports for Settlement Day 28/05/2015 were re-published	An operational error resulted in incorrect data being used in Initial Settlement.	Corrected data was made available and Initial Energy and VMOC Statements and Participant Information Reports for Settlement Day 28/05/2015 were re-published	Minor

Table 17 - Code Breaches – Settlements

SEMO - Funds Transfer

There were no issues to report in June 2015

Market Operator Monthly Report

SEMO - Credit Management

Ops Date Identified	Run Type	Quality or Timing	Party	Issue Type	Description	Cause	Resolution	T and SC Breach
23/06/2015	CRM	Timing	SEMO	Operational	The Daily Credit Report was not published by the 14:30 deadline	Operational Error	The Daily Credit Report was published by 15:30	Minor

Table 18 - Code Breaches – Credit Risk Management

SEMO – Other

There were no issues to report in June 2015

9 Appendix B: List of Queries by Type

Summary Title	Description	ID	Logged On	Date sent to MP	Type
SO-SO Trade	Incorrect costs provided to SEMO for a EWIC SO Trade for 27.05.15. Trade costs which were submitted at D+3 were incorrect due to incorrect exchange rate published. The amended costs per trade date are included with this query per the updated exchange rate.	PY_000097	2015-06-03	2015-06-05	Settlement
MGEU	<p>Querying the MGEU_IA_ROIEWIC_I_ROIEWIC values in PIR for settlement date 14/05/2015 for period ending 06:00.</p> <p>The values in the Error report in AMP are different to the PIR for this settlement date.</p> <p>Can you please confirm what values are applied to generator the MG EU value for this period?</p> <p>For calendar day 14/05/2015 affecting period 6:2. I have attached the Final PIR and AMP Error Report with the period in question highlighted in yellow.</p>	IA_ROIEWIC	2015-06-03	2015-06-10	Settlement
Dispatch Quantities	Unit GU_400370 (WO4). Sync instruction (137mw) issued at 23:16 on 21st May and a warm start profile should apply i.e. approx 4.8 half hours to achieve 137mw. The DQ profile which issued does not follow this warm start profile resulting in high U.I.'s for this period. Please advise.	PT_40030	2015-06-05	2015-06-23	Settlement
Metered Generation	There was issues with the proportioning meter for GU_400251 (Liffey Unit 2) on the 21/12/2014, this caused the meter data to be incorrectly proportioned between GU_400251 (Liffey Unit 2) and GU_400252 (Liffey Unit 4). Corrected meter data is now available.	GU_400251	2015-06-05	2015-06-29	Settlement
Availability	Incorrect Availability Declarations were sent to the SEM for GU_400930 (Whitegate Unit 1) on the 08/03/2015.	GU_400930	2015-06-05	2015-06-10	Settlement
MGEU	The meters were uncontactable for GU_401600 (Beam Hill Wind Farm Phase 1), this resulted in SCADA being sent to the SEM for GU_401600 (Beam Hill Wind Farm Phase 1) for all of the 08/04/2015, 09/04/2015 and 10/04/2015. Meter data is now available.	GU_401600	2015-06-05	2015-06-23	Settlement
Operational Issue	Declared trip issued on 16th May @ 01:29 next instruction was on 2nd June. GU_400240 : Desync instruction issued on 27th May @15:36 and no further instructions issued. GU_400280: Desync issued on 24th May, next instruction at 17:31 on 28th. Unit received no instructions during this period, however, Market Op data shows instructions for this period resulting in high U.I.s. Also, in constraints no start payment was paid for sync at 17:31 on 28th.	GU_400202 (PY_00030)	2015-06-08	2015-06-08	Settlement

Market Operator Monthly Report

Summary Title	Description	ID	Logged On	Date sent to MP	Type
Availability	Incorrect Availability Declarations were sent to the SEM for GU_400530 (Tynagh Combined) on the 05/12/2014, 06/12/2014 and 07/12/2014.	GU_400530	2015-06-09	2015-06-17	Settlement
MIUN issue	Revised IC MIUNs were issued for TD 03/06/2015 on 04/06/2015 at 14:38. This file changed 04/06 periods 61 and 62 from 20 to 12.867 and from 20 to 0.074. We have a missing comp payment due to Cenergise in above settlement statement. SEMO in call ref F0063567 has agreed there are differences visible on their side and should be corrected.	PT_400136	2015-06-10	2015-06-11	Settlement
MGEU	Querying the MGEU_IA_ROIEWIC_I_ROIEWIC values in PIR for settlement date 04/06/2015 for periods ending 05:30 and 06:00. 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 this period? For calendar day 04/06/2015 affecting periods 6:1 and 6:2. I have attached the Final PIR and AMP Error Report with the periods in question highlighted in yellow.	IA_ROIEWIC	2015-06-11	2015-06-11	Settlement
Availability	Unit gu400182 was declared briefly on test on the 18th march. Eirgrid retrospectively adjusted the units availability declaration for the duration of the test period reducing the availability value. This adjustment was incorrect and following a review of the issue this has been agreed. Could you please review the availability for the unit for this date and correct the incorrect value applied to the unit at 16:00.	ESBPGEN (PT_400030)	2015-06-18	2015-06-11	Settlement
Availability	Incorrect Availability Declarations were sent to the SEM for GU_400323 (Poolbeg Combined) on the 22/11/2014.	GU_400530	2015-06-24	2015-06-25	Settlement
Availability	Incorrect Availability Declarations were sent to the SEM for GU_400060 (Glanlee Wind Farm Combined) and GU_400430 (Coomagearlaghy Wind Farm Phase 1) on the 11/12/2014.	GU_400060	2015-06-26	2015-07-01	Settlement
Availability	Incorrect Availability Declarations were sent to the SEM for GU_400323 (Poolbeg Combined) on the 14/10/2014 and 15/10/2014.	GU_400323	2015-06-26	2015-07-01	Settlement

Table 19 - 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
ABB 140556	Initial Conditions	-	-	N	N	-

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
01/06/2015	11:00	09:56	13:00	11:52	09:30	08:28	16:00	14:54	17:00	14:48
02/06/2015	11:00	09:53	13:00	11:50	09:30	08:33	16:00	14:25	17:00	14:23
03/06/2015	11:00	09:56	13:00	11:56	09:30	08:31	16:00	14:42	17:00	14:50
04/06/2015	11:00	10:01	13:00	11:59	09:30	08:25	16:00	14:50	17:00	14:37
05/06/2015	11:00	10:46	13:00	00:00	09:30	08:34	16:00	14:27	17:00	14:23
06/06/2015	11:00	09:56	13:00	12:03	09:30	08:49	16:00	14:45	17:00	14:38
07/06/2015	11:00	09:56	13:00	11:59	09:30	08:38	16:00	14:41	17:00	14:42
08/06/2015	11:00	10:02	13:00	11:49	09:30	08:34	16:00	14:49	17:00	14:28
09/06/2015	11:00	09:58	13:00	12:01	09:30	08:22	16:00	14:42	17:00	14:20
10/06/2015	11:00	09:55	13:00	11:58	09:30	08:28	16:00	14:48	17:00	14:28
11/06/2015	11:00	10:00	13:00	11:53	09:30	08:43	16:00	14:33	17:00	14:38
12/06/2015	11:00	10:09	13:00	12:07	09:30	08:17	16:00	14:26	17:00	14:46
13/06/2015	11:00	09:53	13:00	11:49	09:30	08:23	16:00	14:31	17:00	14:31
14/06/2015	11:00	09:52	13:00	11:53	09:30	08:23	16:00	14:42	17:00	14:35
15/06/2015	11:00	09:52	13:00	11:52	09:30	08:30	16:00	14:48	17:00	14:55
16/06/2015	11:00	09:55	13:00	12:03	09:30	08:44	16:00	14:37	17:00	14:53
17/06/2015	11:00	10:00	13:00	12:02	09:30	08:58	16:00	14:39	17:00	14:27
18/06/2015	11:00	09:55	13:00	11:58	09:30	08:19	16:00	15:01	17:00	14:30
19/06/2015	11:00	09:59	13:00	11:57	09:30	08:34	16:00	14:51	17:00	15:03
20/06/2015	11:00	09:54	13:00	12:06	09:30	08:44	16:00	14:31	17:00	14:29
21/06/2015	11:00	10:09	13:00	12:04	09:30	08:38	16:00	14:34	17:00	14:29
22/06/2015	11:00	10:06	13:00	12:13	09:30	08:27	16:00	15:03	17:00	14:27
23/06/2015	11:00	09:59	13:00	12:07	09:30	08:26	16:00	14:32	17:00	14:36
24/06/2015	11:00	09:58	13:00	11:49	09:30	08:33	16:00	14:33	17:00	14:57
25/06/2015	11:00	09:58	13:00	11:50	09:30	08:34	16:00	14:33	17:00	14:37
26/06/2015	11:00	09:57	13:00	11:55	09:30	08:28	16:00	14:40	17:00	14:53
27/06/2015	11:00	10:08	13:00	12:08	09:30	08:23	16:00	15:00	17:00	14:36
28/06/2015	11:00	09:55	13:00	12:01	09:30	08:27	16:00	14:41	17:00	14:41
29/06/2015	11:00	09:57	13:00	12:02	09:30	08:29	16:00	14:48	17:00	14:36
30/06/2015	11:00	09:57	13:00	11:57	09:30	08:32	16:00	14:38	17:00	14:19
01/07/2015	11:00	09:48	13:00	12:28	09:30	08:28	16:00	14:46	17:00	14:36

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
01/06/2015	02/06/2015	02/06/2015	17:00	16:06	01/06/2015	07/06/2015	12:00	07:58
02/06/2015	03/06/2015	03/06/2015	17:00	15:32	02/06/2015	08/06/2015	12:00	08:01
03/06/2015	04/06/2015	04/06/2015	17:00	15:34	03/06/2015	09/06/2015	12:00	08:22
04/06/2015	05/06/2015	05/06/2015	17:00	15:54	04/06/2015	10/06/2015	12:00	07:30
05/06/2015	06/06/2015	06/06/2015	17:00	11:22	05/06/2015	11/06/2015	12:00	11:41
06/06/2015	07/06/2015	07/06/2015	17:00	11:46	06/06/2015	12/06/2015	12:00	13:30
07/06/2015	08/06/2015	08/06/2015	17:00	15:18	07/06/2015	13/06/2015	12:00	07:21
08/06/2015	09/06/2015	09/06/2015	17:00	15:44	08/06/2015	14/06/2015	12:00	08:11
09/06/2015	10/06/2015	10/06/2015	17:00	15:38	09/06/2015	15/06/2015	12:00	07:23
10/06/2015	11/06/2015	11/06/2015	17:00	15:40	10/06/2015	16/06/2015	12:00	08:10
11/06/2015	12/06/2015	12/06/2015	17:00	15:36	11/06/2015	17/06/2015	12:00	07:42
12/06/2015	13/06/2015	13/06/2015	17:00	11:50	12/06/2015	18/06/2015	12:00	11:12
13/06/2015	14/06/2015	14/06/2015	17:00	12:01	13/06/2015	19/06/2015	12:00	11:40
14/06/2015	15/06/2015	15/06/2015	17:00	15:31	14/06/2015	20/06/2015	12:00	07:54
15/06/2015	16/06/2015	16/06/2015	17:00	15:55	15/06/2015	21/06/2015	12:00	08:10
16/06/2015	17/06/2015	17/06/2015	17:00	15:19	16/06/2015	22/06/2015	12:00	08:03
17/06/2015	18/06/2015	18/06/2015	17:00	15:28	17/06/2015	23/06/2015	12:00	07:35
18/06/2015	19/06/2015	19/06/2015	17:00	16:12	18/06/2015	24/06/2015	12:00	07:47
19/06/2015	20/06/2015	20/06/2015	17:00	11:59	19/06/2015	25/06/2015	12:00	11:57
20/06/2015	21/06/2015	21/06/2015	17:00	12:00	20/06/2015	26/06/2015	12:00	13:21
21/06/2015	22/06/2015	22/06/2015	17:00	16:09	21/06/2015	27/06/2015	12:00	08:10
22/06/2015	23/06/2015	23/06/2015	17:00	15:52	22/06/2015	28/06/2015	12:00	10:26
23/06/2015	24/06/2015	24/06/2015	17:00	15:43	23/06/2015	29/06/2015	12:00	07:37
24/06/2015	25/06/2015	25/06/2015	17:00	15:40	24/06/2015	30/06/2015	12:00	08:41
25/06/2015	26/06/2015	26/06/2015	17:00	16:08	25/06/2015	01/07/2015	12:00	08:06
26/06/2015	27/06/2015	27/06/2015	17:00	13:12	26/06/2015	02/07/2015	12:00	11:26
27/06/2015	28/06/2015	28/06/2015	17:00	13:13	27/06/2015	03/07/2015	12:00	11:57
28/06/2015	29/06/2015	29/06/2015	17:00	15:22	28/06/2015	04/07/2015	12:00	08:29
29/06/2015	30/06/2015	30/06/2015	17:00	16:28	29/06/2015	05/07/2015	12:00	11:14
30/06/2015	01/07/2015	01/07/2015	17:00	15:31	30/06/2015	06/07/2015	12:00	08:20

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
01/10/2014	€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

Market Operator Monthly Report

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	-€9,337.96	-€580,266.39
03/12/2014	€506,617.59	-€48,599.53	-€604,794.55
04/12/2014	€524,348.76	-€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

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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
01/02/2015	€465,811.18	-€7,159.85	-€522,488.66
02/02/2015	€600,896.72	-€25,058.44	-€612,427.31
03/02/2015	€622,108.61	-€646.83	-€612,448.65
04/02/2015	€680,810.77	€3,948.07	-€619,315.92
05/02/2015	€524,358.46	-€557.07	-€614,409.37
06/02/2015	€507,125.10	-€3,973.79	-€600,953.78
07/02/2015	€552,603.96	-€3,844.92	-€533,253.15
08/02/2015	€513,181.80	-€8,706.01	-€526,790.04
09/02/2015	€721,677.70	-€75,869.33	-€603,738.54
10/02/2015	€612,792.69	-€54,689.56	-€615,533.69
11/02/2015	€397,523.20	-€49,206.80	-€612,372.90
12/02/2015	€584,234.54	-€9,961.83	-€589,104.96
13/02/2015	€581,694.45	-€18,426.02	-€571,753.77
14/02/2015	€519,304.93	-€11,018.35	-€524,311.37
15/02/2015	€402,543.48	€350.55	-€482,429.93
16/02/2015	€539,037.68	-€34,021.35	-€564,140.28
17/02/2015	€542,064.44	-€575.68	-€567,853.68
18/02/2015	€602,625.88	-€7,288.26	-€546,880.62
19/02/2015	€512,519.51	€18,470.83	-€556,672.04
20/02/2015	€592,720.94	-€10,749.31	-€567,934.87
21/02/2015	€632,840.91	€17,014.71	-€511,712.83
22/02/2015	€870,894.49	€1,282.86	-€484,230.97
23/02/2015	€674,860.17	-€5,480.97	-€557,984.41
24/02/2015	€512,106.06	-€7,870.22	-€569,013.81
25/02/2015	€642,952.47	-€31,481.05	-€567,195.52
26/02/2015	€488,203.62	-€68,355.71	-€541,080.48
27/02/2015	€702,055.03	-€278,358.30	-€551,568.91

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28/02/2015	€763,470.11	-€156,795.83	-€490,683.19
01/03/2015	€521,607.45	-€1,843.99	-€477,581.24
02/03/2015	€574,380.29	€2,997.71	-€557,667.72
03/03/2015	€465,527.51	-€2,048.31	-€573,855.61
04/03/2015	€672,189.01	€6,050.68	-€574,853.34
05/03/2015	€652,850.86	€16,461.89	-€552,313.54
06/03/2015	€1,016,583.70	€12,741.03	-€526,556.29
07/03/2015	€1,025,731.02	€13,689.73	-€474,408.71
08/03/2015	€522,444.74	-€3,358.29	-€467,929.55
09/03/2015	€788,584.21	€13,340.73	-€530,097.21
10/03/2015	€719,928.31	€40,709.75	-€553,987.99
11/03/2015	€585,235.02	€5,483.05	-€544,302.02
12/03/2015	€621,873.73	-€7,818.95	-€556,429.84
13/03/2015	€658,937.97	-€12,692.12	-€565,741.37
14/03/2015	€513,997.92	€7,537.57	-€517,626.10
15/03/2015	€311,076.74	-€262.33	-€488,699.49
16/03/2015	€490,729.57	€17,637.03	-€560,146.36
17/03/2015	€550,876.37	€8,938.80	-€511,875.67
18/03/2015	€692,759.79	-€4,300.73	-€570,055.70
19/03/2015	€453,060.58	-€5,904.10	-€570,613.33
20/03/2015	€462,873.92	-€11,030.72	-€552,391.25
21/03/2015	€365,859.05	-€10,426.20	-€500,588.32
22/03/2015	€495,861.85	-€3,545.94	-€464,195.55
23/03/2015	€294,666.60	€24,633.51	-€526,351.50
24/03/2015	€532,310.91	€7,538.93	-€541,752.72
25/03/2015	€608,060.75	-€12,063.88	-€555,691.03
26/03/2015	€683,010.24	€2,898.03	-€534,954.70
27/03/2015	€516,305.02	€9,377.91	-€548,088.10
28/03/2015	€907,722.70	€14,362.92	-€460,979.15
29/03/2015	€899,801.32	€13,302.90	-€428,717.12
30/03/2015	€640,827.85	-€22,435.70	-€531,755.11
31/03/2015	€859,838.48	-€27,058.43	-€528,117.64
01/04/2015	€353,637.82	-€12,755.18	-€547,054.68
02/04/2015	€192,564.04	€26,214.78	-€557,637.09
03/04/2015	€553,060.03	€10,436.03	-€500,000.76
04/04/2015	€188,464.90	-€5,482.97	-€488,079.61
05/04/2015	€376,683.46	€379.94	-€449,913.28
06/04/2015	€202,881.78	€2,293.71	-€448,845.81
07/04/2015	€308,271.01	€18,476.58	-€502,814.72
08/04/2015	€302,925.86	€13,910.21	-€508,761.17
09/04/2015	€388,531.87	-€28,047.02	-€507,515.49
10/04/2015	€335,602.84	€3,276.78	-€492,195.74
11/04/2015	€409,832.29	€5,238.81	-€442,683.63
12/04/2015	€190,518.56	-€12,820.94	-€448,514.54
13/04/2015	€447,662.36	-€23,674.74	-€508,077.79
14/04/2015	€251,250.57	-€10,941.74	-€507,702.32
15/04/2015	€474,602.23	-€25,636.21	-€530,083.82
16/04/2015	€403,876.45	-€24,892.87	-€525,533.02
17/04/2015	€374,249.83	-€13,527.90	-€511,462.70
18/04/2015	€597,380.44	€9,054.50	-€444,810.59
19/04/2015	€387,461.71	€17,416.77	-€440,742.77
20/04/2015	€442,459.81	-€12,755.47	-€508,182.03
21/04/2015	€493,310.34	-€5,008.63	-€510,643.59
22/04/2015	€557,304.39	€2,298.79	-€506,655.91

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23/04/2015	€409,459.95	-€8,601.93	-€509,587.22
24/04/2015	€506,069.75	-€1,035.74	-€507,855.55
25/04/2015	€334,715.22	€13,997.02	-€453,162.94
26/04/2015	€479,230.14	€5,427.75	-€444,641.14
27/04/2015	€405,033.18	-€2,812.88	-€504,278.12
28/04/2015	€384,277.88	€2,065.56	-€518,165.93
29/04/2015	€604,102.38	-€3,220.00	-€519,247.75
30/04/2015	€556,531.80	-€9,801.76	-€524,181.83
01/05/2015	€481,056.45	€14,256.54	-€506,269.58
02/05/2015	€459,045.41	€969.91	-€460,134.78
03/05/2015	€385,827.96	€3,504.75	-€437,509.01
04/05/2015	€328,172.19	€1,749.49	-€433,467.59
05/05/2015	€490,272.15	-€14,555.23	-€507,273.77
06/05/2015	€298,647.42	€4,735.81	-€506,162.49
07/05/2015	€261,995.15	€12,217.90	-€529,138.93
08/05/2015	€519,824.39	-€46,342.80	-€529,331.82
09/05/2015	€398,072.55	€2,899.03	-€470,310.55
10/05/2015	€712,118.71	-€1,357.23	-€416,297.12
11/05/2015	€846,733.77	€4,545.48	-€465,910.40
12/05/2015	€210,609.57	-€3,956.63	-€491,547.73
13/05/2015	€457,670.09	-€1,496.75	-€510,924.30
14/05/2015	€232,238.95	-€8,374.10	-€500,940.75
15/05/2015	€446,672.92	-€38,149.99	-€500,906.52
16/05/2015	€584,364.58	€3,138.79	-€431,219.09
17/05/2015	€509,347.00	€8,657.31	-€422,799.73
18/05/2015	€510,890.21	-€3,158.96	-€483,590.87
19/05/2015	€438,287.72	-€12,950.64	-€487,900.79
20/05/2015	€320,302.80	-€48,000.36	-€509,103.25
21/05/2015	€368,276.73	€8,879.24	-€513,657.93
22/05/2015	€228,566.54	-€15,259.46	-€502,528.10
23/05/2015	€354,957.10	-€19,310.70	-€456,898.21
24/05/2015	€552,078.42	€8,110.94	-€419,257.50
25/05/2015	€180,744.22	-€33,577.18	-€490,878.14
26/05/2015	€284,412.73	-€3,046.42	-€499,993.65
27/05/2015	€365,880.58	-€23,900.75	-€499,128.31
28/05/2015	€311,952.87	€7,341.90	-€488,790.58
29/05/2015	€528,545.53	€6,357.53	-€482,950.81
30/05/2015	€563,213.22	-€2,268.16	-€446,780.31
31/05/2015	€498,594.49	€1,093.74	-€399,769.50
01/06/2015	€903,037.05	-€372.60	-€430,963.73
02/06/2015	€225,558.98	-€9,102.27	-€481,644.89
03/06/2015	€163,230.43	€15,407.21	-€506,857.57
04/06/2015	€258,492.55	-€1,419.41	-€502,536.80
05/06/2015	€561,484.29	-€4,219.30	-€466,612.95
06/06/2015	€476,969.41	-€4,158.39	-€420,172.46
07/06/2015	€221,952.59	-€12,964.68	-€428,162.71
08/06/2015	€417,820.22	-€8,108.21	-€490,599.26
09/06/2015	€99,349.26	-€20,427.00	-€502,037.06
10/06/2015	€362,947.70	-€8,565.70	-€497,822.35
11/06/2015	€368,034.49	-€8,598.44	-€496,067.65
12/06/2015	€344,759.44	-€2,316.77	-€490,098.72
13/06/2015	€293,330.88	€9,421.81	-€432,822.16
14/06/2015	€243,977.92	€4,826.00	-€416,471.54
15/06/2015	€146,788.10	-€16,508.90	-€489,169.93

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16/06/2015	€355,793.59	€8,987.44	-€491,232.75
17/06/2015	€350,471.59	€819.68	-€487,101.21
18/06/2015	€526,343.78	-€5,323.88	-€477,763.32
19/06/2015	€241,052.93	€7,739.33	-€486,582.07
20/06/2015	€397,112.32	-€4,839.02	-€433,410.02
21/06/2015	€383,030.12	€10,111.36	-€401,553.37
22/06/2015	€311,691.23	-€13,245.52	-€478,363.90
23/06/2015	€201,144.41	-€4,762.89	-€498,388.85
24/06/2015	€308,129.06	€4,185.85	-€501,724.92
25/06/2015	€467,910.15	€1,370.27	-€491,764.74
26/06/2015	€611,400.32	€5,841.53	-€473,888.59
27/06/2015	€567,227.30	€4,476.00	-€425,354.30
28/06/2015	€383,903.78	€5,553.99	-€394,717.39
29/06/2015	€524,586.93	-€9,068.11	-€472,168.43
30/06/2015	€230,790.65	€20,373.51	-€481,923.33

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

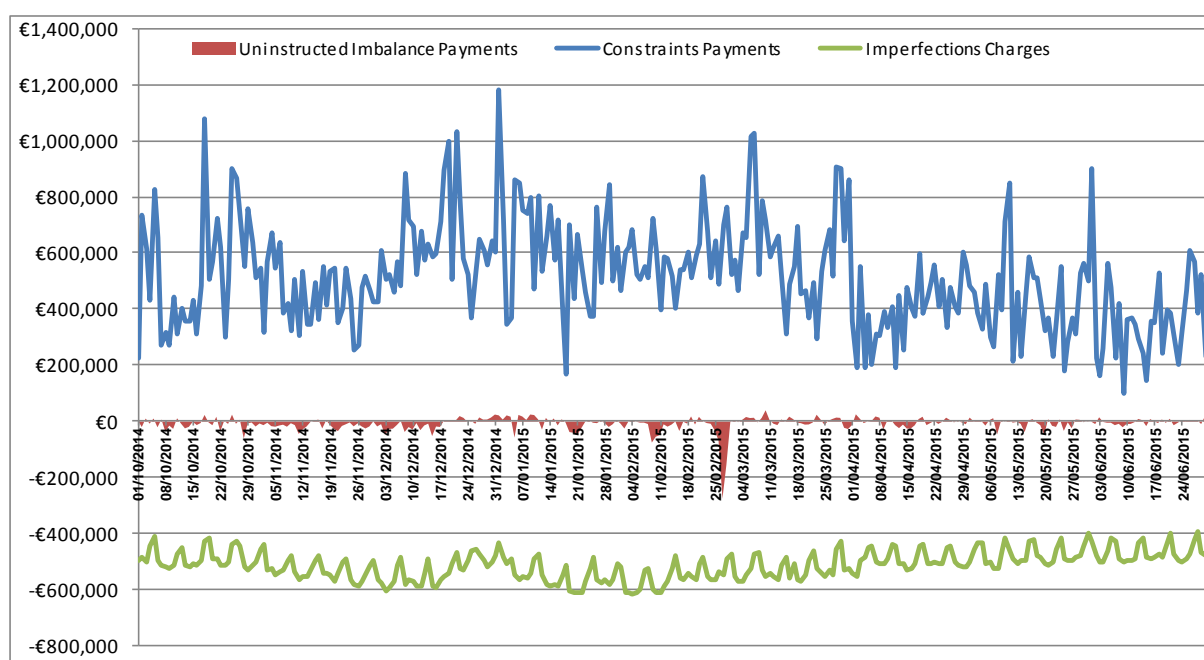


Figure 24 - Constraint Payments, Uninstructed Imbalance Payments, and Imperfections Charges

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
5	€78,694.34
6	€58,735.16
7	€160,187.55
8	€132,758.27
9	€44,275.22
10	€38,818.26
11	€92,533.35
12	€117,780.87
13	€92,533.35
14	€117,780.87
15	€148,719.02
16	€83,282.89
17	126855.95
18	38218.98
19	15114.03
20	172476.22
21	€111,559.70
22	€135,469.70
23	€236,977.70
24	€127,221.90

Table 24 - Make Whole Payments

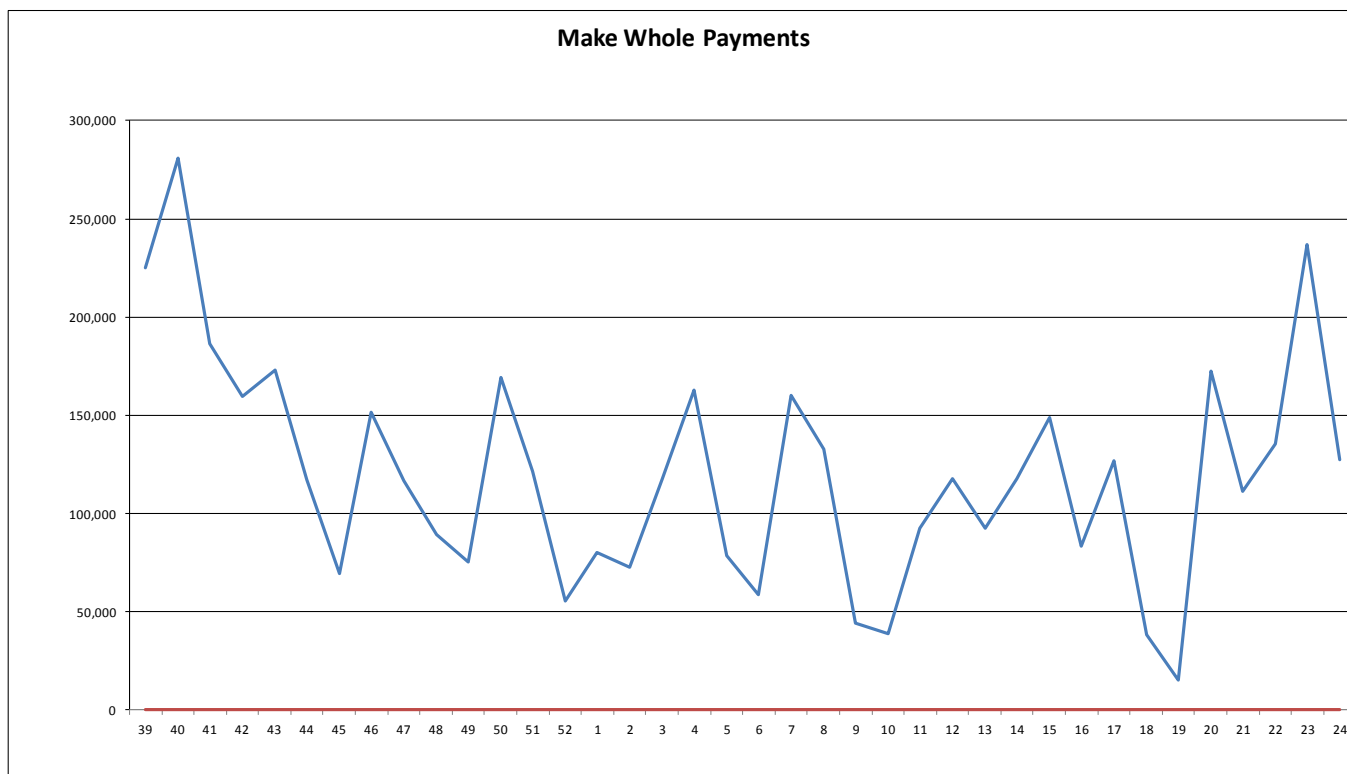


Figure 25 - Make Whole Payments

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
5	-€116,570.26
6	-€15,192.63
7	-€9,394.34
8	-€56,342.39
9	-€76,534.54
10	-€86,286.41
11	-€75,941.02
12	€0.00
13	-€75,941.02
14	€0.00
15	€0.00
16	€0.00
17	€0.00
18	€0.00
19	€0.00
20	€0.00
21	€0.00
22	€0.00
23	-€39,276.80
24	€0.00

Table 25 - Testing Charges

Testing Charges

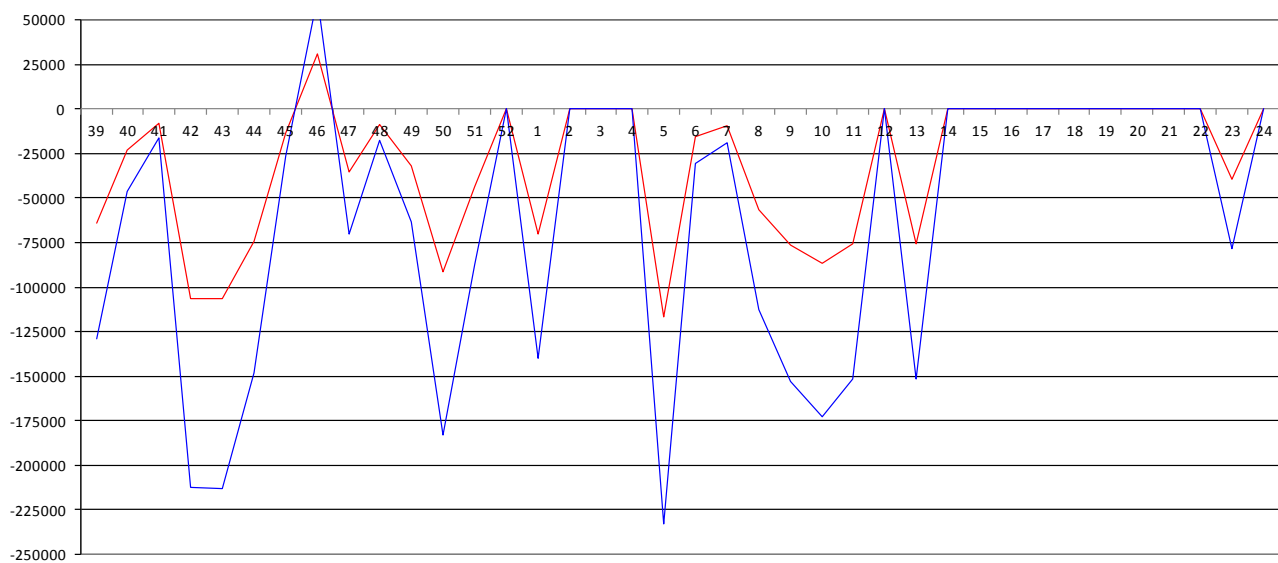


Figure 26 - Testing Charges

13 Appendix F: Default Commercial Offer Data Used

The table below lists for each unit the number of times in operations during June 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_400138	DSU_401590	30			30
PT_400090	DSU_401610	7			7
PT_400116	DSU_401400	30			30
PT_400106	DSU_401330	31			31
PT_400090	DSU_401270	31			31
PT_400111	DSU_401390	11			11
PT_400133	DSU_401530	23			23
PT_400144	DSU_401660	1			1
PT_400124	DSU_401490	30			30
PT_400090	DSU_401620			30	30
PT_400116	DSU_401400			1	1
PT_400090	DSU_401610			24	24
PT_400111	DSU_401390			19	19
PT_400133	DSU_401530			10	10
PT_400024	GU_400120	30			30
PT_400024	GU_400121	30			30
PT_400026	GU_400140	31			31
PT_400030	GU_400180	36			36
PT_400030	GU_400181	37			37
PT_400030	GU_400182	35			35
PT_400030	GU_400183	37			37
PT_400030	GU_400200	36			36
PT_400030	GU_400201	34			34
PT_400030	GU_400202	35			35
PT_400030	GU_400203	36			36
PT_400030	GU_400210	35			35
PT_400030	GU_400211	35			35
PT_400030	GU_400220	35			35
PT_400030	GU_400221	35			35
PT_400030	GU_400240	35			35
PT_400030	GU_400250	35			35
PT_400030	GU_400251	35			35
PT_400030	GU_400252	35			35
PT_400030	GU_400260	35			35
PT_400030	GU_400270	37			37
PT_400030	GU_400271	35			35
PT_400030	GU_400272	36			36
PT_400030	GU_400280	35			35
PT_400030	GU_400281	35			35
PT_400030	GU_400290	35			35
PT_400030	GU_400300	36			36
PT_400030	GU_400311	36			36
PT_400030	GU_400323	36			36
PT_400030	GU_400360	35			35
PT_400030	GU_400361	35			35
PT_400030	GU_400362	35			35

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PT_400030	GU_400363	35			35
PT_400030	GU_400370	35			35
PT_400030	GU_400850	36			36
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	49			49
PT_400037	GU_400500	30			30
PT_400041	GU_400530	51			51
PT_400044	GU_400540	49			49
PT_400054	GU_400620	30			30
PT_400055	GU_400630	30			30
PT_400064	GU_400750	30			30
PT_400064	GU_400751	30			30
PT_400064	GU_400752	30			30
PT_400064	GU_400753	30			30
PT_400064	GU_400762	30			30
PT_400064	GU_400770	30			30
PT_400064	GU_400771	30			30
PT_400064	GU_400780	30			30
PT_400064	GU_400781	30			30
PT_400075	GU_400930	71			71
PT_400077	GU_400950	30			30
PT_400078	GU_401010	32			32
PT_400078	GU_401011	31			31
PT_500024	GU_500040	31			31
PT_500024	GU_500041	30			30
PT_500027	GU_500130	83			83
PT_500027	GU_500131	83			83
PT_500027	GU_500140	83			83
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	47			47
PT_500050	GU_501040	28			28
PT_500050	GU_501050	28			28
PT_500050	GU_501150	28			28
PT_500050	GU_501190	28			28
PT_500053	GU_501130	30			30
PT_500066	GU_501210	30			30
PT_400021	GU_400021			30	30
PT_400021	GU_400050			30	30
PT_400021	GU_400060			30	30
PT_400021	GU_400070			30	30
PT_400021	GU_400080			30	30

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PT_400021	GU_400591			30	30
PT_400021	GU_400600			30	30
PT_400021	GU_400910			30	30
PT_400021	GU_400920			30	30
PT_400021	GU_401080			30	30
PT_400021	GU_401380			30	30
PT_400021	GU_401600			30	30
PT_400021	GU_401640			30	30
PT_400025	GU_400130			30	30
PT_400030	GU_400310			30	30
PT_400038	GU_400550			30	30
PT_400050	GU_400650			30	30
PT_400050	GU_400660			30	30
PT_400050	GU_401000			30	30
PT_400050	GU_401060			30	30
PT_400050	GU_401150			30	30
PT_400050	GU_401240			30	30
PT_400050	GU_401250			30	30
PT_400050	GU_401280			30	30
PT_400050	GU_401290			30	30
PT_400050	GU_401360			30	30
PT_400062	GU_400730			30	30
PT_400062	GU_400731			30	30
PT_400062	GU_400840			30	30
PT_400082	GU_401100			30	30
PT_400087	GU_401230			30	30
PT_400148	GU_401690			30	30
PT_400150	GU_401700			30	30
PT_400151	GU_401770			30	30
PT_400151	GU_401780			30	30
PT_400152	GU_401710			30	30
PT_400152	GU_401720			30	30
PT_400152	GU_401730			30	30
PT_400152	GU_401740			30	30
PT_400152	GU_401750			30	30
PT_400152	GU_401760			30	30
PT_500021	GU_500010			30	30
PT_500021	GU_500740			30	30
PT_500021	GU_501160			30	30
PT_500024	GU_500040			1	1
PT_500032	GU_500211			30	30
PT_500032	GU_501120			30	30
PT_500032	GU_501280			30	30
PT_500032	GU_501290			30	30
PT_500039	GU_500270			30	30
PT_500044	GU_500720			30	30
PT_500047	GU_500790			30	30
PT_500050	GU_501040			2	2
PT_500050	GU_501050			2	2
PT_500050	GU_501150			2	2
PT_500050	GU_501190			2	2
PT_500061	GU_501170			30	30
PT_500062	GU_501180			30	30
PT_500073	GU_501230			30	30

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PT_500074	GU_501250			30	30
PT_400021	I_ROIEWIC	30			30
PT_500083	I_NIMOYLE	2			2
PT_500024	I_NIMOYLE	30			30
PT_500075	I_NIMOYLE	50			50
PT_500021	I_NIMOYLE	30			30
PT_400114	I_ROIEWIC	30			30
PT_400163	I_ROIEWIC	4			4
PT_500031	I_NIMOYLE	30			30
PT_500069	I_NIMOYLE	88			88
PT_500058	I_NIMOYLE	30			30
PT_400096	I_ROIEWIC	86			86
PT_500037	I_NIMOYLE	30			30
PT_400113	I_ROIEWIC	30			30
PT_400136	I_ROIEWIC	45			45
PT_400115	I_ROIEWIC	30			30
PT_500070	I_NIMOYLE	69			69
PT_400108	I_ROIEWIC	68			68
PT_400030	I_ROIEWIC	31			31
	Total	3824	0	1743	5567
	Percentage	68.69%	0.00%	31.31%	100.00%

Table 26 – Default Commercial Data Used

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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

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
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
06/02/2015	4	€371,162.79	-€86,251.15
13/02/2015	5	-€198,874.86	€21,560.90
20/02/2015	6	-€341,073.88	€60,600.73
27/02/2015	7	€9,930.09	-€86,398.49
03/03/2015	8	€345,725.42	-€150,752.30
10/03/2015	9	€1,239,682.13	-€129,512.35
17/03/2015	10	€718,089.57	-€101,950.03
24/03/2015	11	-€432,482.35	€14,085.31
31/03/2015	12	€449,126.81	-€64,651.98
07/04/2015	13	€89,053.88	-€38,664.98
14/04/2015	14	-€1,012,471.70	€128,936.18
21/04/2015	15	-€839,084.24	€128,786.90
01/05/2015	16	-€299,738.05	€144,199.78
08/05/2015	17	-€100,756.77	€94,697.22
15/05/2015	18	-€766,173.39	€143,672.76
22/05/2015	19	€127,012.27	€24,101.25
29/05/2015	20	-€726,994.34	€139,338.43
05/06/2015	21	-€581,933.86	€93,736.74
12/06/2015	22	€52,638.56	€34,490.35
19/06/2015	23	-€130,069.47	€150,507.27
26/06/2015	24	-€41,136.73	€180,820.70

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Table 33 – 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
February 2015	-€364.18	€0.02
March 2015	-€382.43	-€0.03
April 2015	-€265.40	-€0.08
May 2015	-€291.90	€801.20
June 2015	-€232.42	€5324.64

Table 29 - 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>October 2014</u>	<u>10/10/2014</u>	<u>03/10/2014</u> <u>15/10/2014</u> <u>28/10/2014</u>	<u>06/10/2014</u> <u>13/10/2014</u> <u>29/10/2014</u>	<u>06/10/2014</u> <u>13/10/2014</u> <u>27/10/2014</u>	<u>19/10/2014</u>
<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>

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Month	Ex-Ante	Ex-Ante 2	Ex-Post Indicative	Ex-Post Initial	Within Day
<u>May 2015</u>	-	<u>13/05/2015</u>	<u>03/05/2015</u>	-	-
<u>June 2015</u>	-	<u>01/07/2015</u>	<u>22/06/2015</u>	<u>26/06/2015</u>	<u>11/06/2015</u>

Table 30 - MIP Algorithms

Operational Date	Trade Date	Run Type	LR Peak SMP	MIP Peak SMP	Published
02/10/2014	03/10/2014	EA2	€1000	€298.79	MIP
07/10/2014	06/10/2014	EP1	€1000	€287.16	MIP
10/10/2014	06/10/2014	EP2	€1000	€288.65	MIP
09/10/2014	10/10/2014	EA1	€1000	€338.11	MIP
14/10/2014	13/10/2014	EP1	€1000	€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	€1000	€255.85	MIP
30/10/2014	29/10/2014	EP1	€1000	€436.71	MIP
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
23/01/2015	24/01/2015	EA2	€1000	€361.30	MIP

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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

Table 31 - MIP Vs LR Peak Price Comparison