



Market Operator Monthly Report

March 2015

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1 Executive Summary

This Single Electricity Market Operator's (SEMO) report covers the month of operation of March 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 March 2015, Settlements had two late publications as per the Trading and Settlement code one for Indicative Settlement and one for M+13 resettlement.

181 general queries were received in March 2015. During the same period 176 general queries were resolved.

There were fifteen defaults by Participants during March 2015. The largest of these was a Energy Initial €1909.45 invoice which was remedied on the same day.

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

2 Monthly Statistics

Code Breaches

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

| Code Breaches | | | |
|---------------------|------------------------|-----------|----------|
| Area | | Major | Minor |
| Data Providers | | - | 3 |
| Market Participants | Pricing & Scheduling | - | - |
| | Settlement | - | 2 |
| | Funds Transfer | 15 | - |
| | Credit Risk Management | 2 | - |
| SEMO | Pricing & Scheduling | - | 4 |
| | Settlement | - | 2 |
| | Funds Transfer | - | - |
| | Credit Risk Management | - | - |
| | Other | - | - |
| Total | | 17 | 9 |

Table 1 - Code Breaches

Further details of each of the code breaches noted above are set out in [Appendix A](#)

Key:

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

Joining and Terminating Parties and Units

Two Parties joined the Market in March 2015.

- Erova Energy
- Brookfield Renewable Energy 2 Limited

There were no terminating parties in March 2015.

Two new units became effective in the Market in March 2015.

- Interconnector Unit Power NI - PPMG - (PT_400050/Interconnector)
- Barranafaddock Windfarm – APTG – (PT_400066/GU401810)

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

One Supplier unit became effective in the Market in March 2015.

- BRI Green Energy Limited (SU_400182/PT_400153)

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

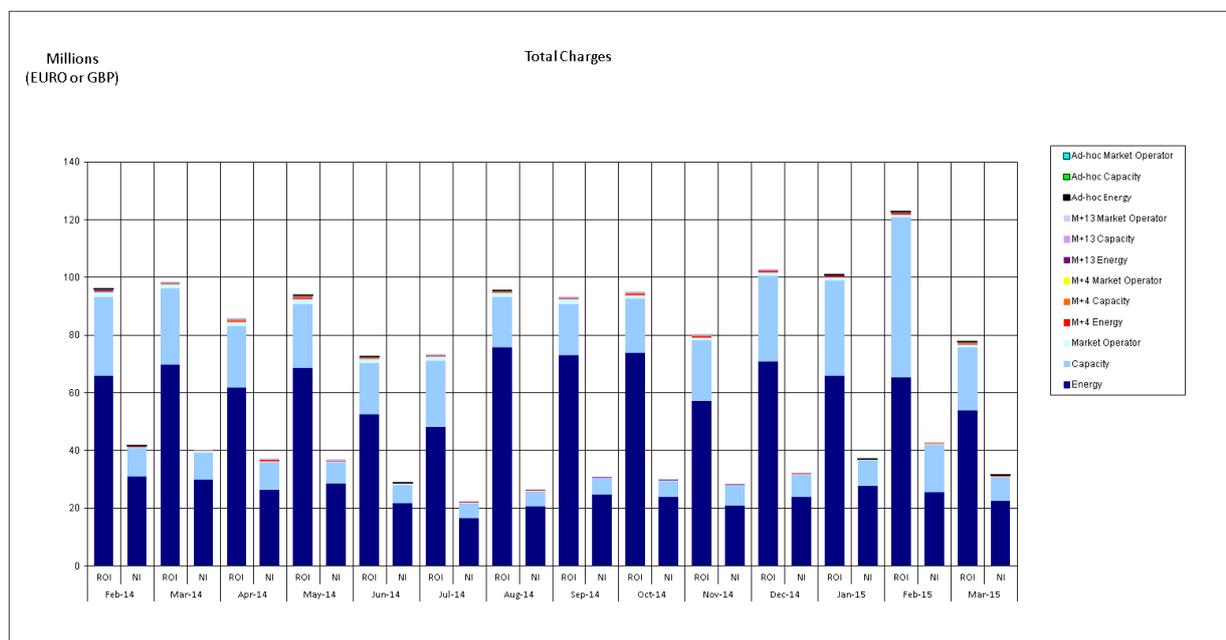


Figure 1 - Total Charges for Each Currency

| Market | March 2015 | |
|------------------------|--------------------|--------------------|
| | ROI | NI |
| Energy | €53,956,275 | £22,615,725 |
| Capacity | €21,836,040 | £8,408,411 |
| Market Operator | €861,676 | £207,225 |
| M+4 Energy | €453,661 | £147,467 |
| M+4 Capacity | €115,780 | £46,471 |
| M+4 Market Operator | €2,416 | £826 |
| M+13 Energy | €355,096 | £39,513 |
| M+13 Capacity | €39,173 | £6,098 |
| M+13 Market Operator | €877 | £183 |
| Ad-hoc Energy | €111,463 | £283 |
| Ad-hoc Capacity | €0 | £0 |
| Ad-hoc Market Operator | €0 | £0 |
| Total | €77,732,457 | £31,472,203 |

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

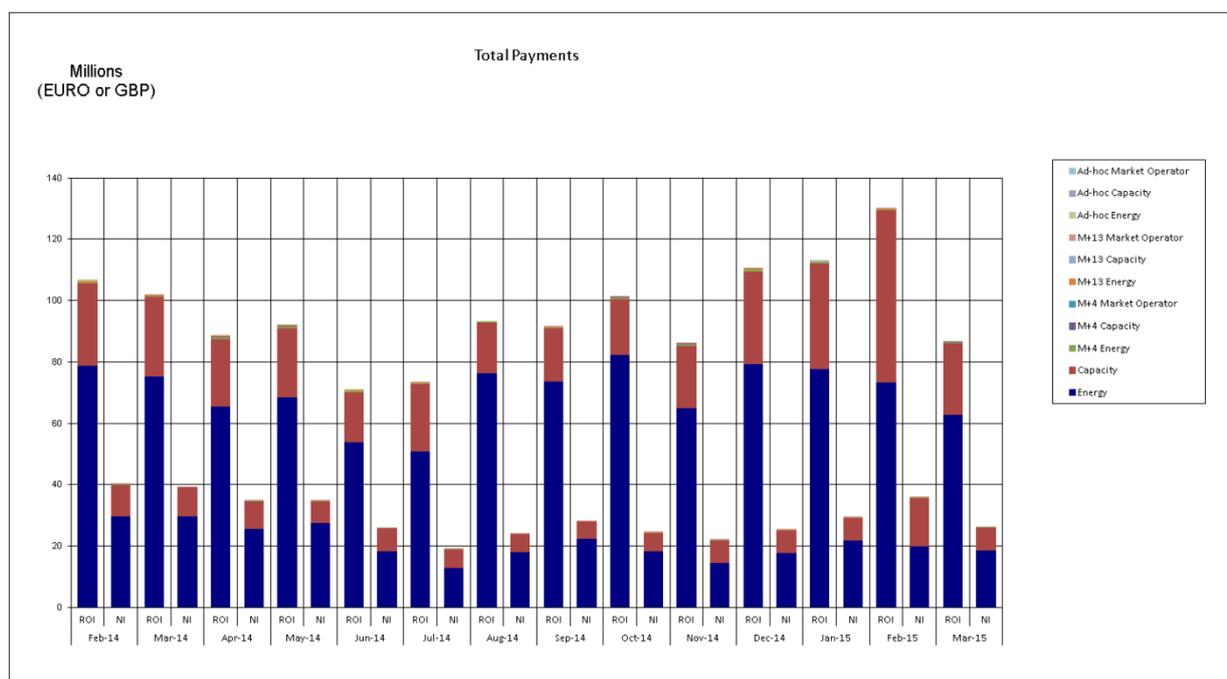


Figure 2 - Total Payments for Each Currency

| Market | March 2015 | |
|------------------------|--------------------|--------------------|
| | ROI | NI |
| Energy | €62,833,351 | £18,497,390 |
| Capacity | €23,162,278 | £7,572,263 |
| M+4 Energy | €454,954 | £147,526 |
| M+4 Capacity | €115,623 | £46,557 |
| M+4 Market Operator | €2,409 | £826 |
| M+13 Energy | €95,141 | £19,215 |
| M+13 Capacity | €35,705 | £8,636 |
| M+13 Market Operator | €876 | £183 |
| Ad-hoc Energy | €34 | £726 |
| Ad-hoc Capacity | €0 | £0 |
| Ad-hoc Market Operator | €0 | £0 |
| Total | €86,700,371 | £26,293,321 |

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:

| March 2015 | |
|-------------------------|-----------------|
| Imbalance (Energy Only) | -€14,966,631.47 |

Table 4 - Balancing Costs for Energy Settlement

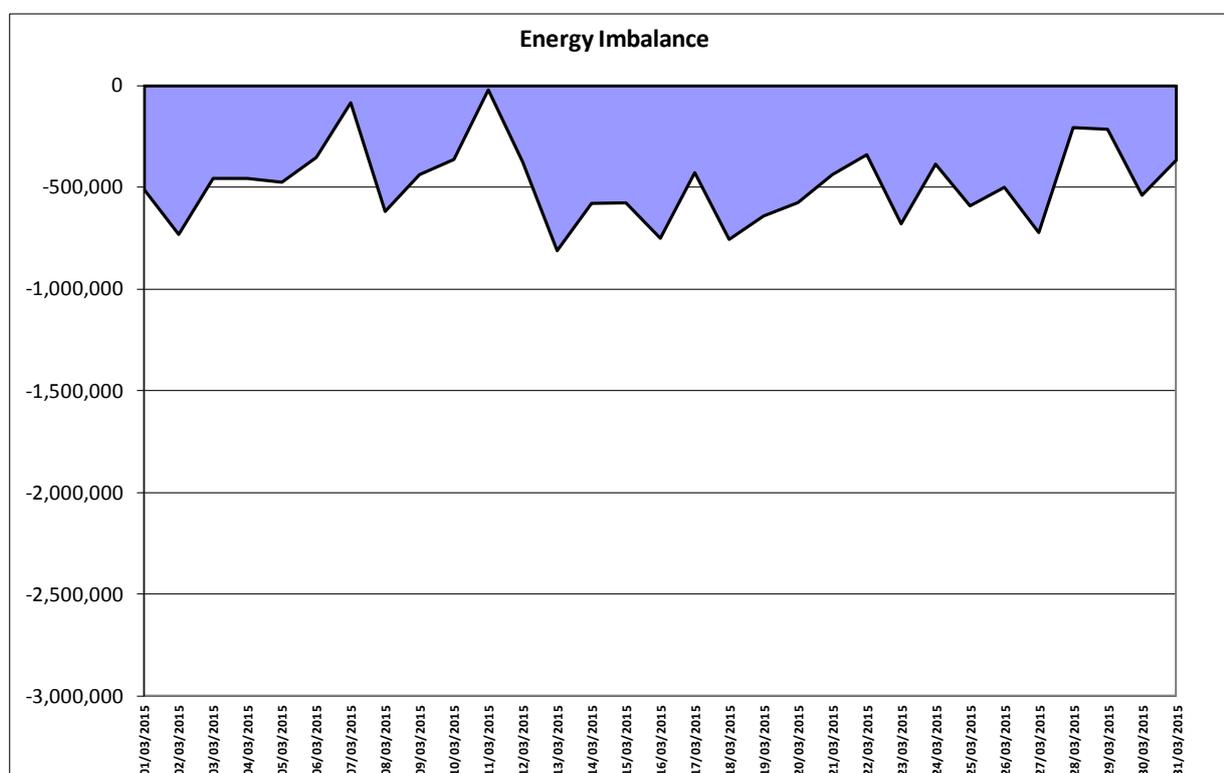


Figure 3 – Energy Imbalances

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 |
|-----------------|---------|---------------------|---------------------|
| 06/03/2015 | 8 | €345,725.42 | -€150,752.30 |
| 13/03/2015 | 9 | €1,239,682.13 | -€129,512.35 |
| 20/03/2015 | 10 | €718,089.57 | -€101,950.03 |
| 27/03/2015 | 11 | -€432,482.35 | €14,085.31 |

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:

| March 2015 | |
|-------------------|-----------------|
| Capacity Charges | -€52,680,878.63 |
| Capacity Payments | €52,680,496.19 |
| Balancing Costs | -€382.43 |
| VAT | -€0.03 |

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)

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

2) Payment Period Currency Costs: - in respect of the difference between the Exchange Rates between the Date of Invoice and the Date of Payment.

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

| Last Date Of Billing Period | Date Of Invoice | Week No | Currency Costs For Energy Settlement (Invoice and Payment) | Currency Cost Adjustment for Inter-jurisdictional SRAs | Total Currency Cost |
|-----------------------------|-----------------|---------|--|--|---------------------|
| 28/02/2015 | 06/03/2015 | 8 | £10,614.51 | £10,295.32 | £20,909.83 |
| 07/03/2015 | 13/03/2015 | 9 | -£32,819.87 | £28,263.26 | -£4,556.61 |
| 14/03/2015 | 20/03/2015 | 10 | -£5,604.92 | £0.00 | -£5,604.92 |
| 21/03/2015 | 27/03/2015 | 11 | £63,595.41 | -£25,192.23 | £38,403.18 |

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 £3,238,403.18 and a cost of £5604.92. 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 |
|-----------------|----------------|--|
| 13/04/2015 | March 2015 | £189,956.17 |

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

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Total Make Whole Payments, as compared against the Total Imperfections Charges, being the weekly budget for these Imperfections Costs.

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

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

| Total Constraint Payments | Total Uninstructed Imbalance | Total Make Whole Payments | Total Imperfections |
|---------------------------|------------------------------|---------------------------|---------------------|
| €85,137,988.18 | -€1,814,972.48 | €2,854,355.47 | -€80,491,983.51 |

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.

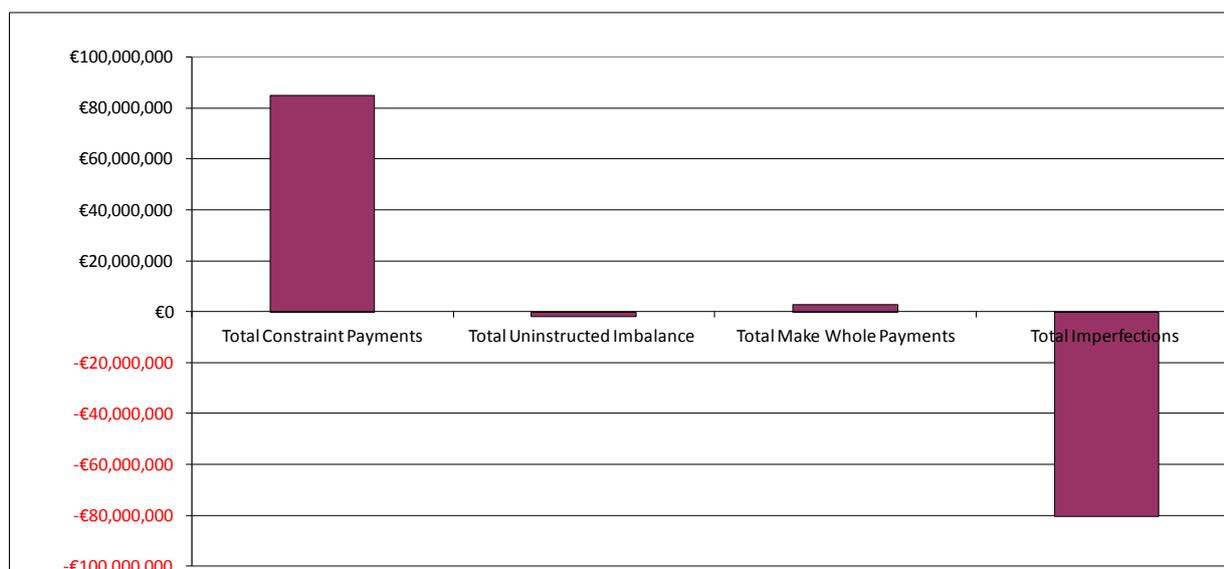


Figure 4 - Cumulative Imperfections Costs Vs Budget

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 November 2014 and M+13 resettlement period of February 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).

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- Negative amounts indicate net additional payment to be made to Participants (Payments).

The reverse is true for Figure 7 & 10

M+4 Resettlement

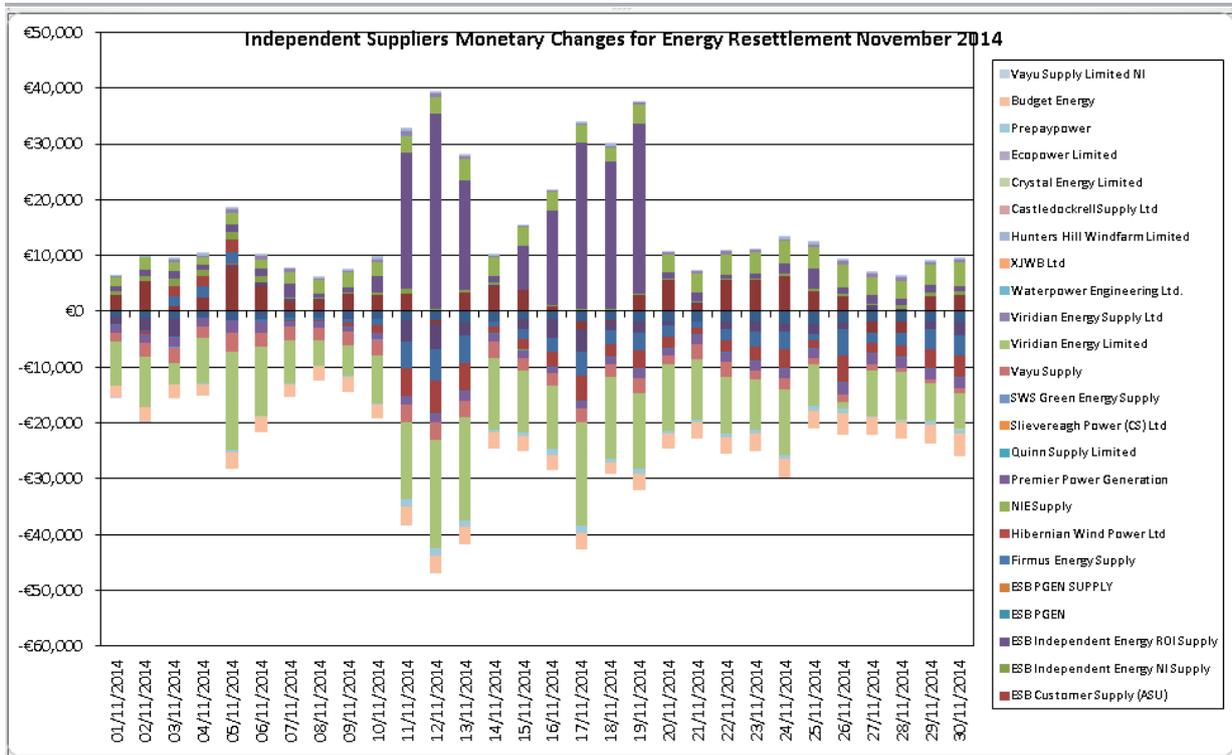


Figure 5 – Independent Suppliers Monetary Changes for Energy Resettlement – November 2014

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

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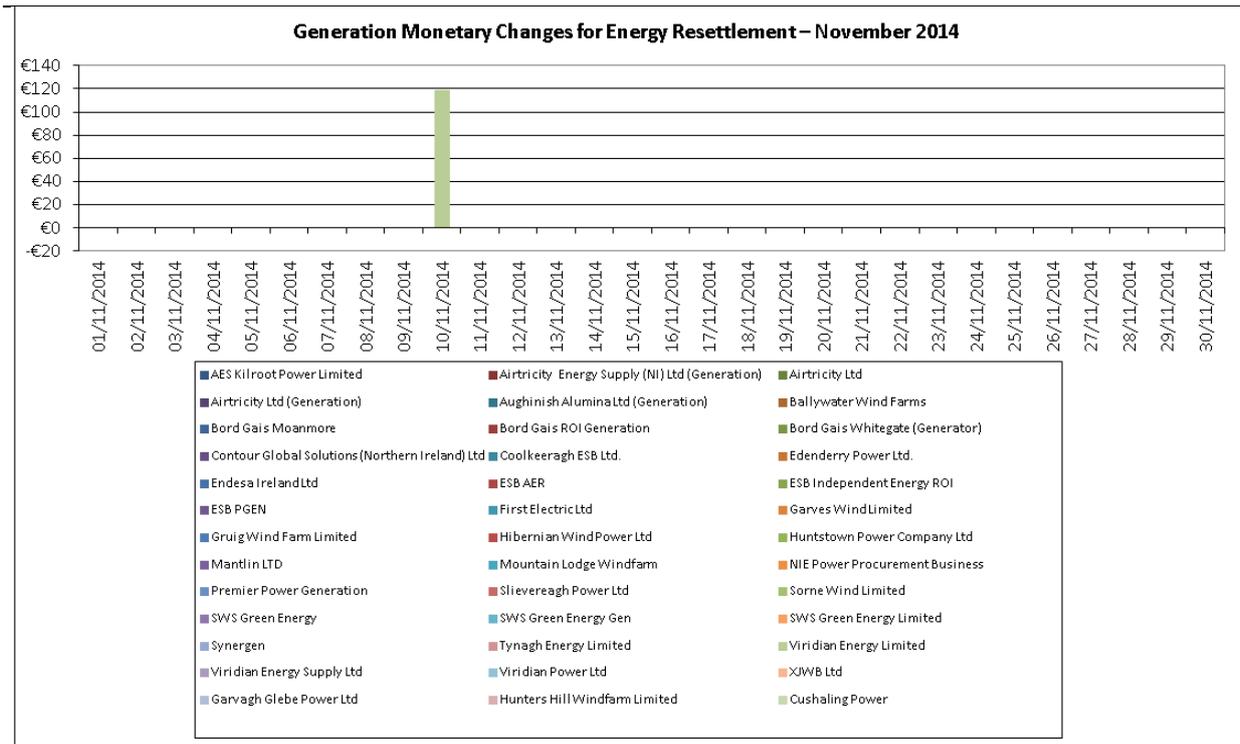


Figure 6 – Generation Monetary Changes for Energy Resettlement – November 2014

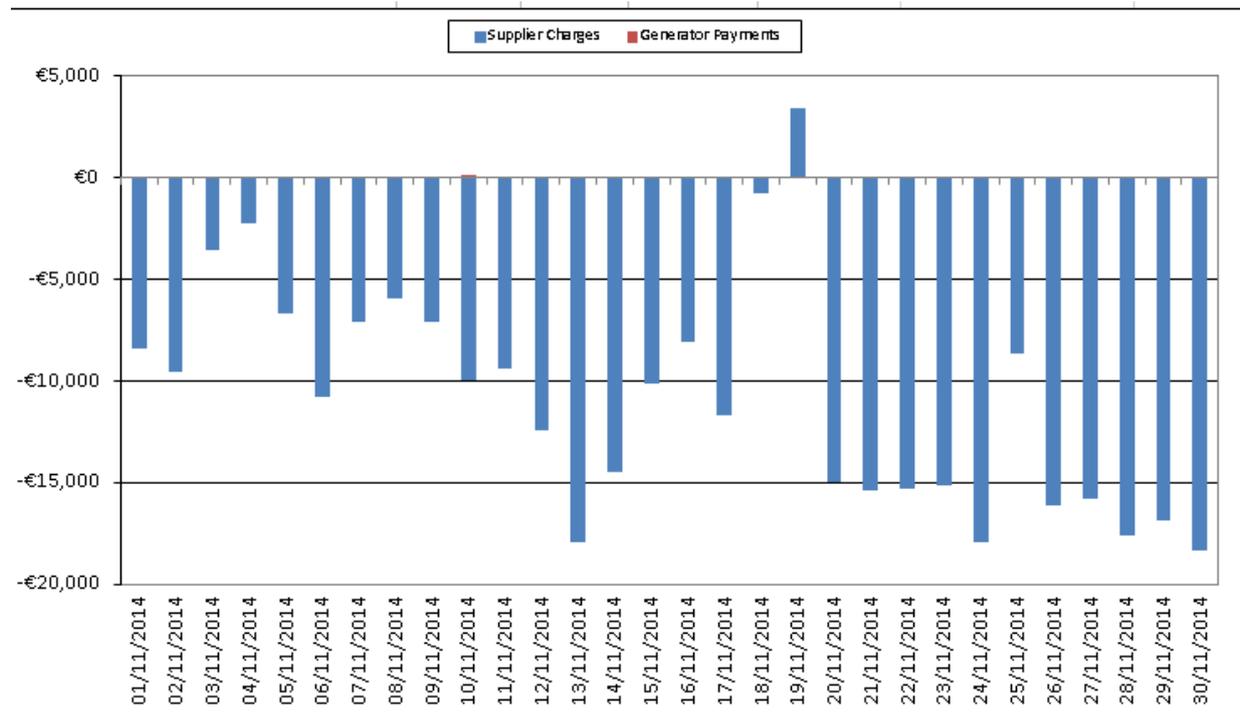


Figure 7 – Total Monetary Changes for Energy Resettlement – November 2014

M+13 Resettlement

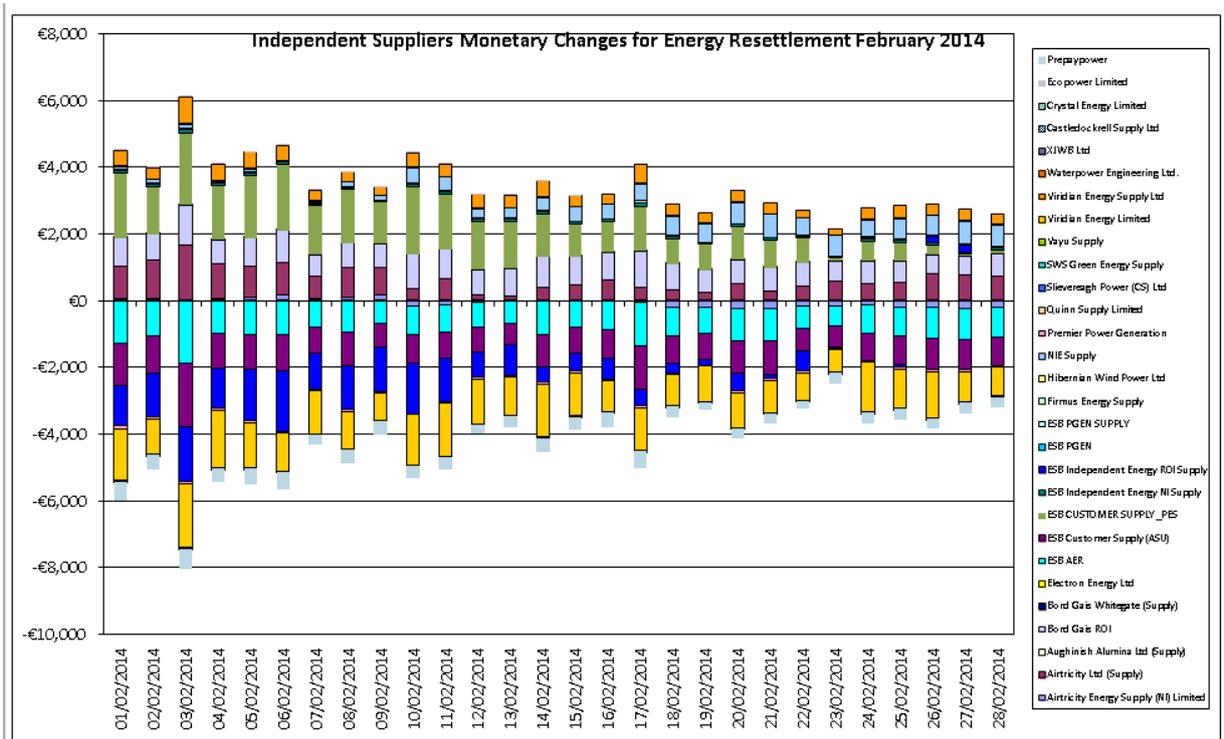


Figure 8 - Independent Suppliers Monetary Changes for Energy Resettlement - February 2014

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

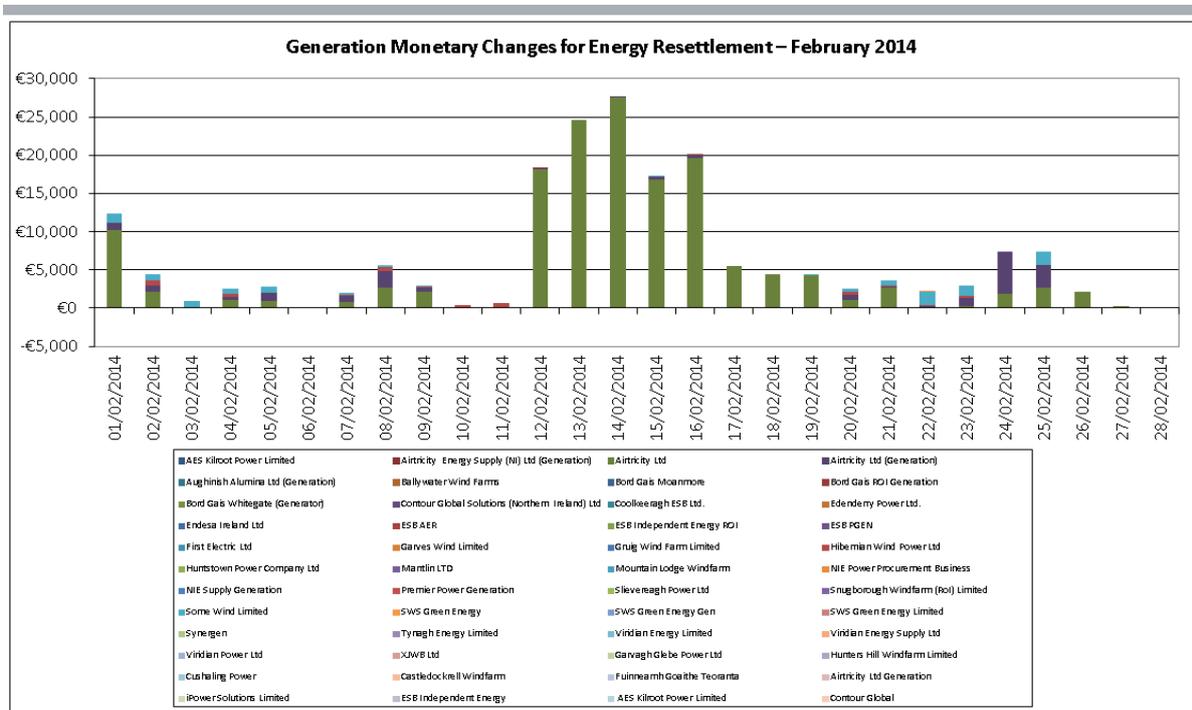


Figure 9 - Generation Monetary Changes for Energy Resettlement - February 2014

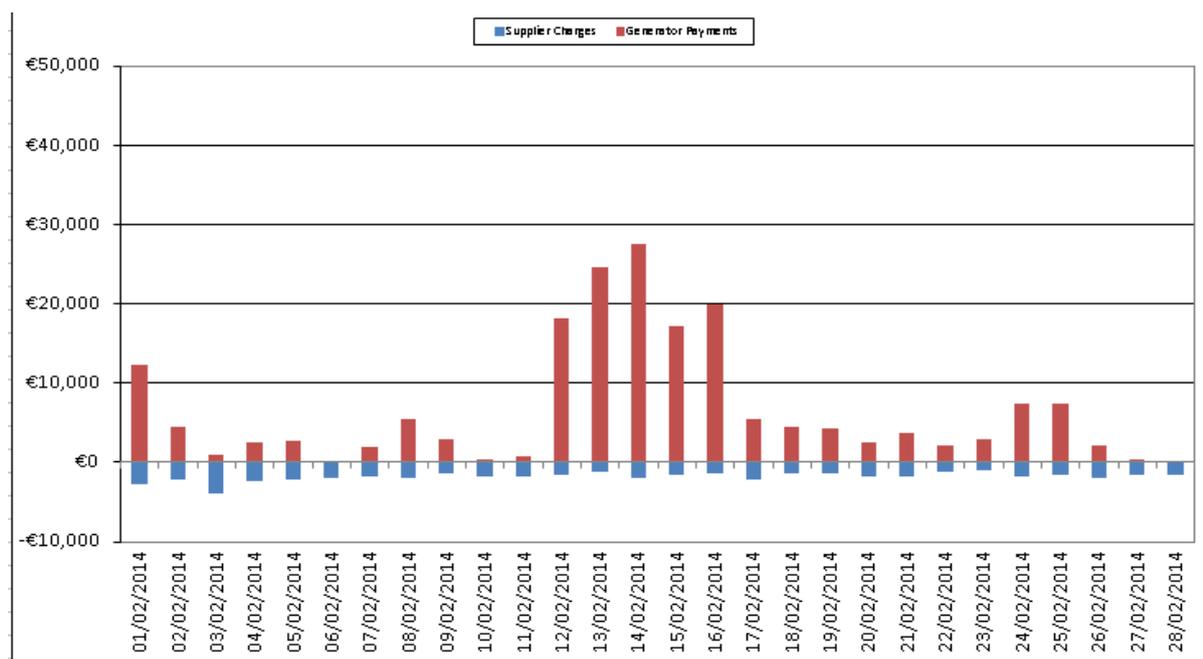


Figure 10 - Total Monetary Changes for Energy Resettlement – February 2014

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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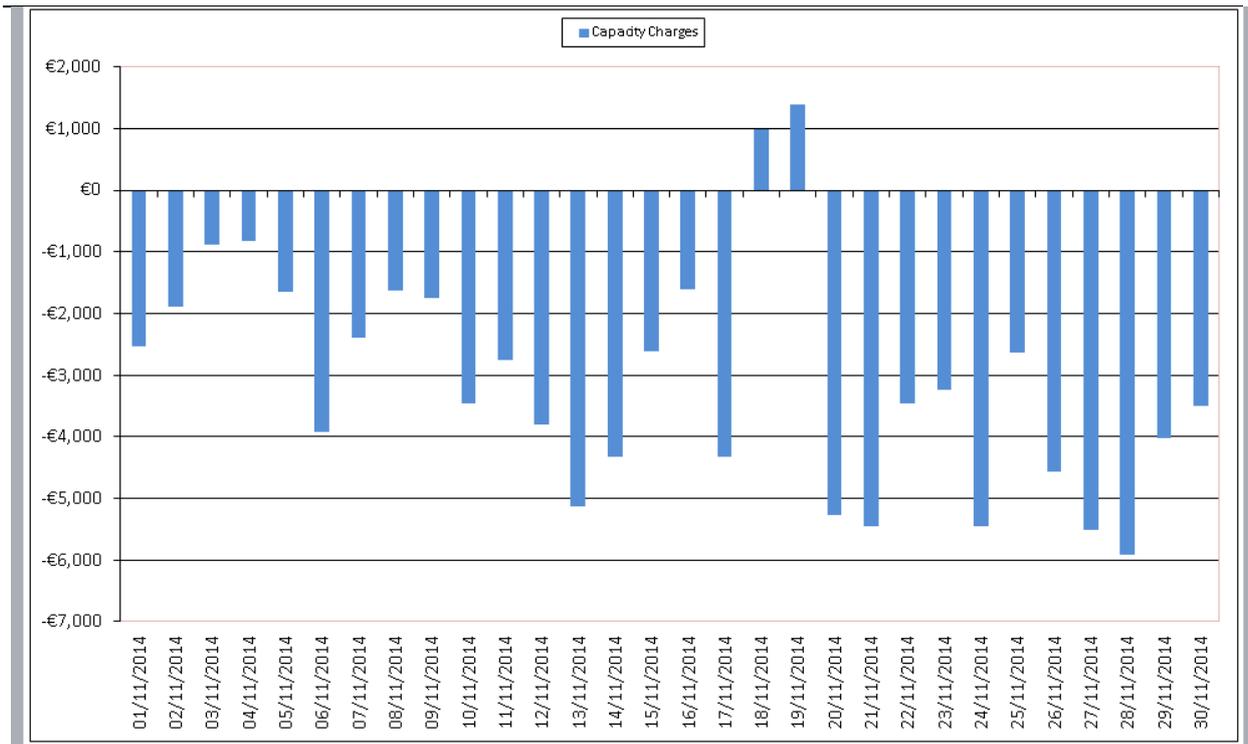


Figure 11 - Independent Suppliers Monetary Changes for Capacity Resettlement – November 2014

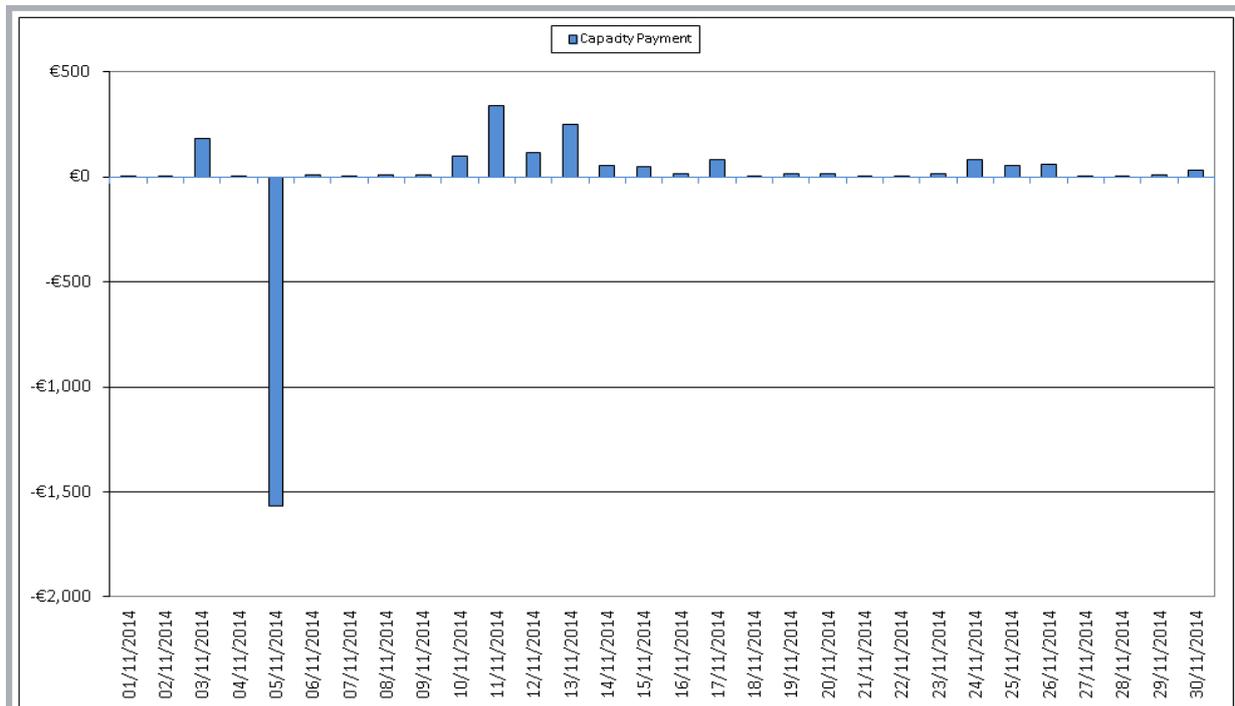


Figure 12 - All Generation Monetary Change for Capacity Resettlement – November 2014

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

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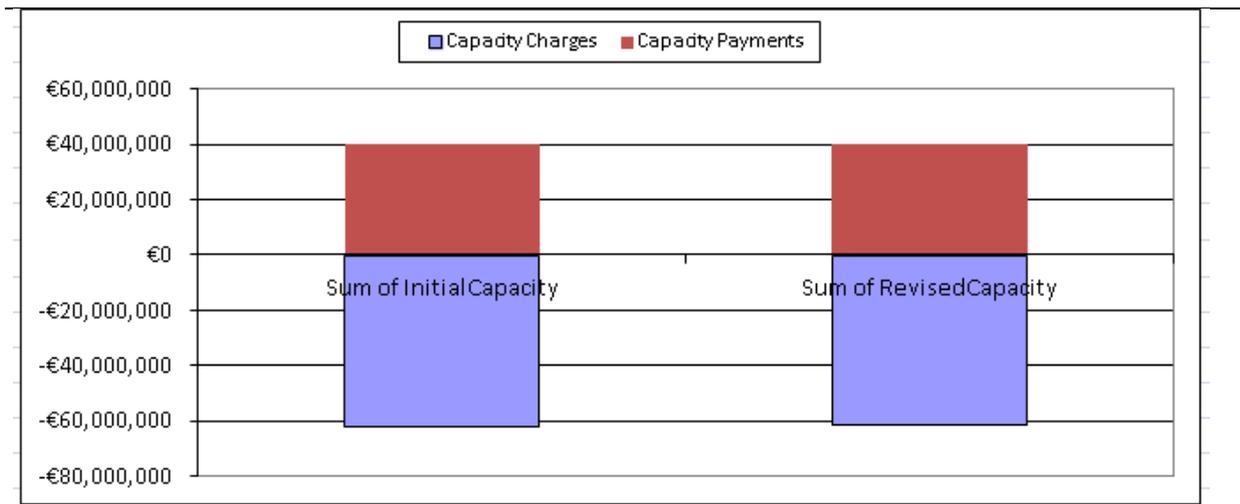


Figure 13 - Comparison of Distribution of Monetary Amounts between Capacity Initial and Resettlement November 2014

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

M+13 Resettlement

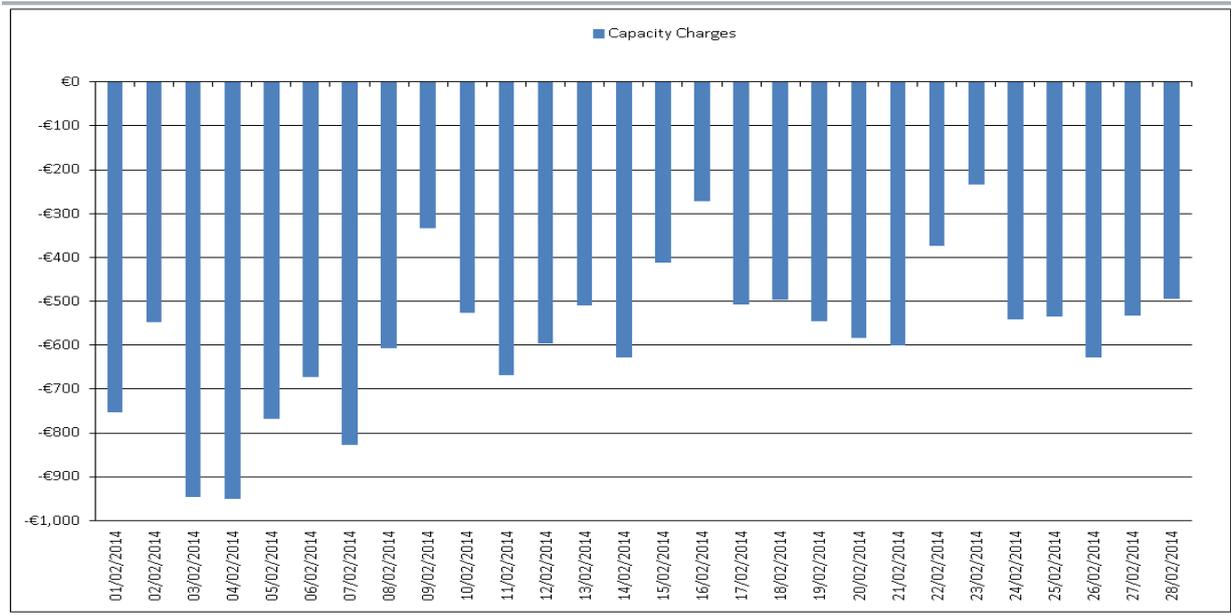


Figure 14 - Independent Suppliers Monetary Changes for Capacity Resettlement – February 2014

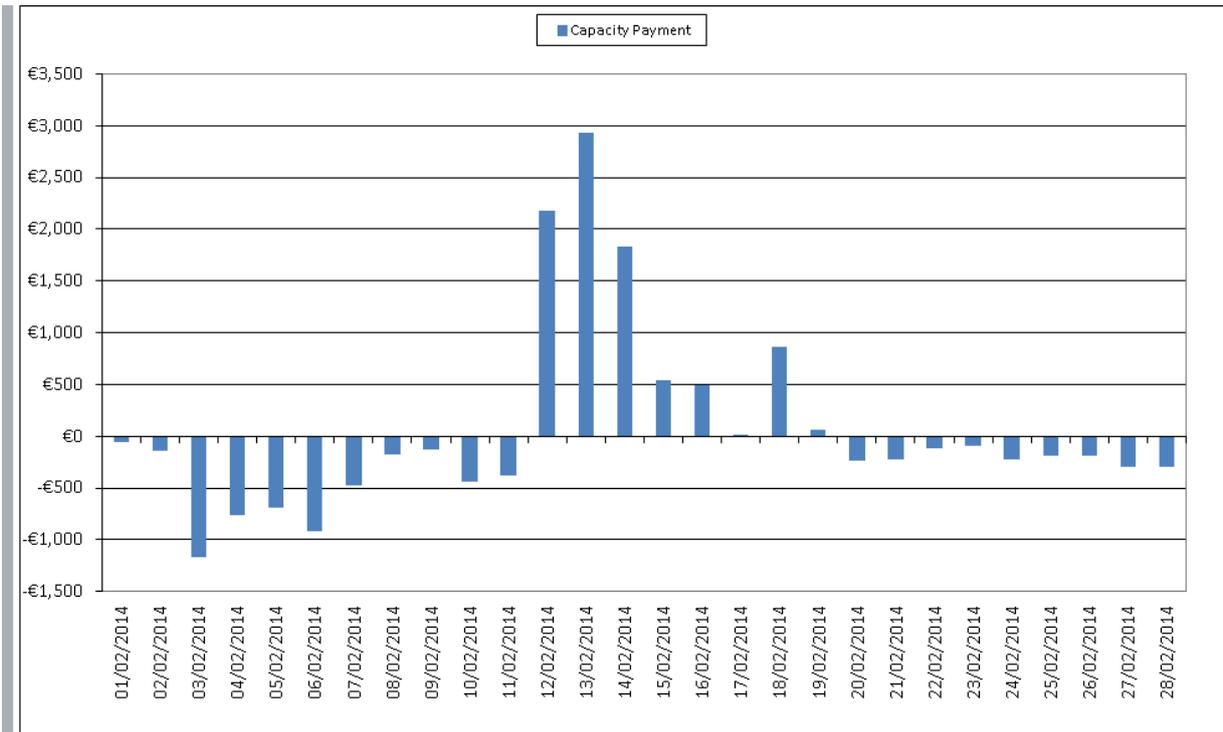


Figure 15 – All Generation Monetary Change for Capacity Resettlement – February 2014

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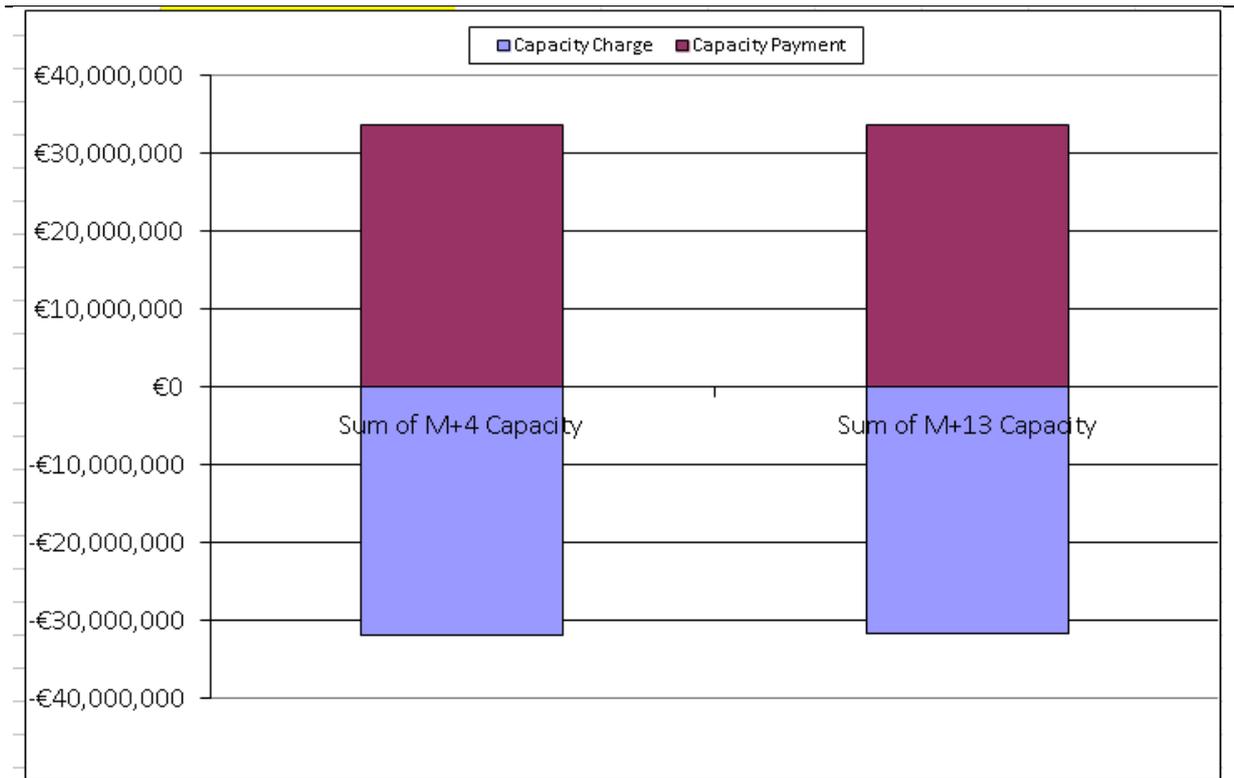


Figure 16 - Comparison of Distribution of Monetary Amounts between M+4 Capacity Resettlement and M+13 Capacity Resettlement – February 2014

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 March 2015.

Market Helpdesk Report: 01/03/15 to 31/03/15

| | Received | Resolved within the period | Not Resolved | Resolved in the period | Resolution Time (Working Days) | Resolved On Time |
|----------------------|------------|----------------------------|--------------|------------------------|--------------------------------|------------------|
| Normal | 178 | 162 | 16 | 173 | 0.99 | 167 |
| Important | 3 | 3 | 0 | 3 | 0.46 | 3 |
| Urgent | 0 | 0 | 0 | 0 | 0.00 | 0 |
| Settlement | 1 | 1 | 0 | 4 | 7.03 | 4 |
| 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 | 182 | 166 | 16 | 180 | 1.70 | 174 |

Table 10 – Helpdesk Statistics

Definitions:

- *Resolved within the Period* refers to queries raised and resolved within the calendar month of March 2015.
- *Resolved in the Period* refers to queries resolved within March 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 March 2015.
- *Not Resolved* refers to queries raised but not resolved within March 2015.
- *Urgent* are general queries which may have an impact on market operations. SEMO has an internal objective to resolve these within 3 working days; however, this is not mandated service level under the Trading & Settlement Code.
- *Disputes* are where a dispute has been raised over the outcome of a data or settlement query.

The average resolution time for General Queries has decreased by 1.21 working days in March 2015 to 0.98 from 2.19 working days in February 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 March 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 March 2015 with regard to formal Settlement Queries.

5. Disputes and Queries

5.1.1 Disputes

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

5.1.2 Data Queries

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

5.1.3 Settlement Queries

There was one Settlement Query raised in March 2015. This was upheld and has since been resolved.

| Topic | Number Of Queries |
|-------|-------------------|
| MIUNs | 1 |

Table 11 –Upheld Settlement Queries by topic

- One query relating to a MIUNs was raised, this was deemed to be of low Materiality and will be corrected in M+4 Re-settlement

Unresolved Queries

There are no unresolved Data Queries as at the 14th of April, 2015.

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

6. Central Systems

Proportion of Default Data Used

On review of the Commercial Offer Data used in the MSP runs, 72.06% of data used was submitted by Participants through the normal Bid-Offer process. 27.94% 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](#).

Proportion of Estimated Meter Data used in Initial Settlement and Resettlement

This is not calculable presently.

List of System Errors and Re-runs

6.1.1 Re-Pricing and Resettlement Runs

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

There were seven Resettlement runs carried out in March 2015.

6.1.2 System Errors

There were four defects found in March. One in the Market Interface (MI) and three in the Market Application (MA).

1. Defect 138437
2. Defect 138451
3. Defect 138728
4. Defect 138847

These have all been raised as defects and we will aim to have them fixed for the SEM 2.6.0 Release or for the wash up release

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

6.2 Operational Timings

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

There are five run types for MSP software,

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

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

6.2.1 MSP Postings March 2015

| Process | On Time | < 1 hr late | > 1 hr late | Not done |
|---------------|---------|-------------|-------------|----------|
| Gate Close EA | 31-31 | 0-31 | 0-31 | 0 |
| Post EA1 | 31-31 | 0-31 | 0-31 | 0 |
| Post EA2 | 31-31 | 0-31 | 0-31 | 0 |
| Post WD1 | 31-31 | 0-31 | 0-31 | 0 |
| Post EP1 | 29-31 | 0-31 | 2-31 | 0 |
| Post EP2 | 31-31 | 0-31 | 0-31 | 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 | 94% | 0% | 6% | 0% |
| Post EP2 | 100% | 0% | 0% | 0% |

Table 13 - Operational Timings (% on time)

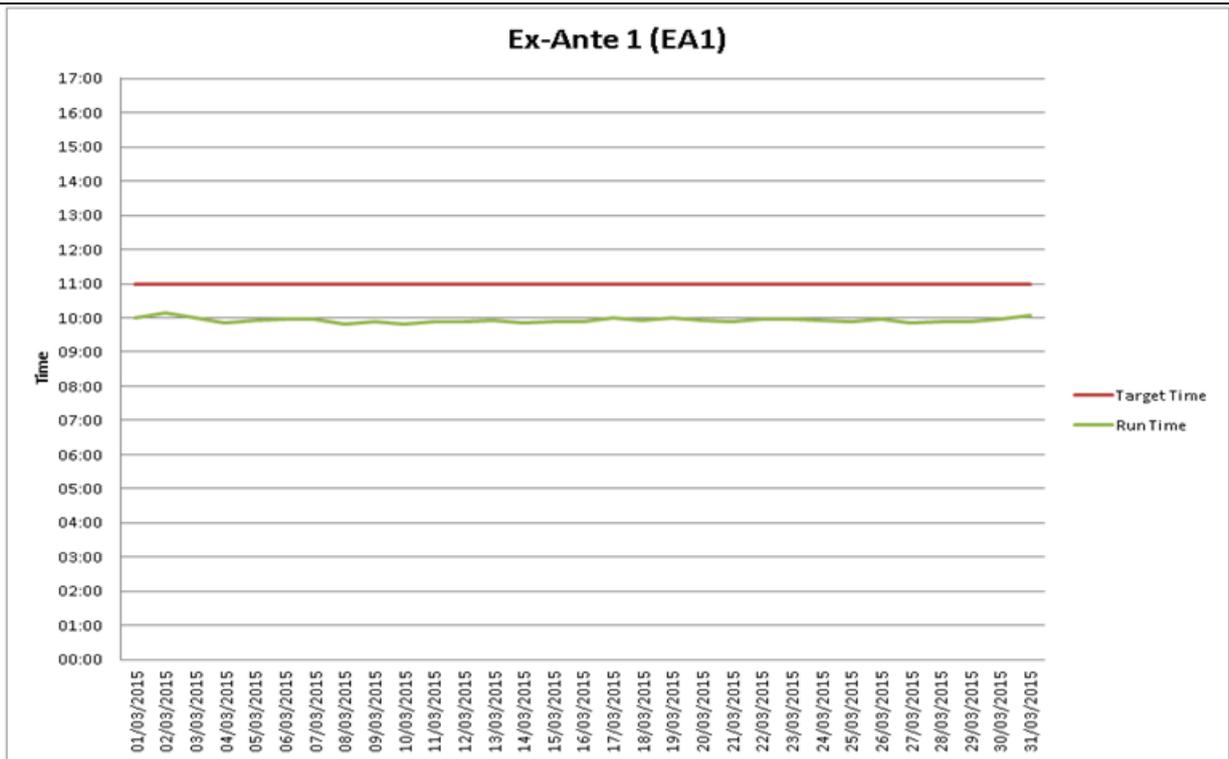


Figure 17 – Ex-Ante 1

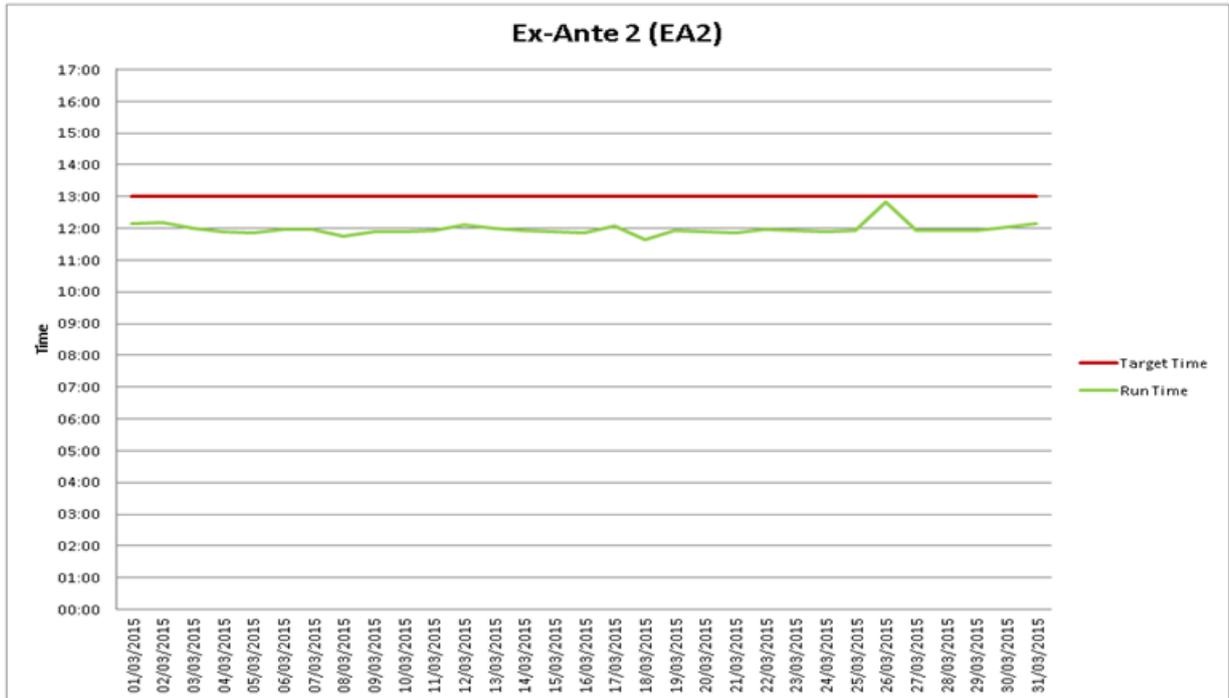


Figure 18 – Ex-Ante 2

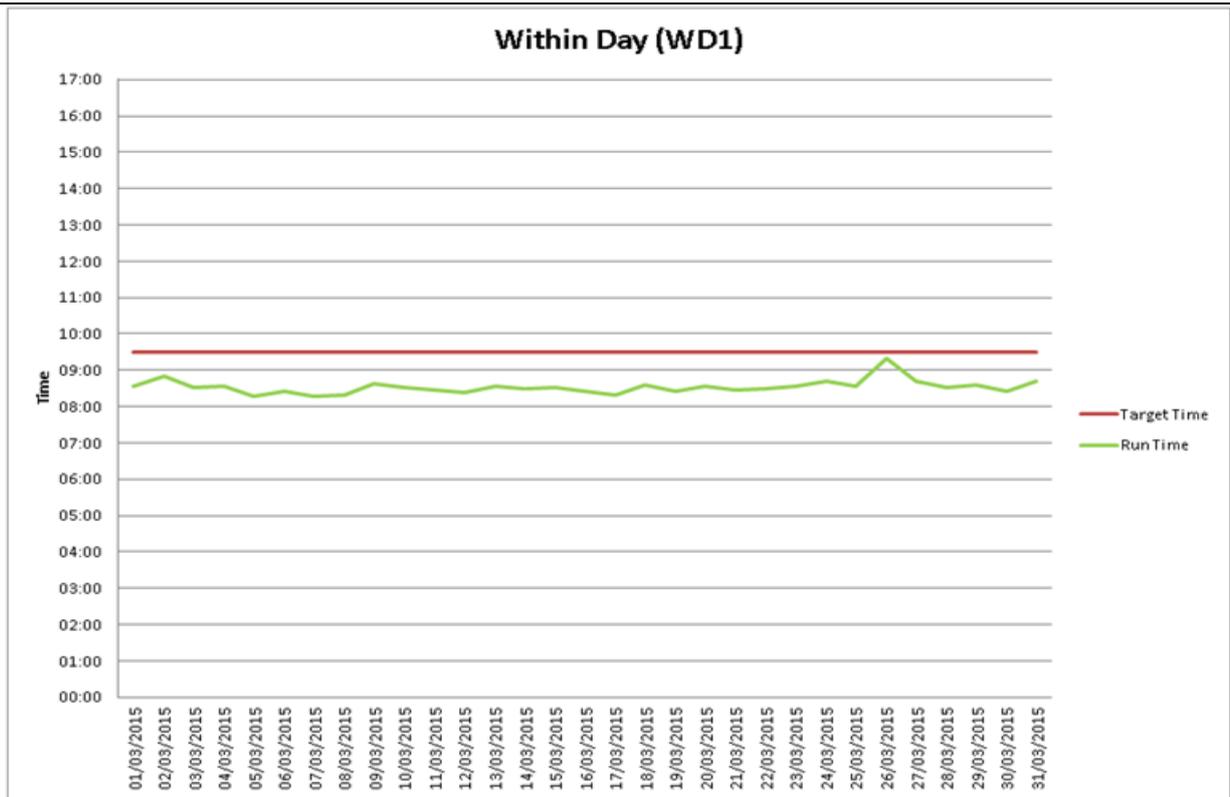


Figure 19 – Within Day 1

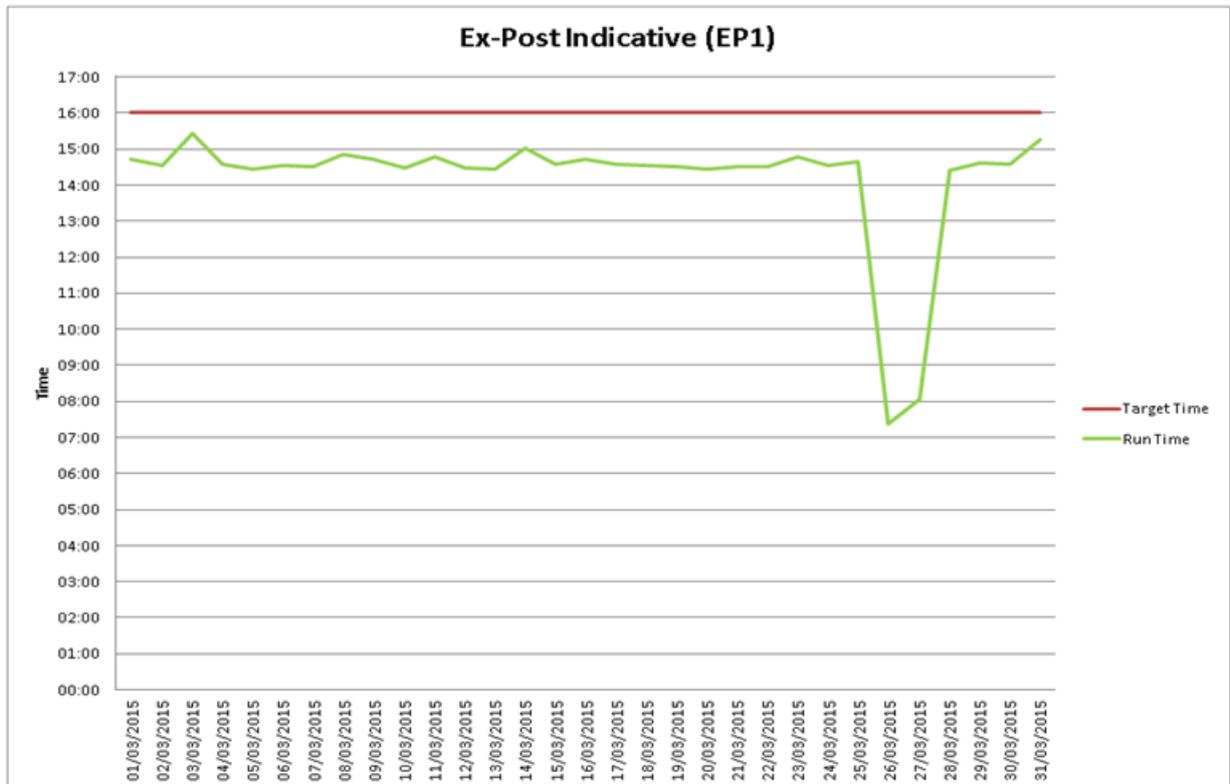


Figure 20 - Ex-Post Indicative

Market Operator Monthly Report

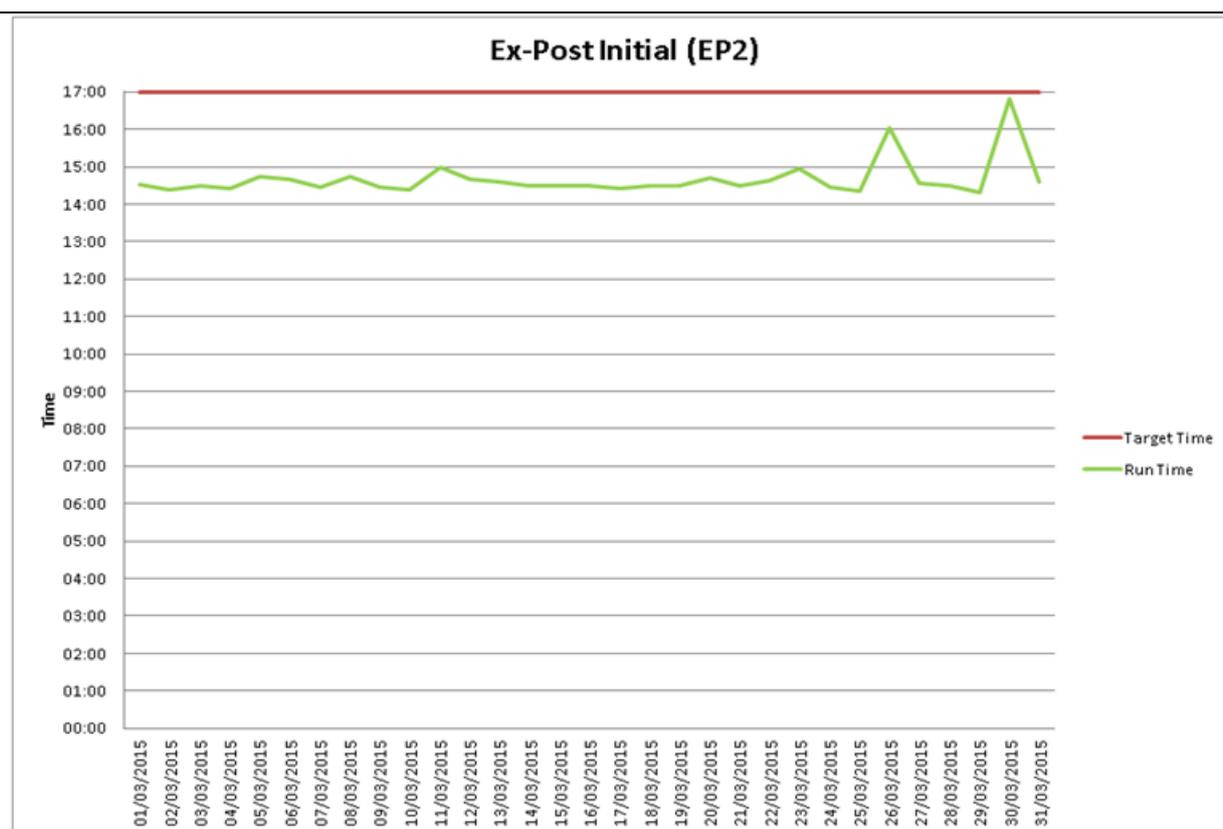


Figure 21 - Ex-Post Initial

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

6.2.2 MSP Algorithms

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

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

In March 2015, there were two 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

6.2.3 Settlement Postings March 2015

The publication timings for Settlement runs are provided below.

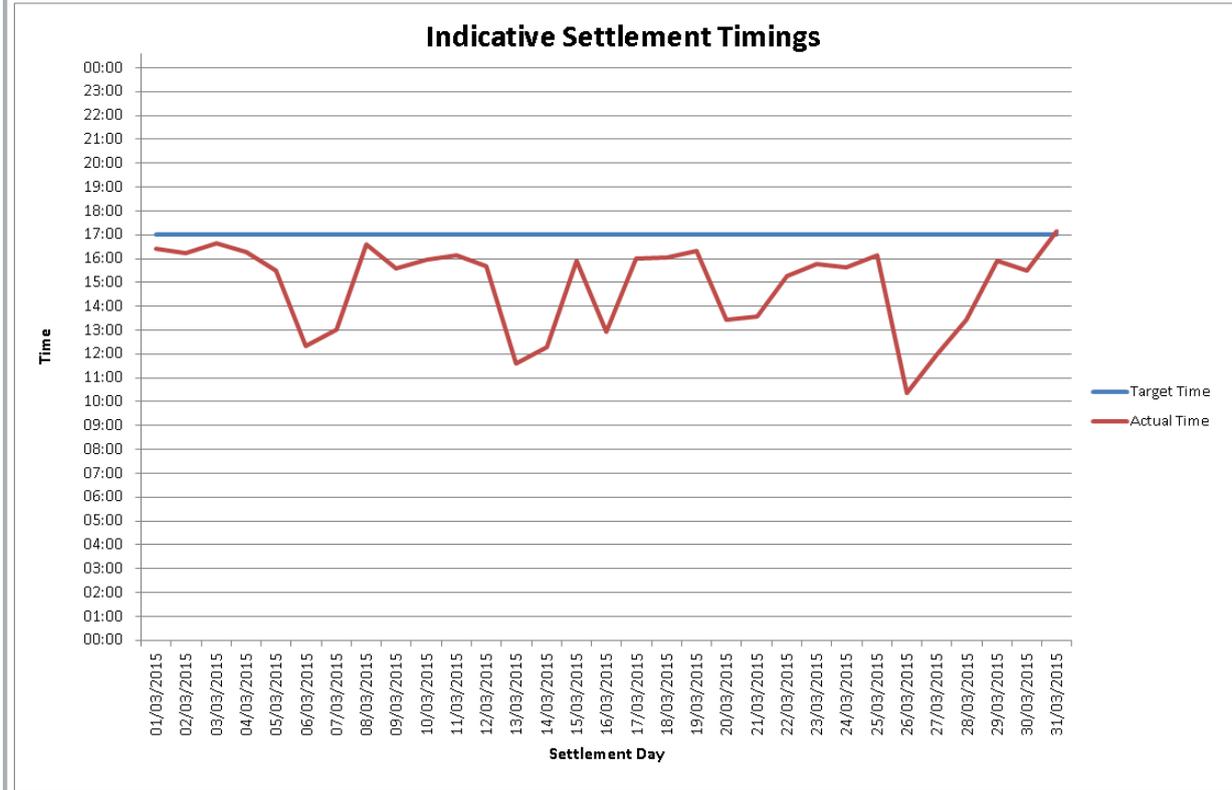


Figure 22 - Indicative Settlement Postings

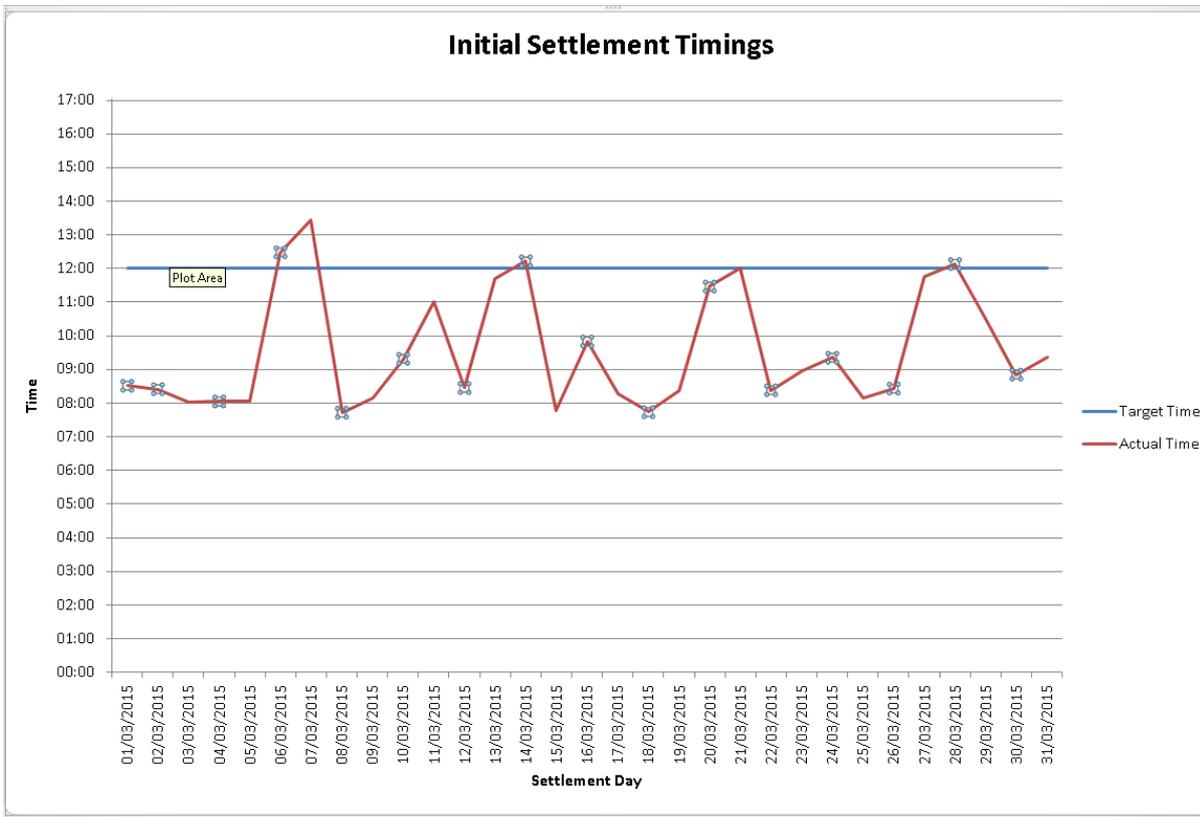


Figure 23 - Initial Settlement Postings

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: April 2015)

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

As at the Cut-Off Date there were no:

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

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

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

7 Occasional Components

7.1 Disaster Recovery/Business Continuity Tests

There was no Business Continuity Tests performed during March 2015.

7.3 Communications or Systems Failures

There was 1 Market Interface System issues during March 2015;

On the 27th of March 2015, Market Operations reported that the MA system had problems with the EP1 workflow for TD 26/03/2015, and error's had been encountered and the run aborted. Upon investigation, Market Systems IS raised a call with the 3rd party vendor to investigate. The call was made by Market Operations to postpone the EP1 run for TD 26/03/2015 on that day. On the 28th of March, the 3rd party vendor provided a fix to the issue, which was installed at approx. 5pm. At this point, the MA system was fully operational again. The fix allowed the EP1 run for TD 26/03/2015 to be ran, but Market Operations made the call to postpone publishing the 26/03/2015 + 27/03/2015 runs until the following morning (Sunday 29th of March).

7.4 Denial of Service Attacks

There was no Denial of Service Attacks during March 2015.

7.5 Submission of Parameters to RAs for Approval

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

8 Appendix A: Detail of Code Breaches

Market Participant

| | | | | | | | | |
|------------|----------|--------|-------------|-----------------|---|---|--|-------|
| 04/03/2015 | Money In | Timing | Participant | Payment Default | Aughrim Power Supply Ltd (PT_400119) defaulted on a Week 7 2015 Initial Energy Invoice | Participant Error | A default letter was issued. | Major |
| 04/03/2015 | Money In | Timing | Participant | Payment Default | Endeco Technology Limited (PT_400133) defaulted on a October 2014 M+4 Capacity Invoice | Participant Error | A default letter was issued. | Major |
| 04/03/2015 | Money In | Timing | Participant | Payment Default | Electricity Exchange Limited(PT_400116) defaulted on a October 2014 M+4 Capacity Invoice | Participant Error | A default letter was issued. | Major |
| 04/03/2015 | Money In | Timing | Participant | Payment Default | Indaver Energy Ltd (PT_400088) defaulted on a Week 7 2015 Initial Energy Invoice | Participant Error | A default letter was issued. | Major |
| 04/03/2015 | Money In | Timing | Participant | Payment Default | Indaver Energy Ltd (PT_400087) defaulted on a October 2014 M+4 Capacity Invoice | Participant Error | A default letter was issued. | Major |
| 04/03/2015 | Money In | Timing | Participant | Payment Default | Indaver Energy Ltd (PT_400087) defaulted on a January 2014 M+13 Capacity Invoice | Participant Error | A default letter was issued. | Major |
| 04/03/2015 | Money In | Timing | Participant | Payment Default | Indaver Energy Ltd (PT_400087) defaulted on a Week 43 2014 M+4 Energy Invoice | Participant Error | A default letter was issued. | Major |
| 04/03/2015 | Money In | Timing | Participant | Payment Default | Dunmore Wind Farm Limited (PT_500074) defaulted on a Week 43 2014 M+4 Energy Invoice | Participant Error | A default letter was issued. | Major |
| 10/03/2015 | CRM | Timing | Participant | Credit | Bruckana Wind Farm Ltd (CP_400131) defaulted on a CCIN issued on 12/03/2015. | CCIN was not resolved within the T&SC timeframes. | Bruckana Wind Farm Ltd (CP_400131) paid an outstanding invoice on the 11/03/2015, which closed the CCIN. | Major |
| 10/03/2015 | CRM | Timing | Participant | Credit | Mount Lucas Wind Farm Ltd (CP_400128) defaulted on a CCIN issued on 10/03/2015. | CCIN was not resolved within the T&SC timeframes. | Bruckana Wind Farm Ltd (CP_400128) paid an outstanding invoice on 11/03/2015 which closed the CCIN. | Major |
| 11/03/2015 | Money In | Timing | Participant | Payment Default | Gortmullan Energy Limited (PT_500077) defaulted on a Week 44 2014 M+4 Energy invoice | Participant Error | A default letter was issued. | Major |
| 13/03/2015 | Money In | Timing | Participant | Payment Default | Arden Energy Limited (PT_400149) defaulted on February 2015 Initial Capacity Invoice. | Participant Error | A default letter was issued. | Major |
| 13/03/2015 | Money In | Timing | Participant | Payment Default | Aughrim Power Supply Limited (PT_400119) defaulted on February 2015 Initial Capacity Invoice. | Participant Error | A default letter was issued. | Major |
| 19/03/2015 | Money In | Timing | Participant | Payment Default | Taubeg Limited (PT_400123) defaulted on Week 6 2014 M+13 Energy Invoice | Participant Error | A default letter was issued. | Major |
| 19/03/2015 | Money In | Timing | Participant | Payment Default | Indaver Energy Ltd (PT_400087) defaulted on Week 45 2014 M+4 Energy Invoice. | Participant Error | A default letter was issued. | Major |
| 25/03/2015 | Money In | Timing | Participant | Payment Default | G.A.E.L Force Power Limited (PT_400069) defaulted on a Week 46 2014 M+4 Energy invoice | Participant error | Default Letter was issued | Major |
| 25/03/2015 | Money In | Timing | Participant | Payment Default | Galeforce Energy Limited (PT_400060) defaulted on a Week 39 2012 Ad Hoc Energy invoice | Participant Error | Default letter was issued | Major |

Table 14 - Code Breaches – Market Participants

Data Provider

| | | | | | | | | |
|------------|-----|---------|----------|-----------------|---|---|--|-------|
| 03/03/2015 | WD1 | Quality | Moyle IA | System | The Within-day (WD1) Moyle MIUNs for Trade Date 03/03/2015 were revised. | There was a trip on the Moyle Interconnector at 10:58 on operational date 03/03/2015. | Revised Moyle MIUNs were published outside the publication deadline, at 16:30 on operational date 03/03/2015, with values set to zero. | Minor |
| 04/03/2015 | WD1 | Quality | Moyle IA | System | The Within Day (WD1) Moyle MIUNs for Trade Date 04/03/2015 were revised. | There was a trip on the Moyle Interconnector at 11:16 on Operational Date 04/03/2015. | Revised Moyle MIUNs were published outside the publication deadline, at 14:18 on operational date 04/03/2015, with values set to zero. | Minor |
| 27/03/2015 | EP1 | Timing | SONI MDP | File Submission | The SONI D+1 Meter Data files were not received by their deadline of 14:00 for Trade Date 26/03/2015. | A manual workaround was required by SONI which caused a delay to the file submission. | A contingency file was used and successfully uploaded at 14:15 on the 27/03/2015. | Minor |

Table 15 - Code Breaches – Data Providers

Market Operator Monthly Report

SEMO - Pricing and Scheduling

| | | | | | | | | |
|------------|-----|---------|----------|-----------------|---|--|--|-------|
| 02/03/2015 | EA2 | Quality | SEMO | System | A revision was required for Ex-Anite 2 (EA2) Moyle MIUNs for Trade Date 03/03/2015. | The MIUN calculator produced an error and a revised file was required. | Revised Moyle MIUNs were published by 13:04. | Minor |
| 03/03/2015 | WD1 | Quality | Moyle IA | System | The Within-day (WD1) Moyle MIUNs for Trade Date 03/03/2015 were revised. | There was a trip on the Moyle Interconnector at 10:58 on operational date 03/03/2015. | Revised Moyle MIUNs were published outside the publication deadline, at 16:30 on operational date 03/03/2015, with values set to zero. | Minor |
| 04/03/2015 | WD1 | Quality | Moyle IA | System | The Within Day (WD1) Moyle MIUNs for Trade Date 04/03/2015 were revised. | There was a trip on the Moyle Interconnector at 11:16 on Operational Date 04/03/2015. | Revised Moyle MIUNs were published outside the publication deadline, at 14:18 on operational date 04/03/2015, with values set to zero. | Minor |
| 05/03/2015 | WD1 | Quality | SEMO | System | A revision was required for Within Day (WD1) Moyle MIUNs for Trade Date 05/03/2015. | The MIUN calculator produced an error and a revised file was required. | Revised Moyle MIUNs were published by 10:20. | Minor |
| 27/03/2015 | EP1 | Timing | SEMO | System | The Ex-Post Indicative (EP1) Market Schedule for Trade Date 26/03/2015 was published after the 16:00 deadline on 27/03/2015. | The EP1 Market Schedule could not be ran due to an issue with Interconnector Offer Data. | The EP1 Market Schedule for Trade Date 26/03/2015 was published at 07:18 on 29/03/2015. | Minor |
| 27/03/2015 | EP1 | Timing | SONI MDP | File Submission | The SONI D+1 Meter Data files were not received by their deadline of 14:00 for Trade Date 26/03/2015. | A manual workaround was required by SONI which caused a delay to the file submission. | A contingency file was used and successfully uploaded at 14:15 on the 27/03/2015. | Minor |
| 28/03/2015 | EP1 | Timing | SEMO | System | The Ex-Post Indicative (EP1) Market Schedule for Trade Date 27/03/2015; was published after the 16:00 deadline on 28/03/2015. | The EP1 Market Schedule could not be ran due to an issue with Interconnector Offer Data. | The EP1 Market Schedule for Trade Date 27/03/2015 was published at 07:58 on 29/03/2015. | Minor |

Table 16 - Code Breaches – Pricing and Scheduling

SEMO – Settlements

| | | | | | | | | |
|------------|--------------------------------|---------|------|-------------|---|--|--|-------|
| 23/03/2015 | M+13 ENG & VMOC Statements | Quality | SEMO | Operational | M+13 Energy and VMOC Resettlement Statements and Participant Information Reports (PIRs) for Billing Week 8 2014 were delayed. | The re-eng checks did not match the Materiality assessment provided by the Analysts. | M+13 Energy and VMOC Resettlement Statements and Participant Information Reports (PIRs) for Billing Week 8 2014 were published a day late. | Minor |
| 31/03/2015 | Indicative Statements and PIRs | Timing | SEMO | Operational | Indicative Statements and PIRs for 31/03/2015 were delayed | Due to the timing of the Ex-Post Indicative publication the 17:00 Indicative Settlement deadline was missed. | Indicative Statements and PIRs 31/03/2015 were published at 17:20. | Minor |

Table 17 - Code Breaches – Settlements

SEMO - Funds Transfer

| | | | | | | | | |
|------------|----------|--------|-------------|-----------------|---|-------------------|------------------------------|-------|
| 04/03/2015 | Money In | Timing | Participant | Payment Default | Aughrim Power Supply Ltd (PT_400119) defaulted on a Week 7 2015 Initial Energy Invoice | Participant Error | A default letter was issued. | Major |
| 04/03/2015 | Money In | Timing | Participant | Payment Default | Endeco Technology Limited (PT_400133) defaulted on a October 2014 M+4 Capacity Invoice | Participant Error | A default letter was issued. | Major |
| 04/03/2015 | Money In | Timing | Participant | Payment Default | Electricity Exchange Limited(PT_400116) defaulted on a October 2014 M+4 Capacity Invoice | Participant Error | A default letter was issued. | Major |
| 04/03/2015 | Money In | Timing | Participant | Payment Default | Indaver Energy Ltd (PT_400088) defaulted on a Week 7 2015 Initial Energy Invoice | Participant Error | A default letter was issued. | Major |
| 04/03/2015 | Money In | Timing | Participant | Payment Default | Indaver Energy Ltd (PT_400087) defaulted on a October 2014 M+4 Capacity Invoice | Participant Error | A default letter was issued. | Major |
| 04/03/2015 | Money In | Timing | Participant | Payment Default | Indaver Energy Ltd (PT_400087) defaulted on a January 2014 M+13 Capacity Invoice | Participant Error | A default letter was issued. | Major |
| 04/03/2015 | Money In | Timing | Participant | Payment Default | Indaver Energy Ltd (PT_400087) defaulted on a Week 43 2014 M+4 Energy Invoice | Participant Error | A default letter was issued. | Major |
| 04/03/2015 | Money In | Timing | Participant | Payment Default | Dunmore Wind Farm Limited (PT_500074) defaulted on a Week 43 2014 M+4 Energy Invoice | Participant Error | A default letter was issued. | Major |
| 11/03/2015 | Money In | Timing | Participant | Payment Default | Gortmullan Energy Limited (PT_500077) defaulted on a Week 44 2014 M+4 Energy Invoice | Participant Error | A default letter was issued. | Major |
| 13/03/2015 | Money In | Timing | Participant | Payment Default | Arden Energy Limited (PT_400149) defaulted on February 2015 Initial Capacity Invoice. | Participant Error | A default letter was issued. | Major |
| 13/03/2015 | Money In | Timing | Participant | Payment Default | Aughrim Power Supply Limited (PT_400119) defaulted on February 2015 Initial Capacity Invoice. | Participant Error | A default letter was issued. | Major |
| 19/03/2015 | Money In | Timing | Participant | Payment Default | Taubeg Limited (PT_400123) defaulted on Week 6 2014 M+13 Energy Invoice | Participant Error | A default letter was issued. | Major |
| 19/03/2015 | Money In | Timing | Participant | Payment Default | Indaver Energy Ltd (PT_400087) defaulted on Week 45 2014 M+4 Energy Invoice. | Participant Error | A default letter was issued. | Major |
| 25/03/2015 | Money In | Timing | Participant | Payment Default | G.A.E.L Force Power Limited (PT_400069) defaulted on a Week 46 2014 M+4 Energy invoice | Participant error | Default Letter was issued | Major |
| 25/03/2015 | Money In | Timing | Participant | Payment Default | Galeforce Energy Limited (PT_400060) defaulted on a Week 39 2012 Ad Hoc Energy invoice | Participant Error | Default letter was issued | Major |

Table 18 - Code Breaches – Funds Transfer

Market Operator Monthly Report

SEMO - Credit Management

| | | | | | | | | |
|------------|-----|--------|-------------|--------|---|---|--|-------|
| 10/03/2015 | CRM | Timing | Participant | Credit | Bruckana Wind Farm Ltd (CP_400131) defaulted on a CCIN issued on 12/03/2015. | CCIN was not resolved within the T&SC timeframes. | Bruckana Wind Farm Ltd (CP_400131) paid an outstanding invoice on the 11/03/2015, which closed the CCIN. | Major |
| 10/03/2015 | CRM | Timing | Participant | Credit | Mount Lucas Wind Farm Ltd (CP_400128) defaulted on a CCIN issued on 10/03/2015. | CCIN was not resolved within the T&SC timeframes. | Bruckana Wind Farm Ltd (CP_400128) paid an outstanding invoice on 11/03/2015 which closed the CCIN. | Major |

Table 19 - Code Breaches – Credit Risk Management

SEMO – Other

There were no issues to report in March 2015

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

Table 20 - Code Breaches – Other

9 Appendix B: List of Queries by Type

Settlement Queries

| Summary Title | Description | ID | Logged On | Date sent to MP | Type |
|---------------|--|----------|------------|-----------------|------------|
| MGEU | For trading day 03/03/2015 affecting trading period 8.2 ; 11.2 and 12.1. I have attached the Final PIR and AMP Error Report with the periods in question highlighted in yellow. This was also raised with SEM shortly after the preliminary PIR was released and also after the Final PIR was released. I have attached our correspondence with SEM for your reference. | IA_MOYLE | 2015-03-18 | 2015-03-31 | SETTLEMENT |

Table 21 - Settlement Queries

10 Appendix C: List of All System Errors and Failures

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

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

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

| Issue No. | Description | Effect | Fixed from | Re-Pricing | Resettlement | Status |
|----------------|---|--------|------------|------------|--------------|--------|
| ABB2015-138847 | EP1 CRASH - SEE ISSUE 138767 | - | - | N | N | - |
| ABB2015-138728 | Interconnector Unit Exposure screen | - | - | N | N | - |
| ABB2015-138451 | IP Defect - consecutive instructions CURL | - | - | N | N | - |
| ABB2015-138437 | IP RAMP DOWN | | | | | |

Table 22 - 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 |
| 01/03/2015 | 11:00 | 10:00 | 13:00 | 12:10 | 09:30 | 08:34 | 16:00 | 14:42 | 17:00 | 14:31 |
| 02/03/2015 | 11:00 | 10:08 | 13:00 | 12:12 | 09:30 | 08:51 | 16:00 | 14:32 | 17:00 | 14:23 |
| 03/03/2015 | 11:00 | 10:00 | 13:00 | 12:01 | 09:30 | 08:31 | 16:00 | 15:25 | 17:00 | 14:29 |
| 04/03/2015 | 11:00 | 09:52 | 13:00 | 11:53 | 09:30 | 08:34 | 16:00 | 14:35 | 17:00 | 14:25 |
| 05/03/2015 | 11:00 | 09:55 | 13:00 | 11:52 | 09:30 | 08:16 | 16:00 | 14:27 | 17:00 | 14:45 |
| 06/03/2015 | 11:00 | 09:57 | 13:00 | 11:58 | 09:30 | 08:26 | 16:00 | 14:32 | 17:00 | 14:40 |
| 07/03/2015 | 11:00 | 09:57 | 13:00 | 11:58 | 09:30 | 08:17 | 16:00 | 14:31 | 17:00 | 14:27 |
| 08/03/2015 | 11:00 | 09:48 | 13:00 | 11:46 | 09:30 | 08:20 | 16:00 | 14:51 | 17:00 | 14:45 |
| 09/03/2015 | 11:00 | 09:53 | 13:00 | 11:54 | 09:30 | 08:38 | 16:00 | 14:43 | 17:00 | 14:27 |
| 10/03/2015 | 11:00 | 09:48 | 13:00 | 11:53 | 09:30 | 08:32 | 16:00 | 14:29 | 17:00 | 14:23 |
| 11/03/2015 | 11:00 | 09:53 | 13:00 | 11:55 | 09:30 | 08:27 | 16:00 | 14:47 | 17:00 | 15:00 |
| 12/03/2015 | 11:00 | 09:53 | 13:00 | 12:06 | 09:30 | 08:23 | 16:00 | 14:29 | 17:00 | 14:40 |
| 13/03/2015 | 11:00 | 09:56 | 13:00 | 12:00 | 09:30 | 08:33 | 16:00 | 14:27 | 17:00 | 14:35 |
| 14/03/2015 | 11:00 | 09:52 | 13:00 | 11:56 | 09:30 | 08:29 | 16:00 | 15:01 | 17:00 | 14:30 |
| 15/03/2015 | 11:00 | 09:53 | 13:00 | 11:53 | 09:30 | 08:31 | 16:00 | 14:35 | 17:00 | 14:30 |
| 16/03/2015 | 11:00 | 09:54 | 13:00 | 11:51 | 09:30 | 08:25 | 16:00 | 14:42 | 17:00 | 14:29 |
| 17/03/2015 | 11:00 | 10:00 | 13:00 | 12:04 | 09:30 | 08:19 | 16:00 | 14:34 | 17:00 | 14:25 |
| 18/03/2015 | 11:00 | 09:56 | 13:00 | 11:38 | 09:30 | 08:36 | 16:00 | 14:32 | 17:00 | 14:29 |
| 19/03/2015 | 11:00 | 10:01 | 13:00 | 11:57 | 09:30 | 08:25 | 16:00 | 14:31 | 17:00 | 14:30 |
| 20/03/2015 | 11:00 | 09:55 | 13:00 | 11:54 | 09:30 | 08:34 | 16:00 | 14:27 | 17:00 | 14:43 |
| 21/03/2015 | 11:00 | 09:54 | 13:00 | 11:52 | 09:30 | 08:27 | 16:00 | 14:30 | 17:00 | 14:29 |
| 22/03/2015 | 11:00 | 09:57 | 13:00 | 11:59 | 09:30 | 08:29 | 16:00 | 14:30 | 17:00 | 14:37 |
| 23/03/2015 | 11:00 | 09:57 | 13:00 | 11:55 | 09:30 | 08:34 | 16:00 | 14:47 | 17:00 | 14:57 |
| 24/03/2015 | 11:00 | 09:55 | 13:00 | 11:54 | 09:30 | 08:42 | 16:00 | 14:32 | 17:00 | 14:28 |
| 25/03/2015 | 11:00 | 09:54 | 13:00 | 11:57 | 09:30 | 08:34 | 16:00 | 14:39 | 17:00 | 14:22 |
| 26/03/2015 | 11:00 | 09:57 | 13:00 | 12:50 | 09:30 | 09:19 | 16:00 | 07:23 | 17:00 | 16:03 |
| 27/03/2015 | 11:00 | 09:51 | 13:00 | 11:56 | 09:30 | 08:41 | 16:00 | 08:03 | 17:00 | 14:33 |
| 28/03/2015 | 11:00 | 09:53 | 13:00 | 11:57 | 09:30 | 08:32 | 16:00 | 14:24 | 17:00 | 14:29 |
| 29/03/2015 | 11:00 | 09:53 | 13:00 | 11:56 | 09:30 | 08:36 | 16:00 | 14:36 | 17:00 | 14:18 |
| 30/03/2015 | 11:00 | 09:57 | 13:00 | 12:02 | 09:30 | 08:26 | 16:00 | 14:35 | 17:00 | 16:48 |
| 31/03/2015 | 11:00 | 10:05 | 13:00 | 12:08 | 09:30 | 08:41 | 16:00 | 15:15 | 17:00 | 14:35 |

Table 23 – MSP Runs

Settlement Runs

Market Operator Monthly Report

| Trading Day | INDICATIVE | | | | INITIAL | | | |
|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| | Target Date | Actual Date | Target Time | Actual Time | Trading Day | Actual Date | Target Time | Actual Time |
| 01/03/2015 | 02/03/2015 | 02/03/2015 | 17:00 | 16:26 | 01/03/2015 | 06/03/2015 | 12:00 | 08:31 |
| 02/03/2015 | 03/03/2015 | 03/03/2015 | 17:00 | 16:13 | 02/03/2015 | 07/03/2015 | 12:00 | 08:25 |
| 03/03/2015 | 04/03/2015 | 04/03/2015 | 17:00 | 16:39 | 03/03/2015 | 08/03/2015 | 12:00 | 08:01 |
| 04/03/2015 | 05/03/2015 | 05/03/2015 | 17:00 | 16:17 | 04/03/2015 | 09/03/2015 | 12:00 | 08:03 |
| 05/03/2015 | 06/03/2015 | 06/03/2015 | 17:00 | 15:31 | 05/03/2015 | 10/03/2015 | 12:00 | 08:03 |
| 06/03/2015 | 07/03/2015 | 07/03/2015 | 17:00 | 12:21 | 06/03/2015 | 11/03/2015 | 12:00 | 12:29 |
| 07/03/2015 | 08/03/2015 | 08/03/2015 | 17:00 | 13:00 | 07/03/2015 | 12/03/2015 | 12:00 | 13:27 |
| 08/03/2015 | 09/03/2015 | 09/03/2015 | 17:00 | 16:37 | 08/03/2015 | 13/03/2015 | 12:00 | 07:43 |
| 09/03/2015 | 10/03/2015 | 10/03/2015 | 17:00 | 15:34 | 09/03/2015 | 14/03/2015 | 12:00 | 08:10 |
| 10/03/2015 | 11/03/2015 | 11/03/2015 | 17:00 | 15:57 | 10/03/2015 | 15/03/2015 | 12:00 | 09:19 |
| 11/03/2015 | 12/03/2015 | 12/03/2015 | 17:00 | 16:08 | 11/03/2015 | 16/03/2015 | 12:00 | 11:01 |
| 12/03/2015 | 13/03/2015 | 13/03/2015 | 17:00 | 15:40 | 12/03/2015 | 17/03/2015 | 12:00 | 08:27 |
| 13/03/2015 | 14/03/2015 | 14/03/2015 | 17:00 | 11:35 | 13/03/2015 | 18/03/2015 | 12:00 | 11:41 |
| 14/03/2015 | 15/03/2015 | 15/03/2015 | 17:00 | 12:17 | 14/03/2015 | 19/03/2015 | 12:00 | 12:13 |
| 15/03/2015 | 16/03/2015 | 16/03/2015 | 17:00 | 15:55 | 15/03/2015 | 20/03/2015 | 12:00 | 07:46 |
| 16/03/2015 | 17/03/2015 | 17/03/2015 | 17:00 | 12:56 | 16/03/2015 | 21/03/2015 | 12:00 | 09:50 |
| 17/03/2015 | 18/03/2015 | 18/03/2015 | 17:00 | 15:59 | 17/03/2015 | 22/03/2015 | 12:00 | 08:17 |
| 18/03/2015 | 19/03/2015 | 19/03/2015 | 17:00 | 16:04 | 18/03/2015 | 23/03/2015 | 12:00 | 07:44 |
| 19/03/2015 | 20/03/2015 | 20/03/2015 | 17:00 | 16:19 | 19/03/2015 | 24/03/2015 | 12:00 | 08:22 |
| 20/03/2015 | 21/03/2015 | 21/03/2015 | 17:00 | 13:25 | 20/03/2015 | 25/03/2015 | 12:00 | 11:28 |
| 21/03/2015 | 22/03/2015 | 22/03/2015 | 17:00 | 13:34 | 21/03/2015 | 26/03/2015 | 12:00 | 12:01 |
| 22/03/2015 | 23/03/2015 | 23/03/2015 | 17:00 | 15:16 | 22/03/2015 | 27/03/2015 | 12:00 | 08:23 |
| 23/03/2015 | 24/03/2015 | 24/03/2015 | 17:00 | 15:45 | 23/03/2015 | 28/03/2015 | 12:00 | 08:57 |
| 24/03/2015 | 25/03/2015 | 25/03/2015 | 17:00 | 15:38 | 24/03/2015 | 29/03/2015 | 12:00 | 09:21 |
| 25/03/2015 | 26/03/2015 | 26/03/2015 | 17:00 | 16:07 | 25/03/2015 | 30/03/2015 | 12:00 | 08:10 |
| 26/03/2015 | 27/03/2015 | 27/03/2015 | 17:00 | 10:23 | 26/03/2015 | 31/03/2015 | 12:00 | 08:26 |
| 27/03/2015 | 28/03/2015 | 28/03/2015 | 17:00 | 11:57 | 27/03/2015 | 01/04/2015 | 12:00 | 11:45 |
| 28/03/2015 | 29/03/2015 | 29/03/2015 | 17:00 | 13:27 | 28/03/2015 | 02/04/2015 | 12:00 | 12:08 |
| 29/03/2015 | 30/03/2015 | 30/03/2015 | 17:00 | 15:54 | 29/03/2015 | 03/04/2015 | 12:00 | 10:31 |
| 30/03/2015 | 31/03/2015 | 31/03/2015 | 17:00 | 15:29 | 30/03/2015 | 04/04/2015 | 12:00 | 08:51 |
| 31/03/2015 | 01/04/2015 | 01/04/2015 | 17:00 | 17:09 | 31/03/2015 | 05/04/2015 | 12:00 | 09:22 |

Table 24 - Settlement Runs

12 Appendix E: Imperfections Charge

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

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

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

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

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| | | | |
|------------|---------------|-------------|--------------|
| 10/11/2014 | €506,959.62 | -€12,756.86 | -€540,675.17 |
| 11/11/2014 | €305,371.45 | -€44,629.39 | -€565,550.06 |
| 12/11/2014 | €532,498.02 | -€28,281.20 | -€554,600.49 |
| 13/11/2014 | €345,990.75 | -€17,901.27 | -€553,923.16 |
| 14/11/2014 | €343,466.61 | -€1,320.38 | -€534,716.18 |
| 15/11/2014 | €494,457.91 | €3,019.64 | -€499,765.88 |
| 16/11/2014 | €360,376.17 | €7,373.68 | -€482,898.42 |
| 17/11/2014 | €553,003.49 | -€24,556.35 | -€545,895.52 |
| 18/11/2014 | €415,247.34 | €4,362.82 | -€543,481.42 |
| 19/11/2014 | €534,047.47 | -€12,653.01 | -€548,548.06 |
| 20/11/2014 | €548,216.05 | -€26,506.42 | -€571,397.50 |
| 21/11/2014 | €351,743.55 | -€34,277.81 | -€542,644.18 |
| 22/11/2014 | €402,367.39 | -€15,880.02 | -€504,134.67 |
| 23/11/2014 | €543,674.52 | -€9,757.73 | -€492,515.83 |
| 24/11/2014 | €436,153.86 | -€3,275.68 | -€568,242.69 |
| 25/11/2014 | €252,433.54 | -€17,224.01 | -€582,837.38 |
| 26/11/2014 | €268,639.50 | -€6,672.97 | -€590,843.52 |
| 27/11/2014 | €477,133.30 | -€17,221.50 | -€571,833.74 |
| 28/11/2014 | €514,059.40 | -€24,958.57 | -€548,216.58 |
| 29/11/2014 | €466,095.46 | -€17,684.09 | -€518,324.65 |
| 30/11/2014 | €426,493.00 | €228.22 | -€497,681.99 |
| 01/12/2014 | €425,729.84 | -€17,667.29 | -€564,559.17 |
| 02/12/2014 | €608,884.75 | -€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 |

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

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| | | | |
|------------|---------------|--------------|--------------|
| 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 |
| 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 |

Table 25 - Constraint Payments, Uninstructed Imbalance Payments, and Imperfections Charges

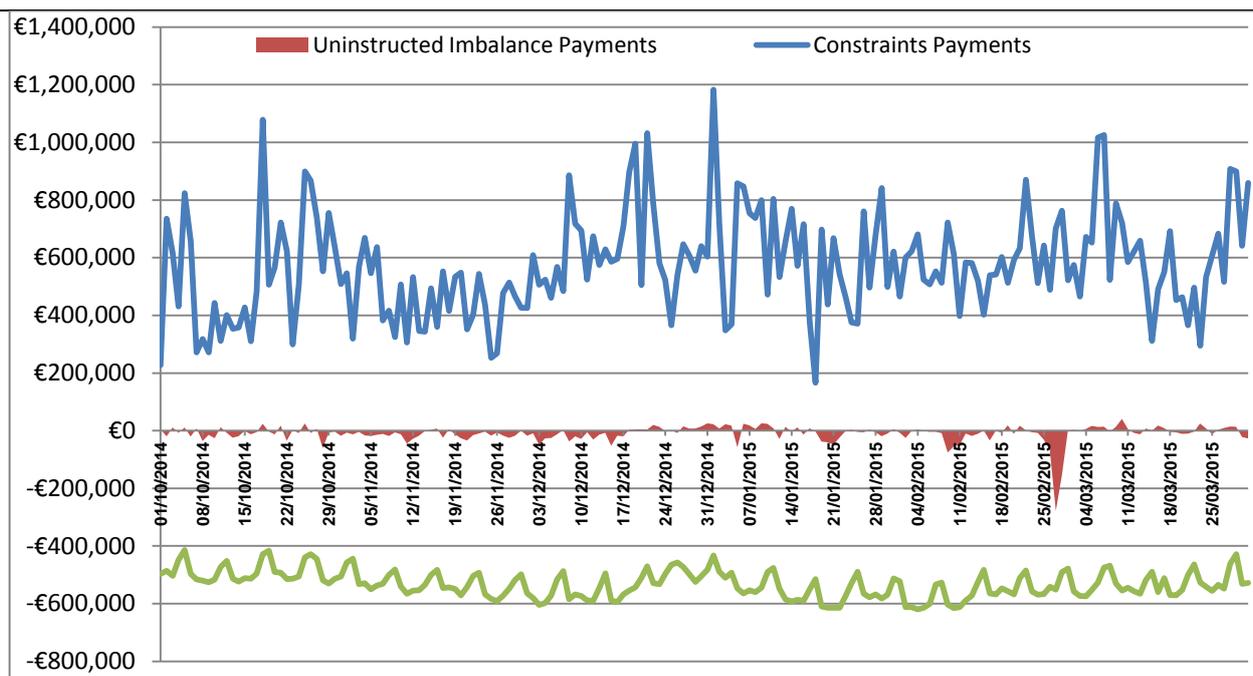


Figure 24 - Constraint Payments, Uninstructed Imbalance Payments, and Imperfections Charges

| 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 |

Table 26 - Make Whole Payments

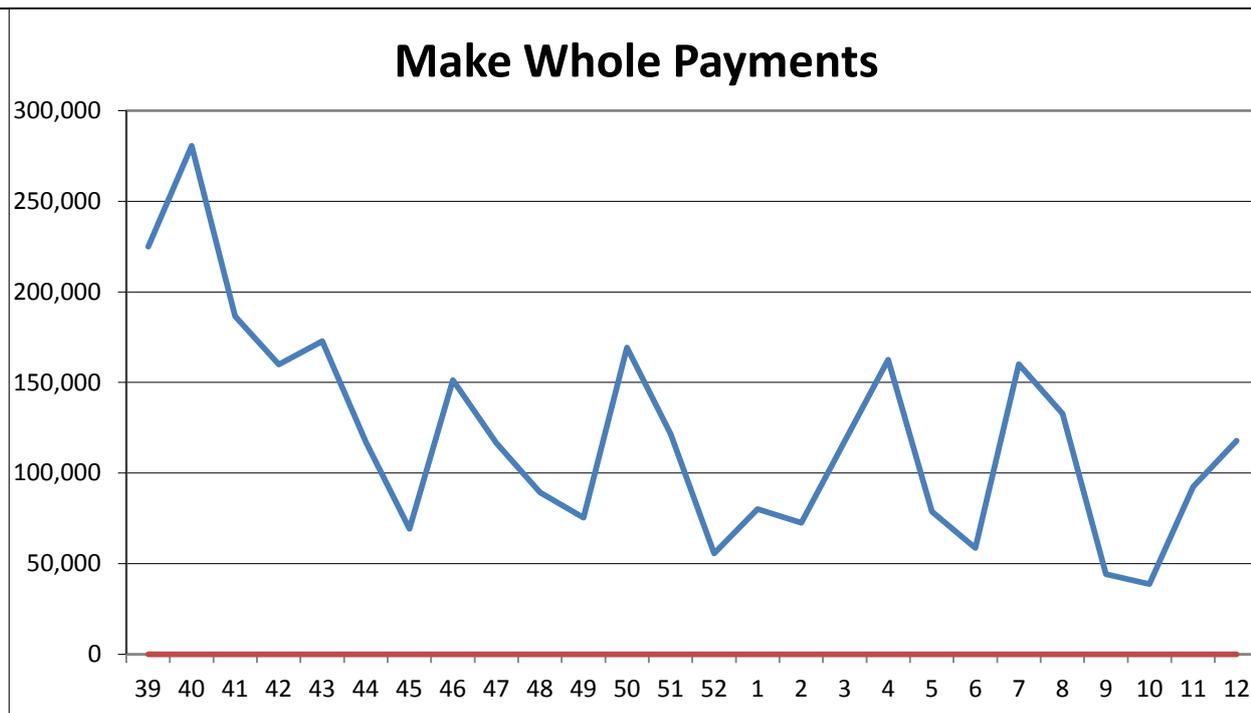


Figure 25 - Make Whole Payments

| 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 |

Table 28 - Testing Charges

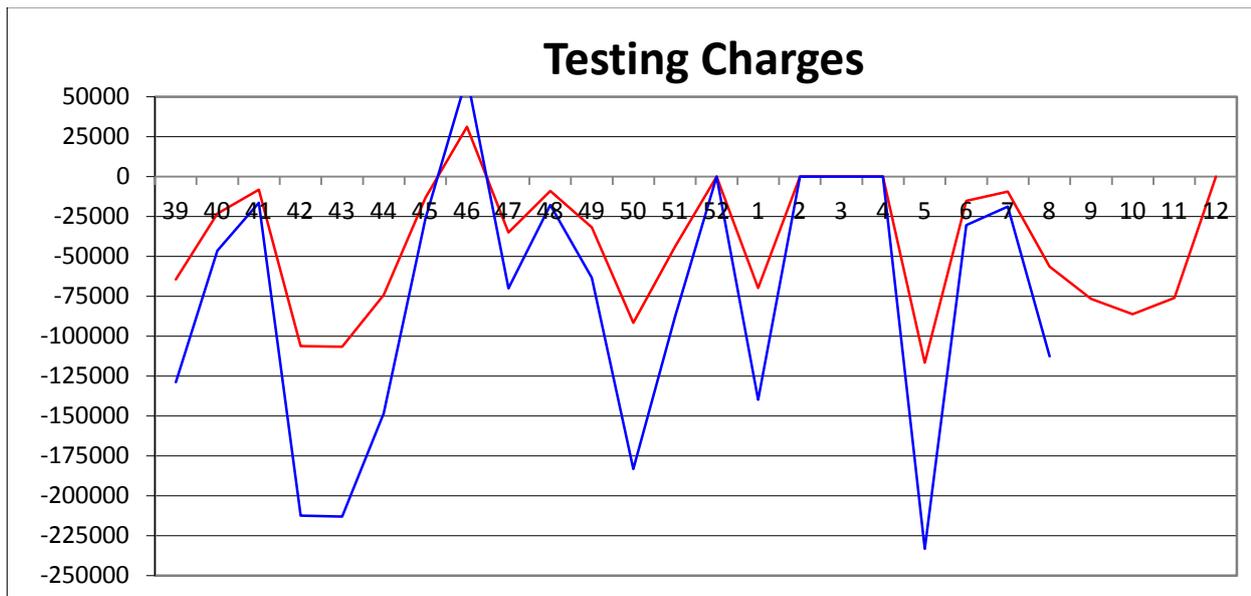


Figure 26 - Testing Charges

13 Appendix F: Default Commercial Offer Data Used

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

| PNAME | RNAME | Manual | Adjusted | Standing | COUNT |
|-----------|------------|--------|----------|----------|-------|
| PT_400090 | DSU_401620 | | | 31 | 31 |
| PT_400090 | DSU_401610 | 20 | | | 20 |
| PT_400138 | DSU_401590 | 31 | | | 31 |
| PT_400116 | DSU_401400 | 31 | | | 31 |
| PT_400090 | DSU_401610 | | | 12 | 12 |
| PT_400090 | DSU_401270 | | | 1 | 1 |
| PT_400111 | DSU_401390 | | | 3 | 3 |
| PT_400106 | DSU_401330 | 41 | | | 41 |
| PT_400111 | DSU_401390 | 28 | | | 28 |
| PT_400090 | DSU_401270 | 31 | | | 31 |
| PT_400133 | DSU_401530 | | | 30 | 30 |
| PT_400133 | DSU_401530 | | | 2 | 2 |
| PT_400124 | DSU_401490 | 31 | | | 31 |
| PT_400024 | GU_400120 | 32 | | | 32 |
| PT_400024 | GU_400121 | 32 | | | 32 |
| PT_400026 | GU_400140 | 31 | | | 31 |
| PT_400030 | GU_400180 | 39 | | | 39 |
| PT_400030 | GU_400181 | 40 | | | 40 |
| PT_400030 | GU_400182 | 40 | | | 40 |
| PT_400030 | GU_400183 | 37 | | | 37 |
| PT_400030 | GU_400200 | 40 | | | 40 |
| PT_400030 | GU_400201 | 41 | | | 41 |
| PT_400030 | GU_400202 | 38 | | | 38 |
| PT_400030 | GU_400203 | 40 | | | 40 |
| PT_400030 | GU_400210 | 37 | | | 37 |
| PT_400030 | GU_400211 | 38 | | | 38 |
| PT_400030 | GU_400220 | 37 | | | 37 |
| PT_400030 | GU_400221 | 38 | | | 38 |
| PT_400030 | GU_400240 | 36 | | | 36 |
| PT_400030 | GU_400250 | 38 | | | 38 |
| PT_400030 | GU_400251 | 37 | | | 37 |
| PT_400030 | GU_400252 | 37 | | | 37 |
| PT_400030 | GU_400260 | 37 | | | 37 |
| PT_400030 | GU_400270 | 43 | | | 43 |
| PT_400030 | GU_400271 | 44 | | | 44 |
| PT_400030 | GU_400272 | 45 | | | 45 |
| PT_400030 | GU_400280 | 37 | | | 37 |
| PT_400030 | GU_400281 | 37 | | | 37 |
| PT_400030 | GU_400290 | 38 | | | 38 |
| PT_400030 | GU_400300 | 40 | | | 40 |
| PT_400030 | GU_400311 | 40 | | | 40 |
| PT_400030 | GU_400323 | 38 | | | 38 |
| PT_400030 | GU_400360 | 36 | | | 36 |
| PT_400030 | GU_400361 | 36 | | | 36 |
| PT_400030 | GU_400362 | 36 | | | 36 |
| PT_400030 | GU_400363 | 37 | | | 37 |

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|-----------|-----------|----|--|--|----|
| PT_400030 | GU_400370 | 36 | | | 36 |
| PT_400030 | GU_400850 | 41 | | | 41 |
| PT_400032 | GU_400430 | 29 | | | 29 |
| PT_400034 | GU_400940 | 29 | | | 29 |
| PT_400034 | GU_401090 | 29 | | | 29 |
| PT_400034 | GU_401440 | 29 | | | 29 |
| PT_400035 | GU_400480 | 54 | | | 54 |
| PT_400037 | GU_400500 | 31 | | | 31 |
| PT_400041 | GU_400530 | 53 | | | 53 |
| PT_400044 | GU_400540 | 54 | | | 54 |
| PT_400054 | GU_400620 | 29 | | | 29 |
| PT_400055 | GU_400630 | 29 | | | 29 |
| PT_400064 | GU_400750 | 31 | | | 31 |
| PT_400064 | GU_400751 | 31 | | | 31 |
| PT_400064 | GU_400752 | 31 | | | 31 |
| PT_400064 | GU_400753 | 31 | | | 31 |
| PT_400064 | GU_400754 | 31 | | | 31 |
| PT_400064 | GU_400760 | 31 | | | 31 |
| PT_400064 | GU_400761 | 31 | | | 31 |
| PT_400064 | GU_400762 | 31 | | | 31 |
| PT_400064 | GU_400770 | 31 | | | 31 |
| PT_400064 | GU_400771 | 31 | | | 31 |
| PT_400064 | GU_400780 | 31 | | | 31 |
| PT_400064 | GU_400781 | 31 | | | 31 |
| PT_400075 | GU_400930 | 80 | | | 80 |
| PT_400077 | GU_400950 | 29 | | | 29 |
| PT_400078 | GU_401010 | 31 | | | 31 |
| PT_400078 | GU_401011 | 31 | | | 31 |
| PT_400087 | GU_401230 | 30 | | | 30 |
| PT_400148 | GU_401690 | 17 | | | 17 |
| PT_400150 | GU_401700 | 22 | | | 22 |
| PT_500024 | GU_500040 | 41 | | | 41 |
| 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_500032 | GU_501280 | 6 | | | 6 |
| PT_500032 | GU_501290 | 8 | | | 8 |
| PT_500040 | GU_500280 | 32 | | | 32 |
| PT_500040 | GU_500281 | 32 | | | 32 |
| PT_500040 | GU_500282 | 32 | | | 32 |
| PT_500040 | GU_500283 | 32 | | | 32 |
| PT_500040 | GU_500284 | 32 | | | 32 |
| PT_500045 | GU_500820 | 32 | | | 32 |
| PT_500045 | GU_500821 | 32 | | | 32 |
| PT_500045 | GU_500822 | 32 | | | 32 |
| PT_400030 | GU_400370 | 36 | | | 36 |
| PT_400030 | GU_400850 | 41 | | | 41 |
| PT_400032 | GU_400430 | 29 | | | 29 |
| PT_400034 | GU_400940 | 29 | | | 29 |
| PT_400034 | GU_401090 | 29 | | | 29 |
| PT_400034 | GU_401440 | 29 | | | 29 |
| PT_400035 | GU_400480 | 54 | | | 54 |
| PT_400037 | GU_400500 | 31 | | | 31 |

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|-----------|-----------|----|--|----|----|
| PT_500045 | GU_500823 | 32 | | | 32 |
| PT_500045 | GU_500824 | 32 | | | 32 |
| PT_500045 | GU_500825 | 32 | | | 32 |
| PT_500048 | GU_500904 | 44 | | | 44 |
| PT_500050 | GU_501040 | 29 | | | 29 |
| PT_500050 | GU_501050 | 29 | | | 29 |
| PT_500050 | GU_501150 | 29 | | | 29 |
| PT_500050 | GU_501190 | 29 | | | 29 |
| PT_500053 | GU_501130 | 31 | | | 31 |
| PT_500066 | GU_501210 | 29 | | | 29 |
| PT_400021 | GU_400021 | | | 31 | 31 |
| PT_400021 | GU_400050 | | | 31 | 31 |
| PT_400021 | GU_400060 | | | 31 | 31 |
| PT_400021 | GU_400070 | | | 31 | 31 |
| PT_400021 | GU_400080 | | | 31 | 31 |
| PT_400021 | GU_400591 | | | 31 | 31 |
| PT_400021 | GU_400600 | | | 31 | 31 |
| PT_400021 | GU_400910 | | | 31 | 31 |
| PT_400021 | GU_400920 | | | 31 | 31 |
| PT_400021 | GU_401080 | | | 31 | 31 |
| PT_400021 | GU_401380 | | | 31 | 31 |
| PT_400021 | GU_401600 | | | 31 | 31 |
| PT_400021 | GU_401640 | | | 31 | 31 |
| PT_400025 | GU_400130 | | | 31 | 31 |
| PT_400030 | GU_400310 | | | 31 | 31 |
| PT_400032 | GU_400430 | | | 2 | 2 |
| PT_400034 | GU_400940 | | | 2 | 2 |
| PT_400034 | GU_401090 | | | 2 | 2 |
| PT_400034 | GU_401440 | | | 2 | 2 |
| PT_400038 | GU_400550 | | | 31 | 31 |
| PT_400050 | GU_400650 | | | 31 | 31 |
| PT_400050 | GU_400660 | | | 31 | 31 |
| PT_400050 | GU_401000 | | | 31 | 31 |
| PT_400050 | GU_401060 | | | 31 | 31 |
| PT_400050 | GU_401150 | | | 31 | 31 |
| PT_400050 | GU_401240 | | | 31 | 31 |
| PT_400050 | GU_401250 | | | 31 | 31 |
| PT_400050 | GU_401290 | | | 31 | 31 |
| PT_400050 | GU_401360 | | | 31 | 31 |
| PT_400054 | GU_400620 | | | 2 | 2 |
| PT_400055 | GU_400630 | | | 2 | 2 |
| PT_400062 | GU_400730 | | | 31 | 31 |
| PT_400062 | GU_400731 | | | 31 | 31 |
| PT_400062 | GU_400840 | | | 31 | 31 |
| PT_400077 | GU_400950 | | | 2 | 2 |
| PT_400082 | GU_401100 | | | 31 | 31 |
| PT_500045 | GU_500823 | 32 | | | 32 |
| PT_500045 | GU_500824 | 32 | | | 32 |
| PT_500045 | GU_500825 | 32 | | | 32 |
| PT_500048 | GU_500904 | 44 | | | 44 |
| PT_500050 | GU_501040 | 29 | | | 29 |
| PT_500050 | GU_501050 | 29 | | | 29 |
| PT_500050 | GU_501150 | 29 | | | 29 |
| PT_500050 | GU_501190 | 29 | | | 29 |

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|-------------------|-----------|---------------|--------------|---------------|----------------|
| PT_400087 | GU_401230 | | | 1 | 1 |
| PT_400148 | GU_401690 | | | 15 | 15 |
| PT_400151 | GU_401770 | | | 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_500024 | GU_500040 | | | 1 | 1 |
| PT_500032 | GU_500211 | | | 31 | 31 |
| PT_500032 | GU_501120 | | | 31 | 31 |
| PT_500032 | GU_501290 | | | 24 | 24 |
| PT_500039 | GU_500270 | | | 31 | 31 |
| PT_500044 | GU_500720 | | | 31 | 31 |
| PT_500047 | GU_500790 | | | 31 | 31 |
| PT_500048 | GU_500904 | | | 1 | 1 |
| 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 | | | 31 | 31 |
| PT_500062 | GU_501180 | | | 31 | 31 |
| PT_500066 | GU_501210 | | | 2 | 2 |
| PT_500073 | GU_501230 | | | 31 | 31 |
| PT_500074 | GU_501250 | | | 31 | 31 |
| PT_400021 | I_ROIEWIC | 31 | | | 31 |
| PT_500075 | I_NIMOYLE | 76 | | | 76 |
| PT_500024 | I_NIMOYLE | 41 | | | 41 |
| PT_500021 | I_NIMOYLE | 31 | | | 31 |
| PT_500058 | I_NIMOYLE | 29 | | | 29 |
| PT_500069 | I_NIMOYLE | 93 | | | 93 |
| PT_500031 | I_NIMOYLE | 31 | | | 31 |
| PT_400113 | I_ROIEWIC | 31 | | | 31 |
| PT_500037 | I_NIMOYLE | 31 | | | 31 |
| PT_400096 | I_ROIEWIC | 80 | | | 80 |
| PT_400136 | I_ROIEWIC | 59 | | | 59 |
| PT_400115 | I_ROIEWIC | 31 | | | 31 |
| PT_400108 | I_ROIEWIC | 72 | | | 72 |
| PT_500070 | I_NIMOYLE | 81 | | | 81 |
| PT_400030 | I_ROIEWIC | 33 | | | 33 |
| PT_400099 | I_ROIEWIC | 31 | | | 31 |
| Total | | 4211 | 0 | 1633 | 5844 |
| Percentage | | 72.06% | 0.00% | 27.94% | 100.00% |

Table 29 – Default Commercial Data Used

14 Appendix G: Total Charges and Payments Data

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

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

| 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 | £92,283.95 | £30,407.22 | £960.16 | £0.00 | £0.00 | £0.00 | 98,224,709.72 |
| | NI | £30,175,818.70 | £9,293,564.48 | £406,620.40 | £46,940.79 | £7,639.04 | £408.77 | £52,408.32 | £11,933.67 | £470.83 | £0.00 | £0.00 | £0.00 | 39,995,805.00 |
| 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 | £149,812.37 | £34,908.87 | £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 | £2,943.28 | £85,242.72 | £17,526.18 | £1,047.39 | £0.00 | £0.00 | £0.00 | 73,064,976.28 |
| | NI | £16,832,807.07 | £5,122,118.14 | £325,108.62 | £91,338.63 | £25,719.39 | £870.76 | £34,166.04 | £7,520.83 | £436.14 | £0.00 | £0.00 | £0.00 | 22,440,085.62 |
| Aug-14 | 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 |
| Sep-14 | ROI | £73,166,499.86 | £17,774,079.00 | £1,638,145.68 | £285,506.09 | £62,431.70 | £3,367.28 | £92,320.83 | £30,020.38 | £728.19 | £0.00 | £0.00 | £0.00 | 93,053,099.01 |
| | NI | £24,828,028.32 | £5,414,449.74 | £421,681.34 | £62,719.19 | £15,276.27 | £566.66 | £41,391.12 | £13,194.54 | £660.78 | £0.00 | £0.00 | £0.00 | 30,797,967.96 |
| 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 | £1,338.36 | £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 | £53,956,275 | £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 | £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 |

Table 30 - 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 | €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 |
| 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 | €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 |
| | 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 |

Table 31 - 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 |

Table 32 – 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 |

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| Invoice Month | SEM Balancing Costs | VAT Balancing Costs |
|---------------|---------------------|---------------------|
| October 2014 | -€361.28 | -€ 968.24 |
| December 2014 | -€393.11 | €0.00 |
| January 2015 | -€416.65 | €0.04 |
| February 2015 | -€364.18 | €0.02 |
| March 2015 | -€382.43 | -€0.03 |

Table 33 - 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> |

Table 34 - 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 |

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| | | | | | |
|------------|------------|-----|---------|---------|-----|
| 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 |
| 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 |

Table 35 - MIP Vs LR Peak Price Comparison