



Market Operator Monthly Report

October 2018

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Executive Summary

This Single Electricity Market Operator's (SEMO) report covers the month of operation of October 2018 and is published in accordance with the Single Electricity Market (SEM) Committee decision and Clause 2.144 of the Trading and Settlement Code.

During the month of October 2018, there was no late Credit Report publication as per the Trading and Settlement Code timelines.

There were 12 defaults by Participants during October 2018. The largest of these was a Capacity 2018 Initial invoice for €385,569.75 which was remedied on the same day.

There were no Credit Cover Increase defaults during October 2018 as per the Trading and Settlement code timelines.

125 general queries were received in October 2018. During the same period 127 general queries were resolved.

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

Monthly Statistics

Trading and Settlement Code Breaches

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

| Trading and Settlement Code Breaches | | | |
|--------------------------------------|------------------------|-----------|----------|
| Area | | Major | Minor |
| Data Providers | | - | - |
| Market Participants | Pricing & Scheduling | - | - |
| | Settlement | - | - |
| | Funds Transfer | 12 | - |
| | Credit Risk Management | - | - |
| SEMO | Pricing & Scheduling | - | - |
| | Settlement | - | 3 |
| | Funds Transfer | - | - |
| | Credit Risk Management | - | - |
| | Other | - | - |
| Total | | 12 | 3 |

Table 1 – Trading and Settlement Code Breaches

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

Key:

- Major Breach - late publishing of invoices, default notices issued for non-payment or similar.
- Minor Breach - deadlines not met, but no financial implication to Participants. This includes late posting of pricing and settlement runs.

Financial Statistics

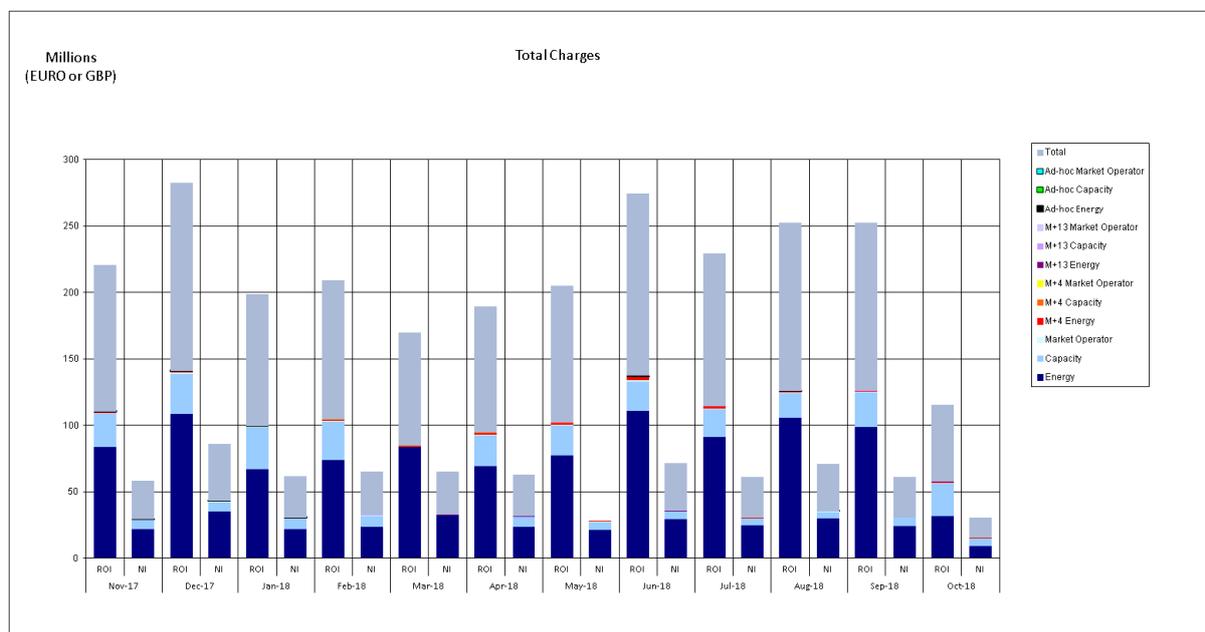


Figure 1 - Total Charges for Each Currency

| Market | Oct-18 | |
|------------------------|--------------------|--------------------|
| | ROI | NI |
| Energy | €31,530,401 | £9,455,756 |
| Capacity | €24,300,026 | £5,693,202 |
| Market Operator | €595,030 | £150,691 |
| M+4 Energy | €865,326 | £108,258 |
| M+4 Capacity | €183,408 | £35,783 |
| M+4 Market Operator | €4,241 | £1,126 |
| M+13 Energy | €148,617 | £8,612 |
| M+13 Capacity | €39,733 | £2,164 |
| M+13 Market Operator | €1,136 | £108 |
| Ad-hoc Energy | €0 | £0 |
| Ad-hoc Capacity | €0 | £0 |
| Ad-hoc Market Operator | €0 | £0 |
| Total | €57,667,916 | £15,455,699 |

Table 2 - Total Charges for Each Currency

Notes relating to Table 2 and 3:

- Month of inclusion based on Invoice Date.

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- Amounts are after application of Settlement Reallocations.
- Previous month's data is available in [Appendix G](#).

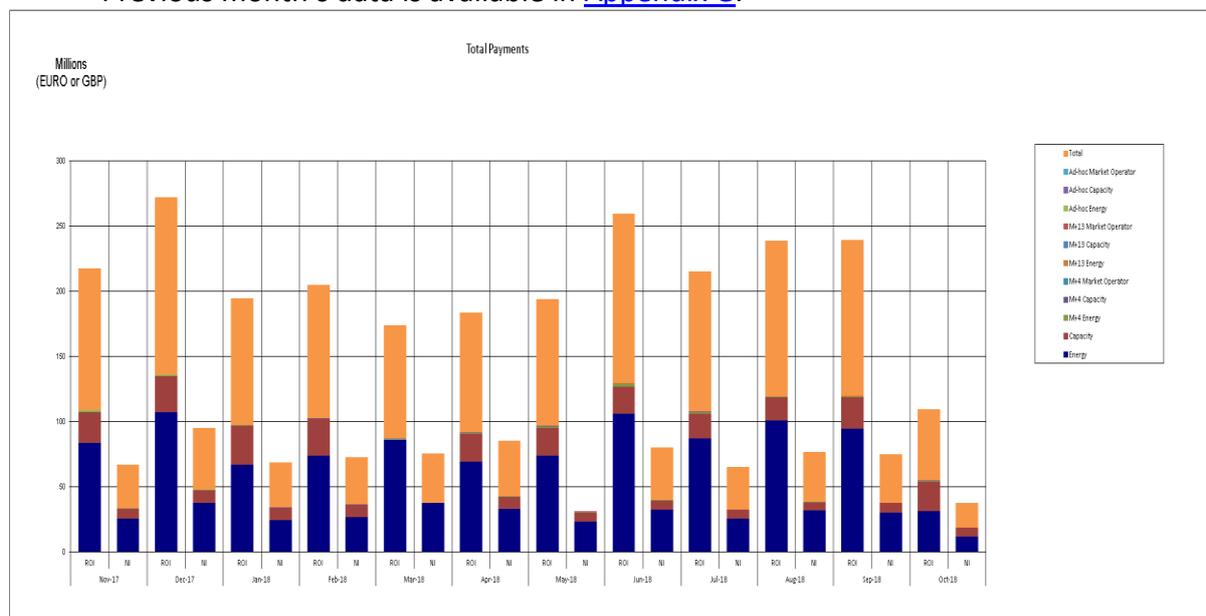


Figure 2 - Total Payments for Each Currency

| Market | Oct-18 | |
|------------------------|--------------------|--------------------|
| | ROI | NI |
| Energy | €30,964,136 | £11,418,621 |
| Capacity | €22,562,931 | £7,231,162 |
| M+4 Energy | €878,875 | £107,709 |
| M+4 Capacity | €189,837 | £30,084 |
| M+4 Market Operator | €5,160 | £1,123 |
| M+13 Energy | €148,618 | £8,612 |
| M+13 Capacity | €39,721 | £2,161 |
| M+13 Market Operator | €1,133 | £110 |
| Ad-hoc Energy | €0 | £0 |
| Ad-hoc Capacity | €0 | £0 |
| Ad-hoc Market Operator | €0 | £0 |
| Total | €54,790,411 | £18,799,581 |

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.

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

Historical values for testing charges have been provided in [Appendix E](#).

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

In tables 4 and 5 below:

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

| Date Of Invoice | Week No | SEM Balancing Costs | VAT Balancing Costs |
|-----------------|---------|---------------------|---------------------|
| 05/10/2018 | 38 | €1,865,440.47 | €0 |
| 12/10/2018 | 39 | €483,934.10 | €0 |

Table 4 – Balancing Costs for Trading Payments and Charges

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

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

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

| October 2018 | |
|---------------------|-----------------|
| Capacity Charges | €-37,611,291.54 |
| Capacity Payments | € 37,611,055.65 |
| Balancing Costs | € -235.89 |
| VAT | €0 |

Table 5 - Balancing Costs for Capacity Settlement

/Historical figures, the current financial year full Balancing Costs for both Trading and Capacity are provided in [Appendix H](#). VAT Balancing costs exclude Currency Cost related VAT.

Total Currency Costs

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

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

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

| Last Date Of Billing Period | Date Of Invoice | Week No | Currency Costs For Energy Settlement (Invoice and Payment) | Currency Cost Adjustment for Inter-jurisdictional SRAs | Total Currency Cost |
|------------------------------------|------------------------|----------------|---|---|----------------------------|
| 29/09/2018 | 05/10/2018 | 38 | £1,252.69 | £- | £1,252.69 |
| 30/09/2018 | 12/10/2018 | 39 | -£5,065.55 | £- | -£5,065.55 |

Table 6 - Total Currency Costs for Trading Payments and Charges

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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 £12,747.58 and a loss of up to £51,843.94. Whether Currency Costs are a cost or benefit to Participants is directly related to whether the currency is rising or falling between the billing period, invoice date and payment dates.

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

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

| Date Of Invoice | Capacity Month | Currency Costs For Capacity Settlement |
|-----------------|----------------|--|
| 09/10/2018 | September 2018 | -£9,654.50 |

Table 7 - Total Currency Costs for Capacity Payments and Charges

Financial Changes between Initial Settlement and Subsequent Reruns

The following graphs provide a breakdown of resettlement amounts for the M+4 resettlement period of June 2018 and the M+13 period of September 2017 for Energy and Capacity.

3.1.1 Energy Market

Note: - For Figure 4, 6, 7, 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 5 & 8

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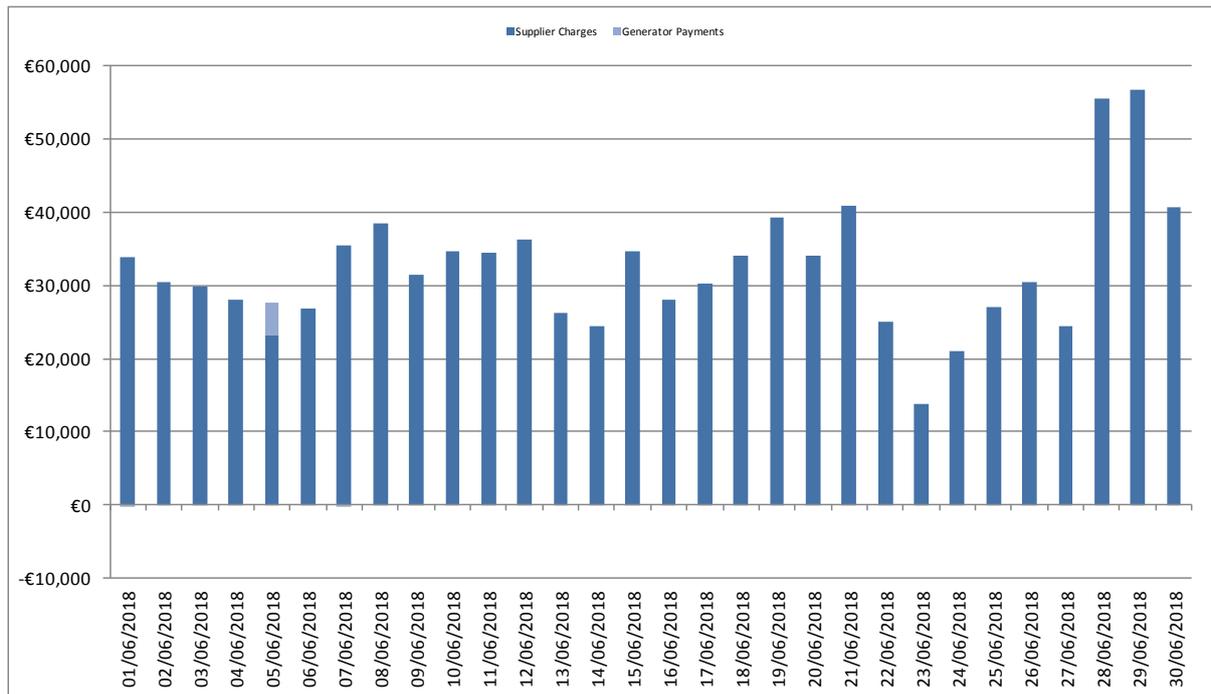


Figure 5 – Total Monetary Changes for Energy Resettlement – June 2018

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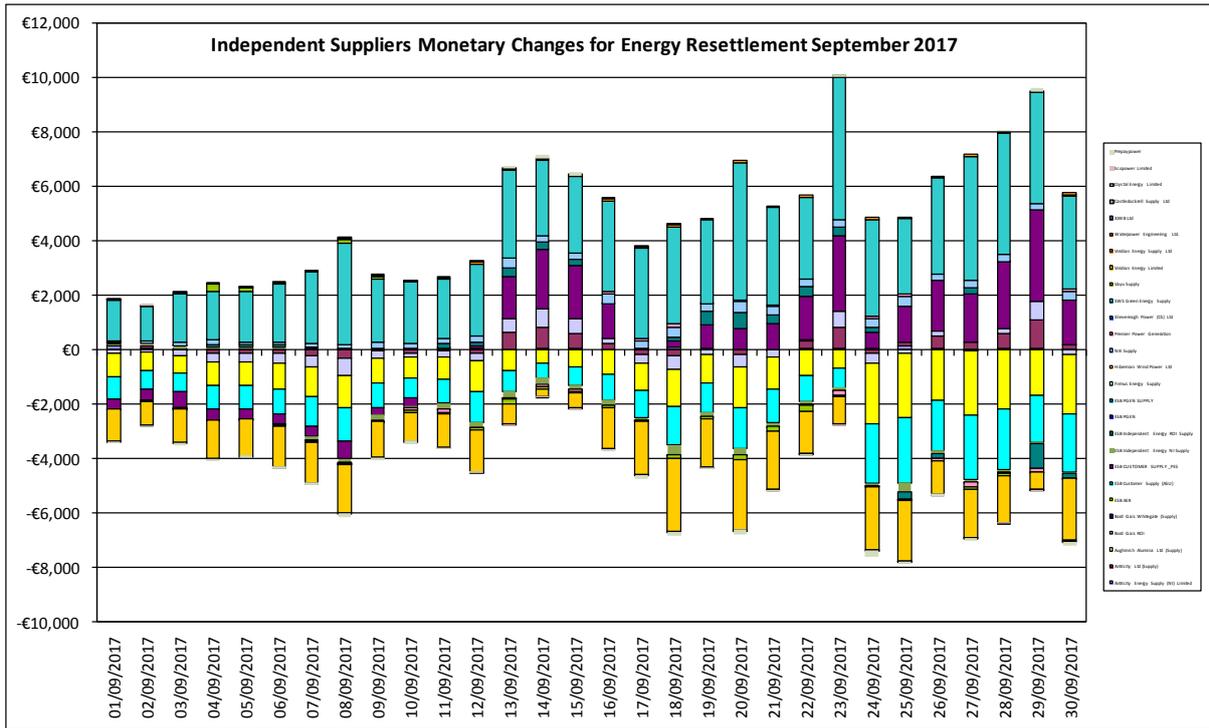


Figure 6 - Independent Suppliers Monetary Changes for Energy Resettlement – Sept 2017

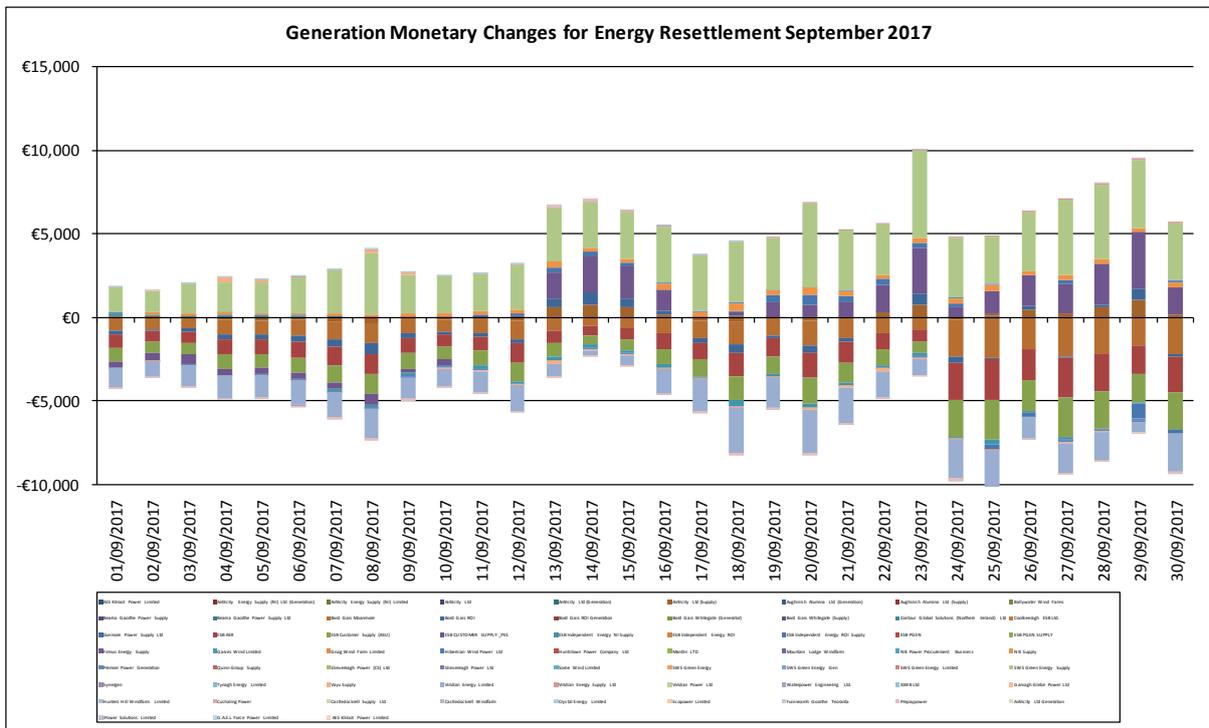


Figure 7 - Generation Monetary Changes for Energy Resettlement – Sept 2017

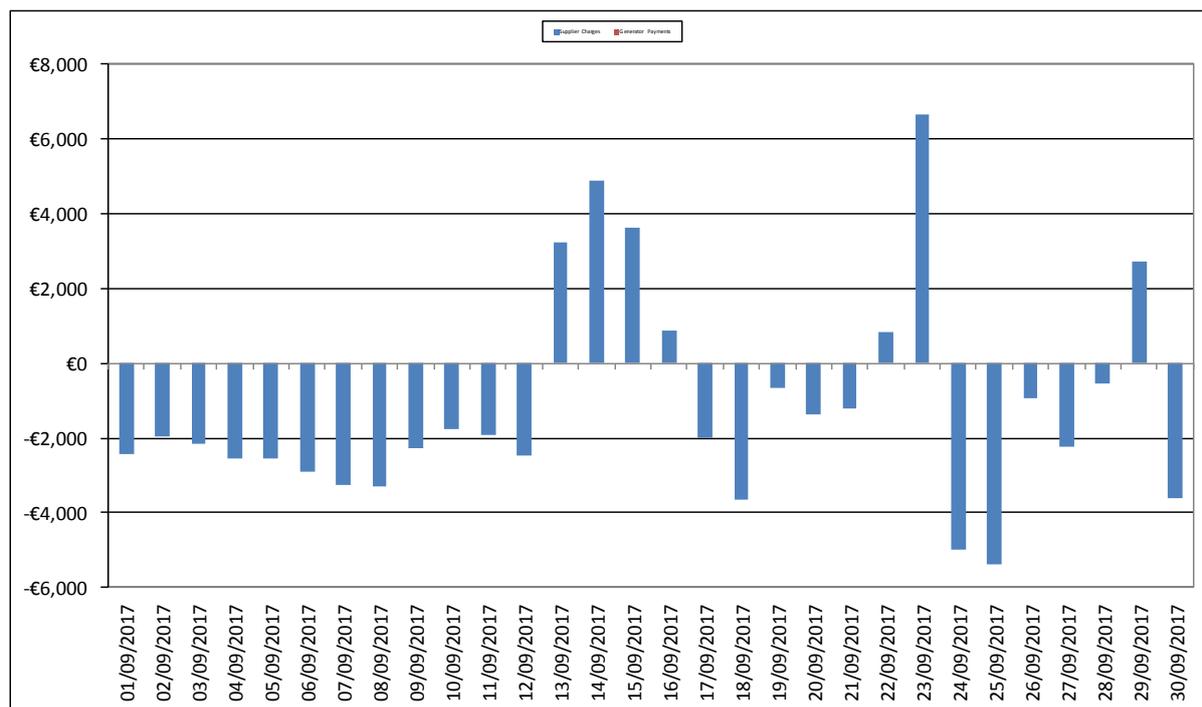


Figure 8 - Total Monetary Changes for Energy Resettlement – Sept 2017

3.1.2 Capacity Market

Note: - For Figure 10, 11 & 14 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 12.

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

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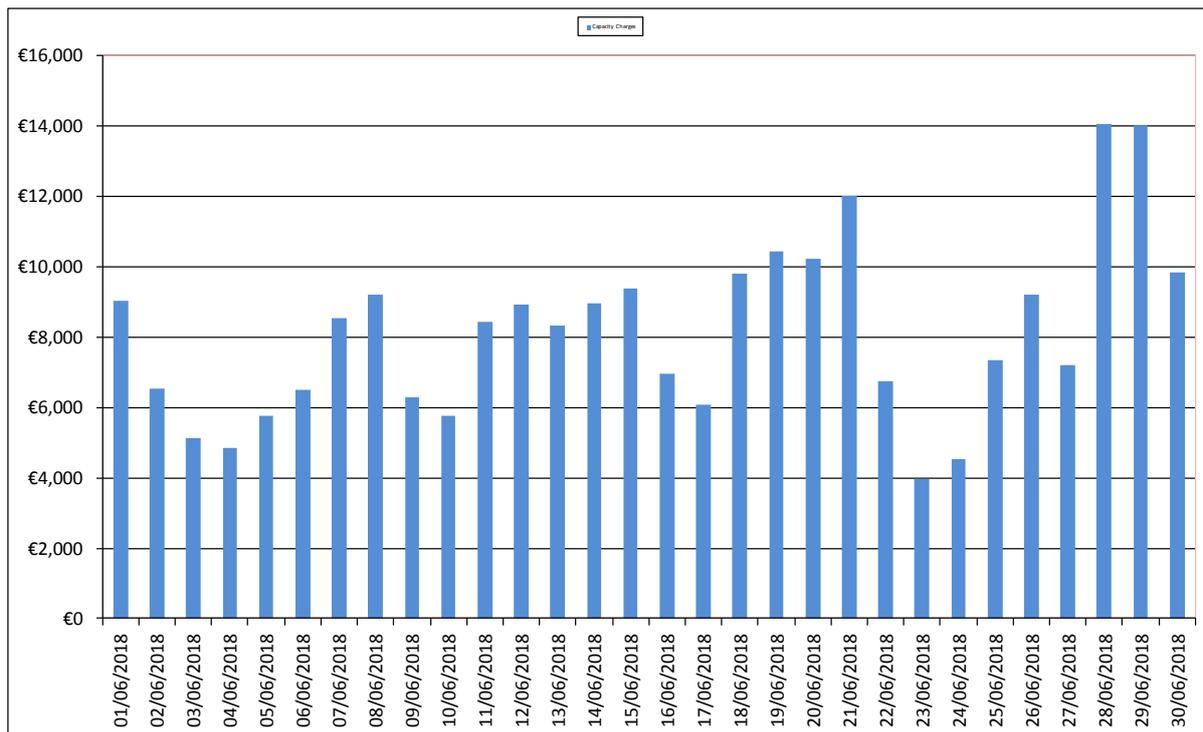


Figure 9 - Independent Suppliers Monetary Changes for Capacity Resettlement – June 2018

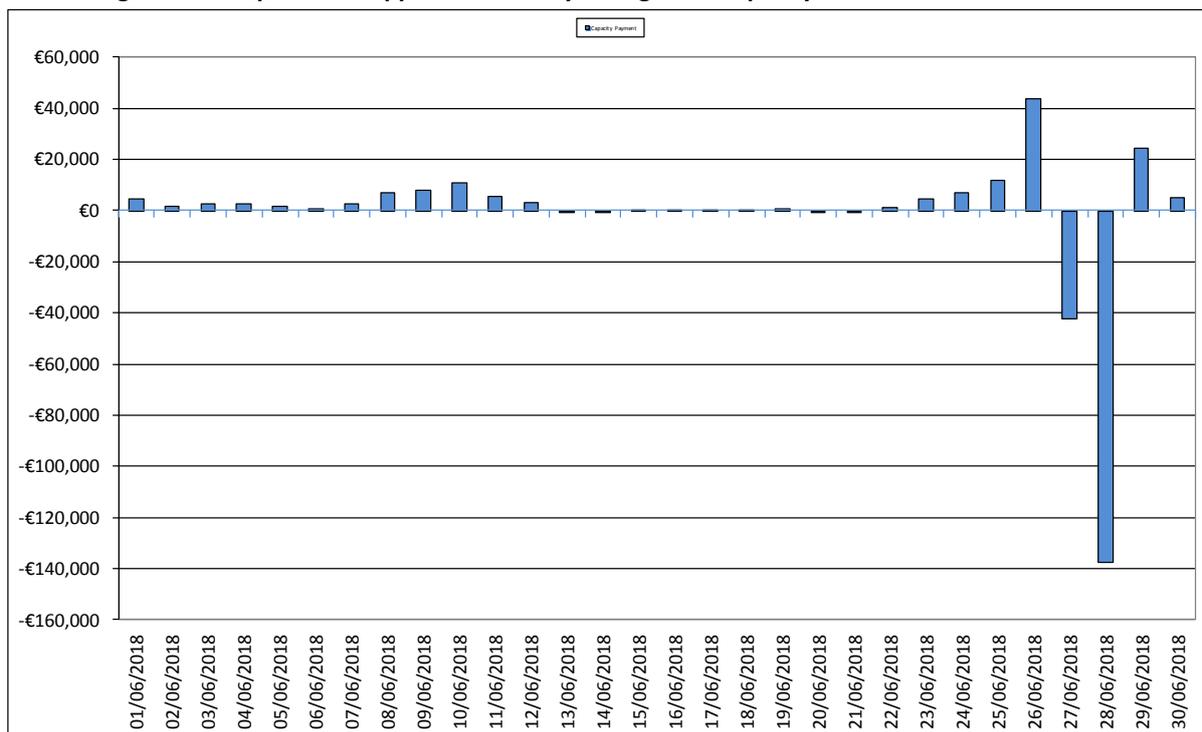


Figure 10 - All Generation Monetary Change for Capacity Resettlement – June 2018

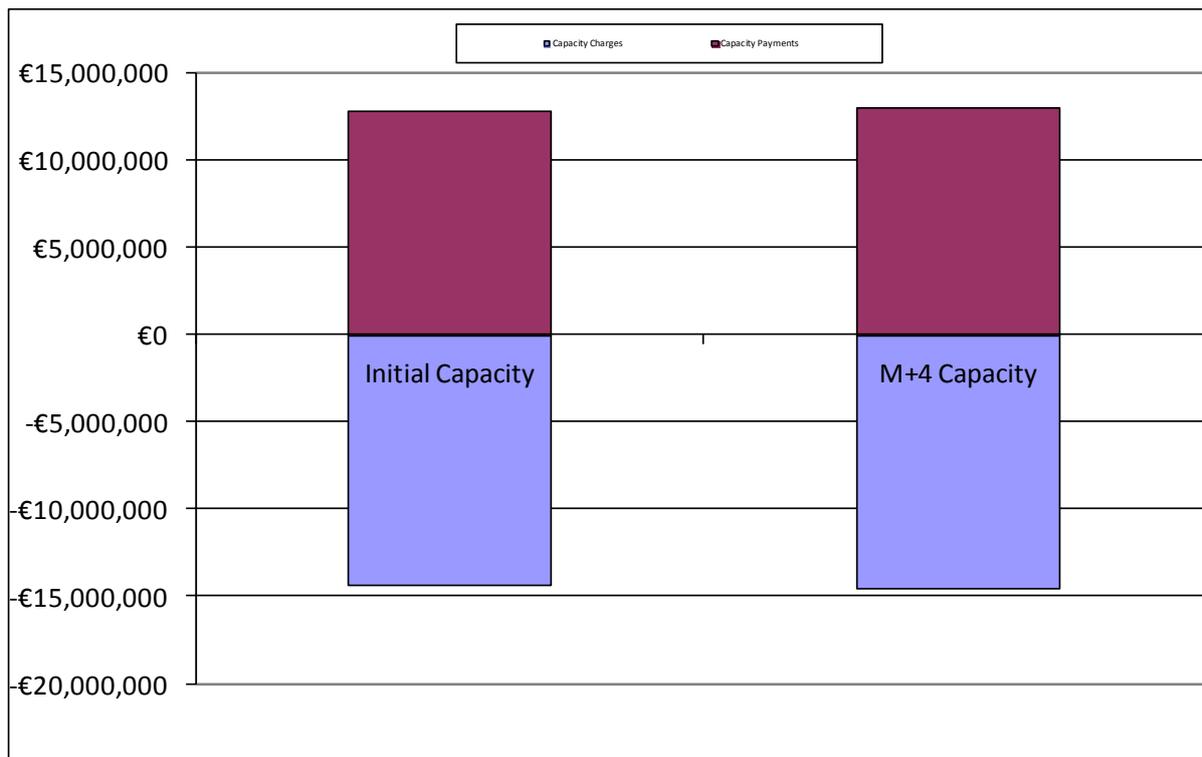


Figure 11 - Comparison of Distribution of Monetary Amounts between Capacity Initial and Resettlement June 2018.

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

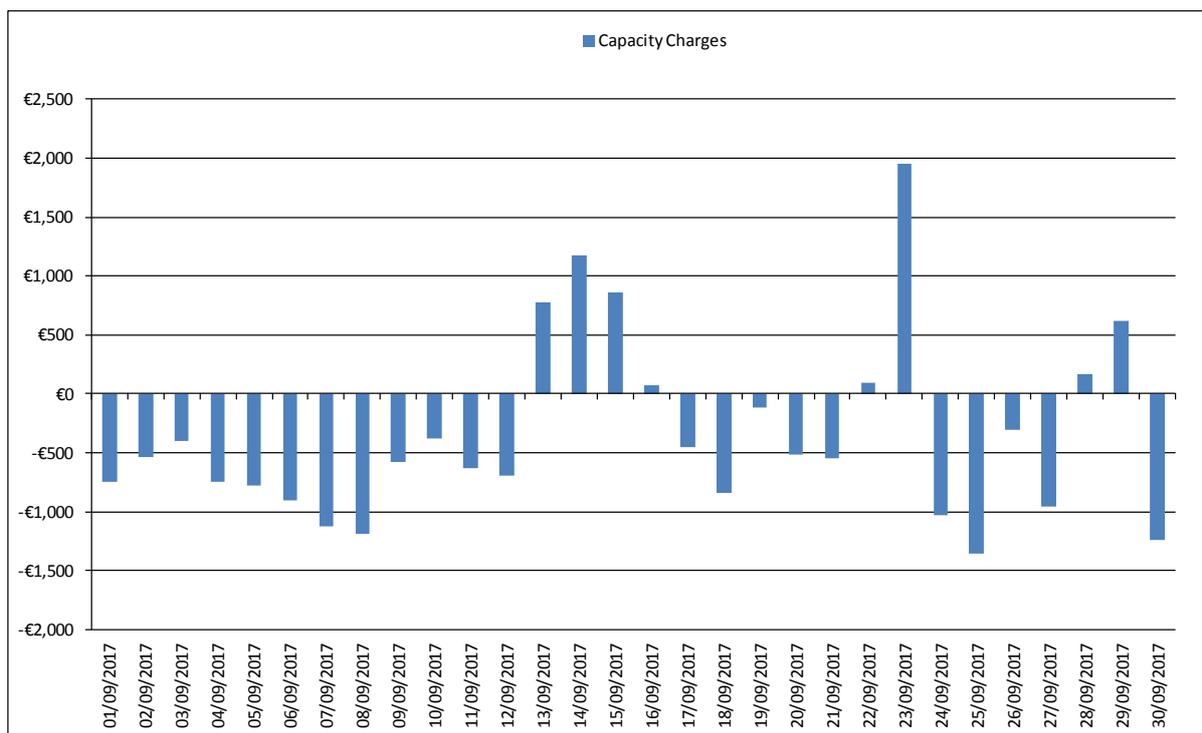


Figure 12 - Independent Suppliers Monetary Changes for Capacity Resettlement - Sept 2017

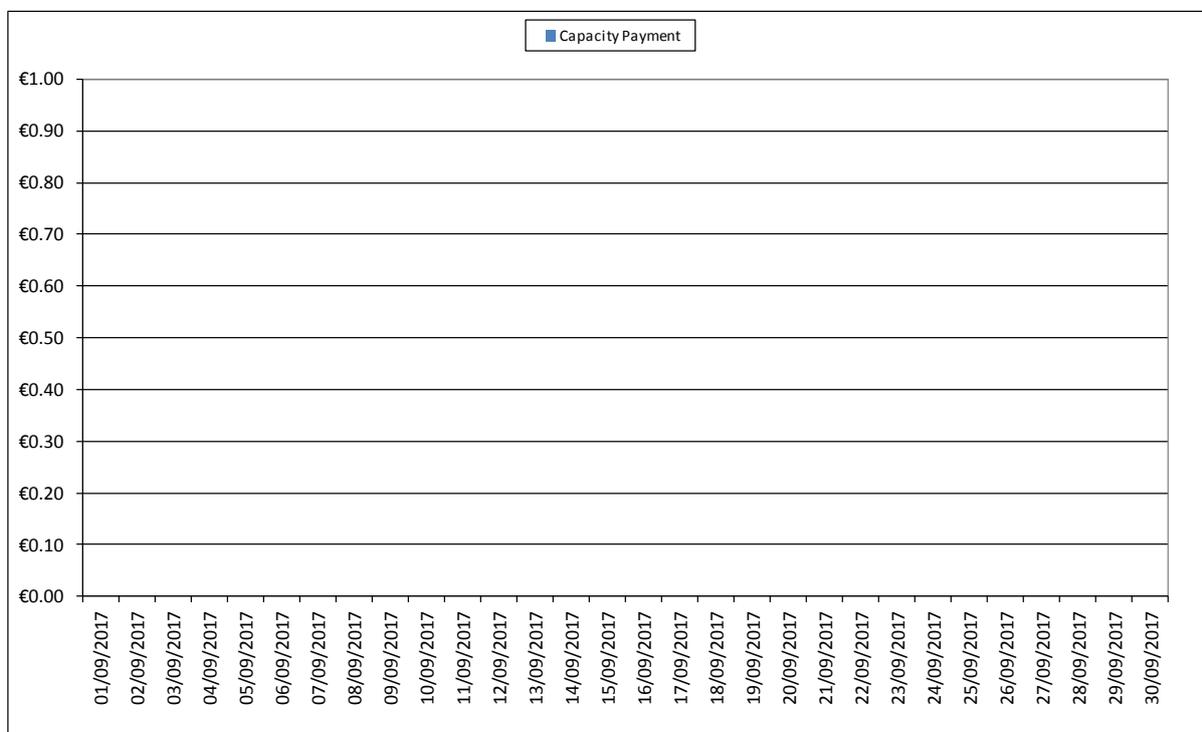


Figure 13 – All Generation Monetary Change for Capacity Resettlement – Sept 2017

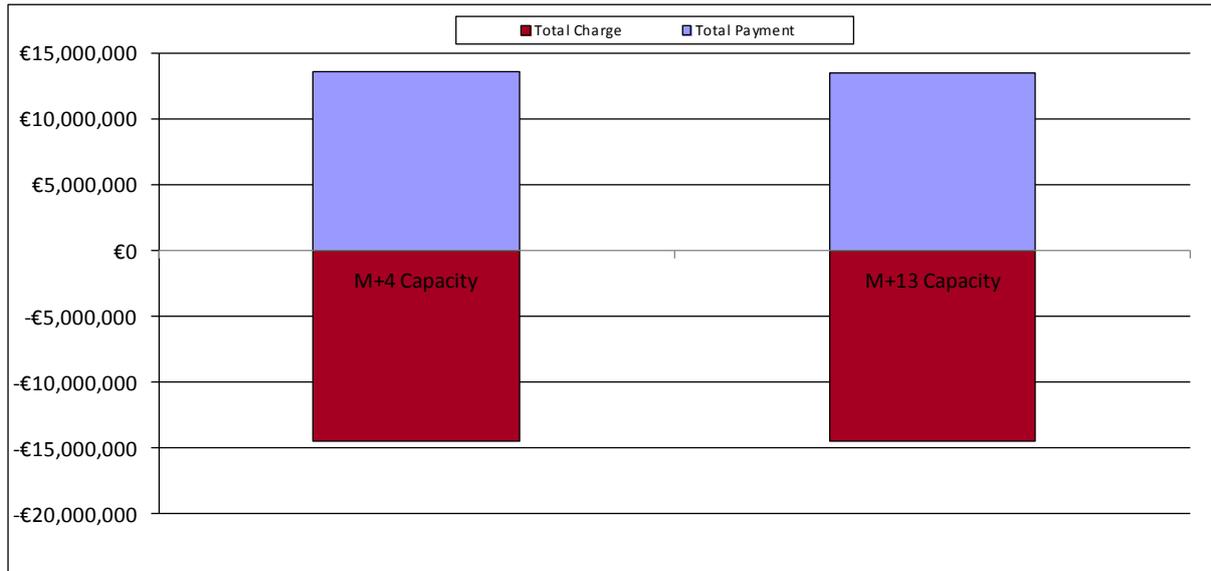


Figure 14 - Comparison of Distribution of Monetary Amounts between M+4 Capacity Resettlement and M+13 Capacity Resettlement – Sept 2017.

Helpdesk Call Statistics

The statistics presented in Table 8 - Helpdesk Call Statistics covers the month of October 2018

Market Helpdesk Report: 01/10/18 to 31/10/18

| | Received | Resolved within the period | Not Resolved | Resolved in the period | Resolution Time (Working Days) | Resolved On Time |
|----------------------|------------|----------------------------|--------------|------------------------|--------------------------------|------------------|
| Normal | 124 | 112 | 12 | 126 | 1.45 | 115 |
| Important | 1 | 1 | 0 | 1 | 0.07 | 1 |
| Urgent | 0 | 0 | 0 | 0 | 0.00 | 0 |
| Settlement | 7 | 3 | 4 | 5 | 8.68 | 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 | 132 | 116 | 16 | 132 | 2.04 | 120 |

Table 8 – Helpdesk Statistics

Definitions:

- Resolved within the Period refers to queries raised and resolved within the calendar month of October 2018.
- Resolved in the Period refers to queries resolved within October 2018, and includes queries raised before this time.
- Resolution Time (Working Days) refers to average time to resolve, in working days, for this category of query. It is calculated based on all queries for the category, not just October 2018.
- Not Resolved refers to queries raised but not resolved within October 2018.
- 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 a mandated service level under the Trading and Settlement Code.
- Disputes are where a dispute has been raised over the outcome of a data or settlement query.

The average resolution time for General Queries has increased by 0.30 working days from 1.14 in September 2018 to 1.44 in October 2018. SEMO has a metric to resolve General Queries within 20 Working Days. These include queries received over the phone and e-mail.

Data and Settlement Queries generally continue to be responded to within the timelines required by the Trading and Settlement Code, i.e. one calendar month. No Formal Query timeline extensions were required during October 2018 with regard to formal Settlement Queries.

Disputes and Queries

5.1.1 Disputes

No Disputes were raised during the month of October 2018.

| Topic | Number Of Queries |
|-------|-------------------|
| | |

Table 9– Upheld Dispute Queries by Topic

5.1.2 Data Queries (SEM)

There were no formal data queries received during the month of October 2018.

| Topic | Number Of Queries |
|-------|-------------------|
| | |

Table 10– Upheld Data Queries by Topic

5.1.3 Settlement Queries

I-SEM

There were thirty-four formal Settlement queries raised in October 2018 and twenty-two were upheld.

| Topic | Number Of Queries |
|----------------------------|-------------------|
| Difference Charges | 2 |
| Fixed Cost Payment | 4 |
| Discount Component Payment | 6 |
| Uninstructed imbalances | 10 |

Table 11 – Upheld Settlement Queries by Topic

- One query relating to Capacity payments was not upheld.
- Five queries relating to Difference Charges were raised; two were upheld and were deemed to be of low materiality. Two investigations are ongoing.
- Eight queries relating to Discount Components were raised and six were upheld. One was deemed to be of high materiality and five of low materiality. Two investigations ongoing.
- Eight queries relating to Fixed Costs were raised, four were upheld. Three were deemed to be of high materiality and one of low materiality. Four investigations are ongoing.
- One query on the Exchange rate was rejected.
- One query on Meter Generation was not upheld.

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- Ten queries relating to Uninstructed Imbalances were raised; all were upheld and deemed to be of low materiality.

- **Unresolved Queries**

There are twenty-six unresolved I-SEM Settlement Queries as of the 14th November 2018.

A full list of all the Settlement formal queries raised in October 2018 is contained in [Appendix B](#).

SEM

There were six formal Settlement queries raised in October 2018 and four were upheld.

| Topic | Number Of Queries |
|------------------|-------------------|
| Exchange Rates | 2 |
| Meter Generation | 2 |

Table 12 – Upheld Settlement Queries by Topic

- Two queries relating to Exchange rates were raised. Both were upheld and deemed to be of low materiality.
- Two queries relating to Meter Generation were raised. Both were upheld; one was deemed to be of low materiality and the other was deemed to be high materiality.
- Two queries relating to Energy Payments were raised and investigations are ongoing.

- **Unresolved Queries**

There are two unresolved SEM Settlement Queries as of the 14th November 2018.

A full list of all the Data and Settlement queries raised in October 2018 is contained in [Appendix B](#).

Central Systems

6.1 List of System Errors and Re-runs

Details are provided in [Appendix C: List of All Systems Errors and Failures](#)

6.1.1 Re-Pricing / Resettlement Runs

There were no Ad hoc Re-Settlement runs carried out in October 2018.

6.1.2 System Errors

There were no Market Application defects found in October 2018.

Details are provided in [Appendix C: List of All Systems Errors and Failures](#)

6.2. – Market System Releases

6.2.1 – POMAX Release 6.2.0 (CR355 – Settlement SEM End Date)

On Thursday, 04th October 2018, Release 6.2.0 was deployed to the SEM Settlement System (POMAX). The Release allowed SEMO to specify the SEM Market End Date. The Release also re-configured the Settlement System so that all Markets (Energy / VMOC / Capacity / FMOC) ended on the End Date specified.

The SEM Market End Date was set as : 23:00 – Sun 30th September 2018

Occasional Components

7.1 Disaster Recovery/Business Continuity Tests

There were no scheduled Business Continuity tests performed during October 2018.

7.2 Communications or Systems Failures

There were on communication failures during October 2018.

7.3 Denial of Service Attacks

There was no Denial of Service Attacks during October 2018.

Appendix A: Detail of Trading and Settlement Code Breaches

Data Provider

There were no breaches to report in October 2018.

Market Participant

| Op# | Date Identified | Run Type | Quality or Timing | Party | Issue Type | Description | Cause | Resolution | T and SC Breach |
|------------|-----------------|----------|-------------------|-----------------|--|-------------------|---|------------|-----------------|
| 24/10/2018 | Money In | Timing | Participant | Payment Default | Just Energy (Ireland) Limited (PT_400211) defaulted on an Energy Week 24 2018 M+4 invoice. | Participant Error | A default letter was issued to the Participant. | Major | |
| 17/10/2018 | Money In | Timing | Participant | Payment Default | Arden Energy Limited (PT_400149) defaulted on an Energy Week 23 2018 M+4 invoice & Week 39 2018 Initial. | Participant Error | A default letter was issued to the Participant. | Major | |
| 12/10/2018 | Money In | Timing | Participant | Payment Default | Gruig Wind Farm Limited (PT_500047) defaulted on a FMOC September 2018 invoice. | Participant Error | A default letter was issued to the Participant. | Major | |
| 12/10/2018 | Money In | Timing | Participant | Payment Default | Statkraft (PT_402540) defaulted on a FMOC September 2018 invoice. | Participant Error | A default letter was issued to the Participant. | Major | |
| 12/10/2018 | Money In | Timing | Participant | Payment Default | Templederry Renewable Energy Supply Limited (PT_400129) defaulted on a Capacity September 2018 Initial invoice. | Participant Error | A default letter was issued to the Participant. | Major | |
| 12/10/2018 | Money In | Timing | Participant | Payment Default | Indaver Energy Limited (PT_400088) defaulted on a Capacity September 2018 Initial invoice. | Participant Error | A default letter was issued to the Participant. | Major | |
| 12/10/2018 | Money In | Timing | Participant | Payment Default | Panda Power Limited (PT_400161) defaulted on a Capacity September 2018 Initial invoice. | Participant Error | A default letter was issued to the Participant. | Major | |
| 03/10/2018 | Money In | Timing | Participant | Payment Default | AES Ballylumford Limited (PT_500040) defaulted on a Capacity May 2018 M+4 invoice. | Participant Error | A default letter was issued to the Participant. | Major | |
| 03/10/2018 | Money In | Timing | Participant | Payment Default | AES Kilroot Power Limited (PT_500045) defaulted on an Capacity May 2018 M+4 invoice. | Participant Error | A default letter was issued to the Participant. | Major | |
| 03/10/2018 | Money In | Timing | Participant | Payment Default | Aughinish Alumina Ltd (PT_400047) defaulted on an Energy Week 37 2018 Initial invoice. | Participant Error | A default letter was issued to the Participant. | Major | |
| 03/10/2018 | Money In | Timing | Participant | Payment Default | Indaver Energy Ltd (PT_400088) defaulted on an Energy Week 37 2018 Initial invoice & Capacity August 2017 M+13. | Participant Error | A default letter was issued to the Participant. | Major | |
| 03/10/2018 | Money In | Timing | Participant | Payment Default | Dan Twomey Waterpower Eng Ltd (PT_400045) defaulted on an Energy Week 37 2018 Initial invoice & Capacity May 2018 M+4 invoice. | Participant Error | A default letter was issued to the Participant. | Major | |

Table 13 – Trading and Settlement Code Breaches – Market Participants

SEMO – Settlements

| Op# | Date Identified | Run Type | Quality or Timing | Party | Issue Type | Description | Cause | Resolution | T and SC Breach | Status |
|------------|--------------------------------|----------|-------------------|--------|---|---|---|------------|-----------------|--------|
| 04/10/2018 | SE2 | n/a | SEMO | System | Initial Energy & VMOC Statements and Participant Information Reports (PIRs) for Settlement day 27/09/2018 were published after the 12:00 deadline. | Delay was due to a system issue which delayed the Initial settlement run. | Initial Energy & VMOC Statements and PIRs were published at 13:10 | Minor | Closed | |
| 02/10/2018 | Indicative CAP | Timing | SEMO | System | Indicative Capacity Statements and Participant Information Reports (PIRs) for September were published after the 17:00 deadline. | Delay was due to a system issue | Indicative Capacity Statements and PIRs were published at 13:34. | Minor | Closed | |
| 01/10/2018 | Indicative Statements and PIRs | Timing | SEMO | System | Indicative Energy & VMOC Statements and Participant Information Reports (PIRs) for Settlement day 30/09/2018 were published after the 17:00 deadline. | Delay was due to a system issue. | Indicative Energy & VMOC Statements and PIRs were published on 04/10/2018 at 18:13. | Minor | Closed | |

Table 14 – Trading and Settlement Code Breaches – SEMO

SEMO - Pricing and Scheduling

There were no breaches to report in October 2018.

SEMO - Funds Transfer

There were no breaches to report in October 2018.

SEMO - Credit Management

There were no breaches to report in October 2018.

SEMO – Other

There were no breaches to report in October 2018.

Appendix B: List of Queries by Type

| Date Sent | Query Ref No. | Topic |
|------------------|----------------------|---------------------------------|
| 03/10/2018 | ene120181003 | Capacity Payments |
| 05/10/2018 | F0081004 | Discount Component Payments |
| 10/10/2018 | F0081106 | Discount Component Payments |
| 10/10/2018 | F0081110 | Uninstructed Imbalances |
| 10/10/2018 | F0081111 | Uninstructed Imbalances |
| 10/10/2018 | F0081112 | Uninstructed Imbalances |
| 11/10/2018 | F0081139 | Uninstructed Imbalances |
| 11/10/2018 | F0081159 | Uninstructed Imbalances |
| 12/10/2018 | F0081171 | Uninstructed Imbalances |
| 12/10/2018 | F0081175 | Uninstructed Imbalances |
| 12/10/2018 | F0081184 | Discount Component Payments |
| 12/10/2018 | F0081185 | Uninstructed Imbalances |
| 11/10/2018 | F0081187 | Meter Generation |
| 15/10/2018 | F0081202 | Difference Payments and Charges |
| 15/10/2018 | F0081206 | Uninstructed Imbalances |
| 15/10/2018 | F0081242 | Uninstructed imbalances |
| 15/10/2018 | F0081245 | Discount Component Payments |
| 17/10/2018 | F0081300 | Difference Payments and Charges |
| 17/10/2018 | F0081318 | Fixed Costs |
| 17/10/2018 | F0081321 | Fixed Costs |
| 19/10/2018 | F0081380 | Discount Component Payments |
| 19/10/2018 | F0081385 | Fixed Costs |
| 19/10/2018 | F0081387 | Exchange Rate |
| 22/10/2018 | F0081396 | Difference Payments and Charges |
| 23/10/2018 | F0081449 | Difference Payments and Charges |
| 23/10/2018 | F0081466 | Fixed Costs |
| 24/10/2018 | F0081467 | Fixed Costs |
| 24/10/2018 | F0081472 | Fixed Costs |
| 24/10/2018 | F0081474 | Fixed Costs |
| 25/10/2018 | F0081483 | Difference Payments and Charges |
| 25/10/2018 | F0081484 | Fixed Costs |
| 29/10/2018 | F0081528 | Discount Component Payments |
| 31/10/2018 | F0081572 | Discount Component Payments |
| 31/10/2018 | F0081588 | Discount Component Payments |

Table 15- Formal Queries

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.

There were no Market Application defects found in October 2018.

| Issue No. | Description | Effect | Fixed from | Re-Pricing | Resettlement | Status |
|-----------|-------------|--------|------------|------------|--------------|--------|
| - | - | - | - | - | - | - |

Table 16 - List of System Errors and Failures

Appendix D: Details of Operational Timings

No longer required as part of legacy SEM wind down.

Appendix E: Imperfections Charge

No longer required as part of legacy SEM wind down.

Appendix F: Default Commercial Offer Data Used

No longer required as part of legacy SEM wind down.

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 |
|--------|-----|-----------------|----------------|-----------------|-------------|--------------|---------------------|-------------|---------------|----------------------|---------------|-----------------|------------------------|----------------|
| Mar-17 | ROI | £66,590,904.20 | £25,999,739.73 | £896,638.56 | £530,904.65 | £113,905.95 | £3,188.17 | £40,679.29 | £13,853.63 | £638.11 | £0.00 | £0.00 | £0.00 | 94,190,452.29 |
| | NI | £27,088,752.15 | £8,001,218.02 | £232,052.21 | £72,287.75 | £14,630.37 | £409.39 | £46,677.74 | £14,276.96 | £577.22 | £0.00 | £0.00 | £0.00 | 35,470,881.81 |
| Apr-17 | ROI | £56,165,195.56 | £24,426,665.10 | £727,000.54 | £536,698.08 | £142,324.28 | £3,531.15 | £45,125.24 | £18,620.07 | £596.12 | £0.00 | £0.00 | £0.00 | 82,065,756.14 |
| | NI | £17,358,282.80 | £7,584,088.13 | £179,414.93 | £127,102.29 | £27,651.79 | £859.38 | £60,044.36 | £25,589.38 | £801.90 | £0.00 | £0.00 | £0.00 | 25,363,834.96 |
| May-17 | ROI | £44,648,195.71 | £19,781,317.86 | £700,841.87 | £489,950.65 | £142,425.65 | £2,974.84 | £51,455.64 | £17,883.26 | £699.50 | £0.00 | £0.00 | £0.00 | 65,835,744.98 |
| | NI | £16,964,613.24 | £5,548,133.24 | £169,862.58 | £108,402.43 | £29,733.84 | £622.87 | £88,001.70 | £33,781.45 | £1,179.59 | £0.00 | £0.00 | £0.00 | 22,944,330.94 |
| Jun-17 | ROI | £50,996,714.24 | £18,508,982.13 | £841,895.70 | £869,713.90 | £198,750.84 | £4,934.88 | £65,063.85 | £16,276.93 | £866.44 | £0.00 | £0.00 | £0.00 | 71,503,198.91 |
| | NI | £18,134,740.54 | £5,385,407.39 | £213,872.53 | £138,837.43 | £30,982.10 | £823.10 | £148,093.71 | £42,384.03 | £1,836.46 | £0.00 | £0.00 | £0.00 | 24,096,977.29 |
| Jul-17 | ROI | £53,839,556.76 | £18,469,543.17 | £689,850.17 | £859,675.25 | £105,231.46 | £1,843.13 | £47,200.17 | £31,615.25 | £600.31 | £0.00 | £0.00 | £0.00 | 74,045,115.67 |
| | NI | £16,871,524.38 | £4,970,215.26 | £169,319.17 | £206,699.63 | £26,416.99 | £609.40 | £122,939.50 | £47,342.00 | £1,369.62 | £0.00 | £0.00 | £0.00 | 22,416,435.95 |
| Aug-17 | ROI | £49,715,868.99 | £16,597,661.81 | £670,887.89 | £189,567.77 | £49,405.94 | £1,189.91 | £131,434.13 | £36,135.62 | £1,706.37 | £1.41 | £0.00 | £0.00 | 67,393,859.84 |
| | NI | £15,604,259.43 | £4,539,253.85 | £174,636.65 | £71,879.64 | £24,102.39 | £515.19 | £11,674.35 | £2,799.04 | £123.94 | £52.50 | £0.00 | £0.00 | 20,429,296.98 |
| Sep-17 | ROI | £74,262,007.43 | £18,246,287.18 | £871,978.12 | £297,529.91 | £58,164.04 | £2,322.12 | £47,978.01 | £13,495.87 | £504.35 | £163,227.43 | £0.00 | £0.00 | 93,963,494.46 |
| | NI | £26,213,019.19 | £5,128,326.58 | £230,350.58 | £81,360.23 | £23,139.40 | £499.97 | £13,331.20 | £6,511.87 | £297.83 | £140,679.45 | £0.00 | £0.00 | 31,837,516.30 |
| Oct-17 | ROI | £64,383,218.39 | £18,184,490.56 | £721,054.00 | £289,078.01 | £109,973.68 | £2,586.90 | £32,785.64 | £11,166.82 | £447.56 | £0.00 | £0.00 | £0.00 | 83,734,801.56 |
| | NI | £18,177,387.18 | £5,365,068.45 | £188,849.52 | £78,539.81 | £23,503.63 | £650.99 | £10,931.60 | £2,877.72 | £134.29 | £0.00 | £0.00 | £0.00 | 23,847,943.19 |
| Nov-17 | ROI | £83,791,449 | £24,787,352 | £781,890 | £413,698 | £113,547 | £3,295 | £122,794 | £33,971 | £718 | £458,369 | £6,145 | £6,145 | £110,519,371 |
| | NI | £22,118,497 | £6,651,371 | £204,783 | £141,841 | £56,639 | £1,085 | £61,621 | £21,195 | £400 | £705 | £2,550 | £2,550 | £29,263,237 |
| Dec-17 | ROI | £108,724,596.96 | £30,213,314.37 | £1,032,089.87 | £386,043.20 | £61,761.35 | £2,747.14 | £91,579.26 | £20,859.90 | £558.92 | £354,184.96 | £196,828.99 | £196,828.99 | 141,281,393.91 |
| | NI | £35,009,530.01 | £7,435,318.60 | £270,080.16 | £180,156.15 | £72,189.79 | £1,323.93 | £45,368.58 | £11,660.54 | £288.42 | £58,353.41 | £11,091.72 | £11,091.72 | 43,106,453.03 |
| Jan-18 | ROI | £66,824,387.64 | £31,236,649.01 | £796,356.35 | £272,646.34 | £136,640.90 | £1,965.48 | £56,253.29 | £18,996.49 | £347.05 | £320.44 | £2,955.28 | £2,955.28 | 99,350,473.55 |
| | NI | £21,801,403.00 | £8,153,351.60 | £211,139.18 | £105,764.72 | £76,139.37 | £734.71 | £22,938.26 | £7,983.39 | £150.76 | £275,137.08 | £85,908.52 | £85,908.52 | 30,826,559.11 |
| Feb-18 | ROI | £73,894,145.46 | £29,049,213.63 | £821,611.24 | £239,608.70 | £442,118.67 | £1,727.82 | £34,763.85 | £73,083.63 | £225.56 | £0.00 | £0.00 | £0.00 | 104,556,498.56 |
| | NI | £23,559,299.88 | £8,534,268.31 | £214,366.57 | £214,152.33 | £80,930.26 | £1,369.32 | £27,935.49 | £69,821.89 | £160.29 | £0.00 | £0.00 | £0.00 | 32,702,304.34 |
| Mar-18 | ROI | £83,664,309 | £0 | £194,992 | £674,215 | £284,390 | £3,439 | £95,181 | £158,339 | £583 | £0 | £0 | £0 | £85,075,447 |
| | NI | £32,334,060 | £0 | £50,052 | £163,160 | £102,559 | £899 | £50,645 | £71,098 | £380 | £0 | £0 | £0 | £32,772,854 |
| Apr-18 | ROI | £69,317,323 | £23,231,814 | £783,294 | £970,456 | £256,503 | £5,627 | £71,337 | £267,758 | £516 | £0 | £0 | £0 | £94,904,628 |
| | NI | £23,659,859 | £7,429,700 | £190,874 | £151,575 | £33,802 | £816 | £72,822 | £115,446 | £533 | £0 | £0 | £0 | £31,655,427 |
| May-18 | ROI | £77,304,833 | £22,485,464 | £739,608 | £1,395,991 | £384,788 | £8,896 | £89,490 | £221,592 | £645 | £0 | £0 | £0 | £102,631,308 |
| | NI | £21,411,034 | £6,005,961 | £181,189 | £109,484 | £23,056 | £674 | £114,249 | £62,751 | £823 | £0 | £0 | £0 | £27,909,222 |
| Jun-18 | ROI | £110,729,885 | £22,412,350 | £892,166 | £2,294,801 | £444,742 | £12,880 | £101,002 | £74,247 | £805 | £417,974 | £0 | £0 | £137,380,852 |
| | NI | £29,772,183 | £5,362,582 | £213,124 | £111,573 | £27,385 | £607 | £183,273 | £95,348 | £1,350 | £16 | £0 | £0 | £35,767,439 |
| Jul-18 | ROI | £91,566,909 | £20,553,253 | £732,984 | £1,335,293 | £324,878 | £6,367 | £47,651 | £89,704 | £431 | £0 | £0 | £0 | £114,657,469 |
| | NI | £24,824,845 | £5,305,704 | £169,676 | £164,048 | £26,544 | £654 | £124,634 | £100,028 | £1,063 | £0 | £0 | £0 | £30,717,196 |
| Aug-18 | ROI | £105,558,500 | £18,695,229 | £882,539 | £165,878 | £33,317 | £3,317 | £48,971 | £87,850 | £370 | £206,636 | £0 | £0 | £126,208,357 |
| | NI | £29,846,140 | £5,022,974 | £217,086 | £248,040 | £37,238 | £1,329 | £10,253 | £31,064 | £85 | £5,825 | £0 | £0 | £35,420,033 |
| Sep-18 | ROI | £99,146,293 | £25,829,272 | £731,124 | £468,008 | £88,260 | £2,304 | £34,658 | £89,979 | £269 | £0 | £0 | £0 | £126,390,237 |
| | NI | £24,452,280 | £5,983,336 | £181,019 | £13,992 | £13,992 | £365 | £6,470 | £18,637 | £53 | £0 | £0 | £0 | £30,724,387 |
| Oct-18 | ROI | £31,530,401 | £24,300,026 | £595,030 | £865,326 | £183,408 | £4,241 | £148,617 | £39,793 | £1,136 | £0 | £0 | £0 | £57,667,916 |
| | NI | £9,455,756 | £5,693,202 | £150,691 | £108,258 | £35,783 | £1,126 | £8,612 | £2,164 | £108 | £0 | £0 | £0 | £15,455,699 |

Table 17 – 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 |
|--------|-----|-----------------|----------------|-------------|--------------|---------------------|-------------|---------------|----------------------|---------------|-----------------|------------------------|-----------------|
| Mar-17 | ROI | €74,265,958.01 | €25,788,084.66 | €532,016.14 | €116,104.70 | €3,141.82 | €39,271.10 | €13,708.08 | €638.20 | €0.00 | €0.00 | €0.00 | €100,758,922.71 |
| | NI | €27,816,469.38 | €9,149,368.84 | €76,024.05 | €12,908.20 | €406.88 | €32,923.50 | €14,410.91 | €582.61 | €0.00 | €0.00 | €0.00 | €36,103,094.37 |
| Apr-17 | ROI | €56,718,380.85 | €24,463,279.10 | €537,285.75 | €147,053.40 | €3,530.38 | €45,104.86 | €18,331.73 | €596.32 | €0.00 | €0.00 | €0.00 | €81,933,562.39 |
| | NI | €18,526,297.40 | €7,555,445.88 | €125,968.13 | €23,710.00 | €645.79 | €59,866.13 | €25,832.73 | €810.81 | €0.00 | €0.00 | €0.00 | €26,318,576.87 |
| May-17 | ROI | €45,161,376.39 | €18,086,733.29 | €488,856.77 | €139,195.42 | €2,589.27 | €62,916.83 | €17,794.83 | €699.70 | €0.00 | €0.00 | €0.00 | €63,960,162.50 |
| | NI | €19,510,303.26 | €6,964,363.87 | €107,751.82 | €32,525.65 | €619.02 | €88,078.61 | €33,838.58 | €1,182.28 | €0.00 | €0.00 | €0.00 | €26,738,663.09 |
| Jun-17 | ROI | €52,758,496.23 | €17,355,294.13 | €882,852.53 | €191,441.91 | €3,661.42 | €65,347.10 | €16,420.10 | €863.48 | €0.00 | €0.00 | €0.00 | €71,274,382.90 |
| | NI | €20,252,622.96 | €6,380,475.07 | €138,076.17 | €37,695.41 | €816.77 | €148,166.13 | €42,425.33 | €1,836.50 | €0.00 | €0.00 | €0.00 | €27,002,114.34 |
| Jul-17 | ROI | €54,277,998.32 | €17,477,373.72 | €846,835.48 | €102,146.67 | €1,651.30 | €47,723.87 | €34,509.09 | €601.00 | €0.00 | €0.00 | €0.00 | €72,788,839.45 |
| | NI | €18,773,354.99 | €5,850,870.07 | €230,926.67 | €29,088.46 | €609.37 | €122,267.41 | €44,738.41 | €1,404.46 | €0.00 | €0.00 | €0.00 | €25,053,259.84 |
| Aug-17 | ROI | €50,562,528.38 | €15,345,661.50 | €190,289.53 | €50,188.86 | €1,330.67 | €130,457.46 | €35,704.06 | €1,694.02 | €2.00 | €0.00 | €0.00 | €66,317,856.48 |
| | NI | €18,103,577.29 | €5,650,171.54 | €71,815.23 | €23,380.11 | €512.28 | €11,510.00 | €3,159.55 | €146.77 | €45.51 | €0.00 | €0.00 | €23,864,318.28 |
| Sep-17 | ROI | €77,198,039.75 | €16,935,824.39 | €297,316.08 | €58,064.10 | €2,315.75 | €36,227.08 | €14,579.25 | €480.13 | €329,748.86 | €0.00 | €736.80 | €94,873,332.19 |
| | NI | €29,090,989.44 | €6,342,522.98 | €81,307.50 | €23,116.39 | €615.25 | €24,625.76 | €5,539.12 | €177.97 | €254,051.02 | €0.00 | €4.28 | €35,822,949.71 |
| Oct-17 | ROI | €66,627,076.69 | €17,573,435.30 | €379,168.29 | €109,325.13 | €2,586.81 | €31,769.76 | €11,103.25 | €495.24 | €0.00 | €0.00 | €0.00 | €84,734,382.90 |
| | NI | €22,549,009.87 | €5,897,549.80 | €79,103.03 | €24,197.26 | €648.45 | €10,935.82 | €2,957.83 | €134.12 | €0.00 | €0.00 | €0.00 | €28,564,536.18 |
| Nov-17 | ROI | €83,230,541 | €23,930,421 | €473,719 | €114,595 | €3,363 | €122,843 | €33,951 | €718 | €645,100 | €4,985 | €800 | €108,561,035 |
| | NI | €25,746,600 | €7,365,655 | €145,319 | €55,530 | €1,080 | €61,622 | €21,196 | €399 | €274 | €3,545 | €0 | €33,401,221 |
| Dec-17 | ROI | €106,835,064.33 | €27,957,453.42 | €397,100.73 | €98,040.58 | €2,984.78 | €91,151.49 | €20,818.71 | €956.31 | €336,745.88 | €173,793.95 | €644.35 | €135,914,354.53 |
| | NI | €37,790,994.99 | €9,466,911.04 | €181,354.27 | €40,293.46 | €1,305.84 | €45,734.51 | €11,769.44 | €290.16 | €57,624.89 | €31,404.66 | €288.16 | €47,627,971.42 |
| Jan-18 | ROI | €66,556,846.79 | €30,184,516.90 | €264,692.47 | €140,421.82 | €600.74 | €56,245.08 | €18,749.58 | €346.74 | €37.23 | €16,333.45 | €0.00 | €97,238,790.80 |
| | NI | €24,598,645.75 | €9,075,819.96 | €105,487.86 | €72,782.55 | €685.44 | €22,940.69 | €8,209.56 | €150.74 | €270,100.11 | €74,414.80 | €1,311.93 | €34,230,549.39 |
| Feb-18 | ROI | €73,649,373.32 | €28,234,770.33 | €241,672.56 | €232,622.38 | €1,496.49 | €33,903.63 | €90,769.95 | €220.04 | €0.00 | €0.00 | €0.00 | €102,484,828.70 |
| | NI | €26,522,258.99 | €9,276,145.07 | €211,340.35 | €267,052.17 | €1,368.55 | €28,772.37 | €54,122.68 | €164.70 | €0.00 | €0.00 | €0.00 | €36,361,224.88 |
| Mar-18 | ROI | €85,513,434 | €0 | €691,820 | €303,976 | €3,238 | €94,253 | €188,330 | €578 | €0 | €0 | €0 | €86,795,628 |
| | NI | €37,437,280 | €0 | €170,090 | €85,702 | €898 | €51,265 | €45,028 | €384 | €0 | €0 | €0 | €37,790,647 |
| Apr-18 | ROI | €69,267,924 | €20,860,692 | €945,469 | €237,063 | €3,887 | €193,101 | €310,897 | €516 | €0 | €0 | €0 | €91,819,549 |
| | NI | €32,845,010 | €9,450,019 | €150,560 | €50,635 | €818 | €72,832 | €77,370 | €533 | €0 | €0 | €0 | €42,647,777 |
| May-18 | ROI | €73,986,199 | €21,003,133 | €1,333,265 | €344,914 | €4,639 | €89,323 | €138,550 | €645 | €0 | €0 | €0 | €96,900,668 |
| | NI | €23,049,174 | €7,260,826 | €111,164 | €58,347 | €686 | €114,206 | €136,262 | €823 | €0 | €0 | €0 | €30,731,488 |
| Jun-18 | ROI | €106,186,794 | €20,271,690 | €2,266,420 | €404,741 | €6,062 | €101,282 | €80,377 | €791 | €394,961 | €0 | €884 | €129,714,001 |
| | NI | €32,258,574 | €7,261,868 | €115,238 | €62,628 | €627 | €183,374 | €89,625 | €1,350 | €852 | €0 | €2 | €39,974,138 |
| Jul-18 | ROI | €86,768,139 | €19,045,125 | €1,383,691 | €307,142 | €4,724 | €47,761 | €123,685 | €431 | €0 | €0 | €0 | €107,680,698 |
| | NI | €25,508,813 | €6,579,825 | €161,500 | €42,347 | €738 | €124,667 | €69,402 | €1,063 | €0 | €0 | €0 | €32,488,356 |
| Aug-18 | ROI | €101,015,744 | €17,337,990 | €549,108 | €161,828 | €2,583 | €49,204 | €91,882 | €311 | €145,525 | €0 | €0 | €119,354,176 |
| | NI | €31,815,843 | €6,244,149 | €243,991 | €41,050 | €1,252 | €10,283 | €27,631 | €85 | €7,589 | €0 | €0 | €38,391,874 |
| Sep-18 | ROI | €94,348,675 | €24,483,726 | €469,838 | €87,398 | €2,373 | €34,655 | €85,446 | €269 | €0 | €0 | €0 | €119,512,381 |
| | NI | €30,233,883 | €7,164,947 | €67,373 | €14,752 | €295 | €6,469 | €22,731 | €53 | €0 | €0 | €0 | €37,510,502 |
| Oct-18 | ROI | €30,964,136 | €22,562,931 | €878,875 | €189,837 | €5,160 | €148,618 | €39,721 | €1,133 | €0 | €0 | €0 | €54,790,411 |
| | NI | €11,418,621 | €7,231,162 | €107,709 | €30,084 | €1,123 | €8,612 | €2,161 | €110 | €0 | €0 | €0 | €18,799,581 |

Table 18 - Total Payments by Month

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 |
|-----------------|---------|---------------------|---------------------|
| 06/10/2017 | 39 | €4,277,088.98 | €0 |
| 13/10/2017 | 40 | €2,482,838.95 | €0 |
| 20/10/2017 | 41 | €1,242,741.61 | €0 |
| 27/10/2017 | 42 | €2,017,373.96 | €0 |
| 03/11/2017 | 43 | €1,496,601.70 | €0 |
| 10/11/2017 | 44 | €1,138,507.50 | €0 |
| 17/11/2017 | 45 | €2,429,067.77 | €0 |
| 24/11/2017 | 46 | €1,847,665.06 | €0 |
| 01/12/2017 | 48 | €1,330,336.80 | €0 |
| 08/12/2017 | 49 | €1,452,421.60 | €0 |
| 15/12/2017 | 50 | €1,454,433.85 | €0 |
| 22/12/2017 | 51 | -€120,183.03 | €0 |
| 05/01/2018 | 52 | €668,708.17 | €0 |
| 12/01/2018 | 53 | €1,983,172.46 | €0 |
| 19/01/2018 | 1 | €534,352.28 | €0 |
| 26/01/2018 | 2 | €1,946,527.32 | €0 |
| 02/02/2018 | 3 | €1,107,021.02 | €0 |
| 09/02/2018 | 4 | €1,493,834.12 | €0 |
| 16/02/2018 | 5 | €1,362,758.37 | €0 |
| 23/02/2018 | 6 | €1,362,251.43 | €0 |
| 02/03/2018 | 7 | €2,236,125.89 | €0 |
| 09/03/2018 | 8 | €5,824,119.00 | €0 |
| 16/03/2018 | 9 | -€148,322.47 | €0 |
| 23/03/2018 | 10 | €1,754,733.96 | €0 |
| 30/03/2018 | 11 | €374,990.87 | €0 |
| 07/04/2018 | 12 | €3,709,200.97 | €0 |
| 14/04/2018 | 13 | €6,818,333.49 | €0 |

| | | | |
|------------|----|---------------|----|
| 21/04/2018 | 14 | €1,405,312.25 | €0 |
| 28/04/2018 | 15 | €2,534,835.45 | €0 |
| 05/05/2018 | 16 | €578,885.36 | €0 |
| 12/05/2018 | 17 | -€361,792.43 | €0 |
| 19/05/2018 | 18 | €161,682.11 | €0 |
| 26/05/2018 | 19 | €1,067,155.44 | €0 |
| 01/06/2018 | 20 | €1,000,133.03 | €0 |
| 08/06/2018 | 21 | €367,381.73 | €0 |
| 15/06/2018 | 22 | €1,601,279.26 | €0 |
| 22/06/2018 | 23 | €1,740,138.42 | €0 |
| 29/06/2018 | 24 | €89,182.83 | €0 |
| 06/07/2018 | 25 | €1,423,194.26 | €0 |
| 13/07/2018 | 26 | -€49,824.63 | €0 |
| 20/07/2018 | 27 | €932,000.12 | €0 |
| 27/07/2018 | 28 | -€201,547.96 | €0 |
| 03/08/2018 | 29 | -€577,074.19 | €0 |
| 10/08/2018 | 30 | €601,716.09 | €0 |
| 17/08/2018 | 31 | €858,801.98 | €0 |
| 24/08/2018 | 32 | €536,383.94 | €0 |
| 31/08/2018 | 33 | €1,140,731.70 | €0 |
| 07/09/2018 | 34 | €1,340,396.15 | €0 |
| 14/09/2018 | 35 | -€191,288.87 | €0 |
| 21/09/2018 | 36 | €1,112,429.89 | €0 |
| 28/09/2018 | 37 | €2,509,395.36 | €0 |
| 05/10/2018 | 38 | €1,865,440.47 | €0 |
| 12/10/2018 | 39 | €483,934.10 | €0 |

Table 19 – 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 |
|----------------|---------------------|---------------------|
| September 2018 | € -235.89 | €0 |

Table 20 - Balancing Costs for Capacity Settlement

Market Operator Monthly Report

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.

Appendix I: MSP Algorithms

No longer required as part of legacy SEM wind down.