

Legacy SEM Market Operator Monthly Report September 2019

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Executive Summary

The Legacy Single Electricity Market was in operation under its previous arrangements from the 1st November 2007 until the 30th September 2018. On 1 October 2018 the Integrated Single Electricity Market (I-SEM) went live and is now the enduring operational electricity market in Ireland and Northern Ireland.

This Single Electricity Market Operator's (SEMO) report covers the month of operation of September 2019 regarding the Legacy Single Electricity Market 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 September 2019, there was no late Credit Report publication as per the Trading and Settlement Code timelines.

There were 4 defaults by Participants during September 2019. The largest of these was an Energy Week 30 2018 M+13 invoice for €1,445.68 which was remedied on the same day.

There were no Credit Cover Increase defaults during September 2019 as per the Trading and Settlement code timelines.

25 general queries were received in September 2019. During the same period 28 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	4	-						
	Credit Risk Management	-	-						
SEMO	Pricing & Scheduling	-	-						
	Settlement	-	-						
	Funds Transfer	-							
	Credit Risk Management	-	-						
	Other	-	-						
Total		4	-						

Table 1 – Trading and Settlement Code Breaches

Further details of each of the Trading and Settlement code breaches noted above are set out in <u>Appendix A</u>

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.

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

Financial Statistics

Figure 1 - Total Charges for Each Currency

Market	September-19			
	ROI	NI		
Energy	€0	£0		
Capacity	€0	£0		
Market Operator	€0	£0		
M+4 Energy	€0	£0		
M+4 Capacity	€0	£0		
M+4 Market Operator	€0	£0		
M+13 Energy	€58,596	£13,030		
M+13 Capacity	€11,075	£2,929		
M+13 Market Operator	€296	£65		
Ad-hoc Energy	€0	£0		
Ad-hoc Capacity	€0	£0		
Ad-hoc Market Operator	€0	£0		
Total	€69,967	£16,023		

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.

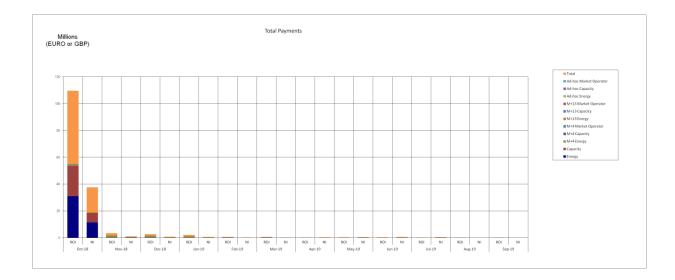


Figure 2 - Total Payments for Each Currency

Market	September-19			
	ROI	NI		
Energy	€0	£0		
Capacity	€0	£0		
Market Operator	€0	£0		
M+4 Energy	€0	£0		
M+4 Capacity	€0	£0		
M+4 Market Operator	€0	£0		
M+13 Energy	€58,576	£13,024		
M+13 Capacity	€11,056	£2,924		
M+13 Market Operator	€296	£64		
Ad-hoc Energy	€0	£0		
Ad-hoc Capacity	€0	£0		
Ad-hoc Market Operator	€0	£0		
Total	€69,928	£16,013		

Table 3 - Total Payments for Each Currency

Total Currency Costs

Currency Costs for Initial Invoicing are no longer calculated in the SEM since Week 39 2018.

Financial Changes between Initial Settlement and Subsequent Reruns

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

3.1.1 Energy Market

Note: - For Figure 3, 4, net values are shown.

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

The reverse is true for Figure 5

M+4 Resettlement

M+4 Energy Resettlement is no longer required as part of legacy SEM wind down.

M+13 Resettlement

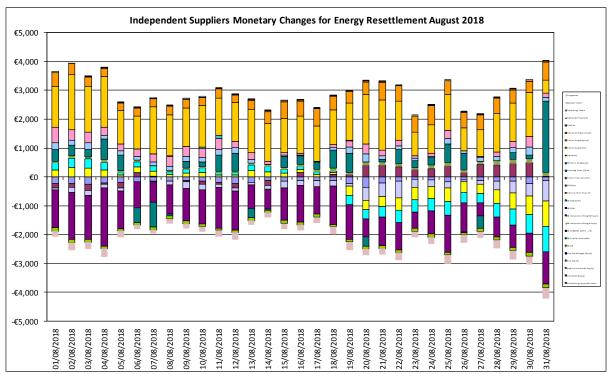


Figure 3 - Independent Suppliers Monetary Changes for Energy Resettlement – August 2018

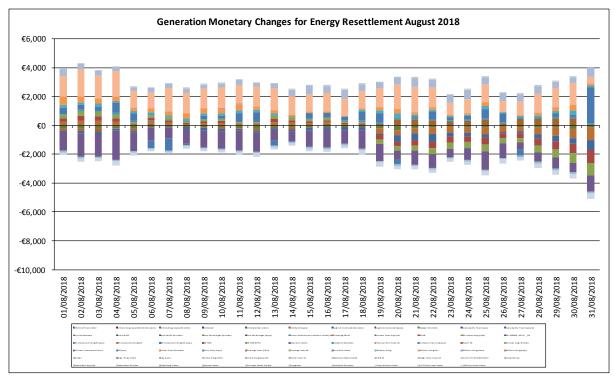


Figure 4 - Generation Monetary Changes for Energy Resettlement - August 2018



Figure 5 - Total Monetary Changes for Energy Resettlement - August 2018

3.1.2 Capacity Market

Note: - For Figure 8 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 6.

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

M+4 Capacity Resettlement is no longer required as part of legacy SEM wind down.

M+13 Resettlement

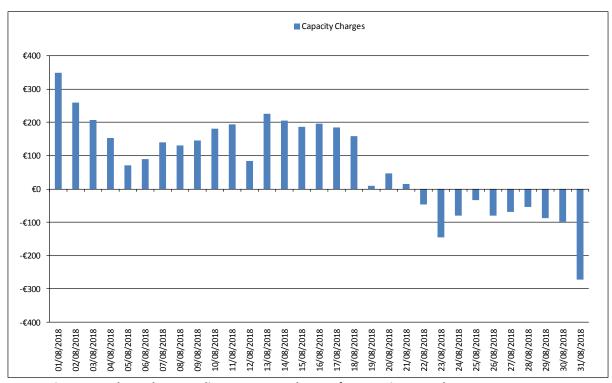


Figure 6 - Independent Suppliers Monetary Changes for Capacity Resettlement - August 2018

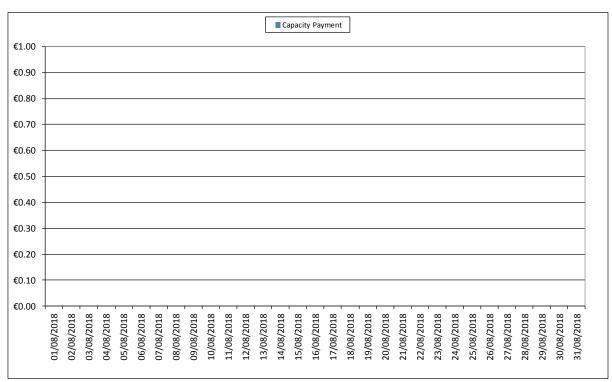


Figure 7 - All Generation Monetary Change for Capacity Resettlement - August 2018

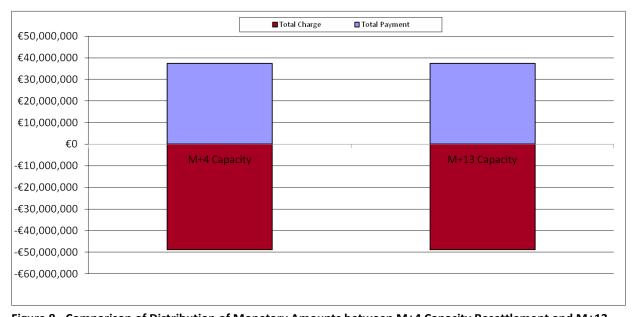


Figure 8 - Comparison of Distribution of Monetary Amounts between M+4 Capacity Resettlement and M+13 Capacity Resettlement –August 2018.

Helpdesk Call Statistics

The statistics presented in Table 4 - Helpdesk Call Statistics covers the month of September 2019

Market Helpdesk Report: 01/09/19 to 30/09/19

	Received	Resolved within the period	Not Resolved	Resolved in the period	Resolution Time (Working Days)	Resolved On Time
Normal	25	21	4	28	1.39	27
Important	0	0	0	0	0.00	0
Urgent	0	0	0	0	0.00	0
Settlement	0	0	0	0	0.00	0
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	25	21	4	28	0.28	27

Table 4 – Helpdesk Statistics

Definitions:

- Resolved within the Period refers to queries raised and resolved within the calendar month of September 2019.
- Resolved in the Period refers to queries resolved within September 2019, 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 September 2019.
- Not Resolved refers to gueries raised but not resolved within September 2019.
- 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 decreased by 0.22 working days from 0.50 in August 2019 to 0.28 in September 2019. 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 September 2019 with regard to formal Settlement Queries.

Disputes and Queries

5.1.1 Disputes

No Settlement Disputes were raised during the month of September 2019.

Topic	Number Of Queries

Table 5– Upheld Dispute Queries by Topic

5.1.2 Data Queries

There were no formal data queries received during the month of September 2019.

Topic	Number Of Queries

Table 6- Upheld Data Queries by Topic

5.1.3 Settlement Queries

There were no formal queries received during the month of September 2019.

Topic	Number Of Queries

Table 7 – Upheld Settlement Queries by Topic

• Unresolved Queries

There are no unresolved SEM Settlement Queries as of the 16th October 2019.

Central Systems

6.1 List of System Errors and Re-runs

Details are provided in <u>Appendix C</u>: List of All Systems Errors and Failures

6.1.1 Re-Pricing / Resettlement Runs

There were no Ad hoc Re-Settlement run carried out in September 2019.

6.1.2 System Errors

There were no Market Application defects found in September 2019.

Details are provided in <u>Appendix C</u>: List of All Systems Errors and Failures

Occasional Components

7.1 Disaster Recovery/Business Continuity Tests

There were no scheduled Business Continuity tests performed during September 2019.

7.2 Communications or Systems Failures

There were on communication failures during September 2019.

7.3 Denial of Service Attacks

There was no Denial of Service Attacks during September 2019.

Appendix A: Detail of Trading and Settlement Code Breaches

Data Provider

There were no breaches to report in September 2019.

Market Participant



Table 8 – Trading and Settlement Code Breaches – Market Participants

SEMO - Settlements

There were no breaches to report in September 2019.

SEMO - Pricing and Scheduling

There were no breaches to report in September 2019.

SEMO - Funds Transfer

There were no breaches to report in September 2019.

SEMO - Credit Management

There were no breaches to report in September 2019.

SEMO - Other

There were no breaches to report in September 2019.

Appendix B: List of Queries by Type

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 September 2019.

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

Table 9 - List of System Errors and Failures

Appendix D: Details of Operational Timings

Appendix E: Imperfections Charge	Appendix	E: Im	perfection	ons (harge
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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.

Table 10 – Total Charges by Month

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-18	R	OI	£83,664,309	£0	£194,992	£674,215	£284,390	£3,439	£95,181	£158,339	£583	£0	£0	£0	£85,075,447
	N	VI .	£32,334,060	£0	£50,052	£163,160	£102,559	£899	£50,645	£71,098	£380	£0	£0	٤0	£32,772,854
Apr-18	R	:OI	£69,317,323	£23,231,81 4	£783,294	£970,456	£256,503	£5,627	£71,337	£267,758	£516	٤0	£0	٤0	£94,904,628
	N	VI .	£23,659,859	£7,429,700	£190,874	£151,575	£33,802	£816	£72,822	£115,446	£533	£0	£0	٤0	£31,655,427
May-18	R	OI	£77,304,833	£22,485,464	£739,608	£1,395,991	£384,788	£8,896	£89,490	£221,592	£645	٤0	£0	٤0	£102,631,308
	N	WI .	£21,411,034	£6,005,961	£181,189	£109,484	£23,056	£674	£114,249	£62,751	£823	٤0	٤0	٤0	£27,909,222
Jun-18	R	OI	£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
		VI .	£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	R	OI	£91,566,909	£20,553,253	£732,984	£1,335,293	£324,878	£6,367	£47,651	£89,704	£431	٤0	٤0	£0	£114,657,469
		VI	£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	R	OI	£105,558,500	£18,695,229	£882,539	£559,068	£165,878	£3,317	£48,971	£87,850	£370	£206,636	£0		£126,208,357
	N	VI	£29,846,140	£5,022,974	£217,086	£248,040	£37,238	£1,329	£10,253	£31,064	£85	£5,825	£0		£35,420,033
Sep-18	R	:OI	£99,146,293	£25,829,272	£731,194	£468,008	£88,260	£2,304	£34,658	£89,979	£269	£0	£0		£126,390,237
	N	VI	£24,452,280	£5,983,336	£181,019	£68,235	£13,992	£365		£18,637	£53	£0	£0		£30,724,387
Oct-18	-		£31,530,401	£24,300,026	£595,030	£865,326	£183,408	£4,241	£148,617	£39,733	£1,136	£0	£0		£57,667,916
		VI	£9,455,756	£5,693,202	£150,691	£108,258	£35,783	£1,126	£8,612	£2,164	£108	٤0	£0		£15,455,699
Nov-18	-		£0	£0		£1,160,011	£185,595	£6,269	£312,981	£78,711	£1,598	£31	٤0		£1,745,196
	_	VI	£0	£0		£333,889	£67,914	£1,675	£86,421	£34,554	£589	£82,261	٤0		£607,304
Dec-18	-		٤0	£0		£806,243	£170,047	£6,269	£312,981	£78,711	£1,598	£0	٤0		£1,375,850
		VI	٤0	£0		£248,530	£72,567	£1,675	£71,305		£589	£0	٤0		£415,692
Jan-19	-	_	£0	£0		£500,065	£75,786	£2,328	£400,377	£112,479	£2,266	£0	£0		£1,093,300
		VI	£0	£0		£192,903	£39,123	£858	£72,043	£22,307	£395	£0	٤0		£327,629
Feb-19			£0	£0		£13,836	٤0	£69	£289, 4 39	£81,327	£1,783	٤0	٤0		£386,454
		VI .	£0	£0		£8,561	£0	£3		£15,274	£245	£0	£0		£62,755
Mar-19	-	_	£0	£0		£0		£0		£71,255	£1,635	£0	٤0		£369,437
		VI .	٤0	٤0		٤0		٤0		£23,689	£465	٤0	٤0		£107,582
Apr-19			£0	£0		£0		£0	£92,317	£18,280	£469	£0	٤0		£111,066
		VI .	£0	£0		£0		£0		£39,070	£693	£0	٤0		£178,104
May-19	_	_	٤0	٤0		£0		20		£27,512	£858	£0	٤0		£175,023
	_	VI .	£0	£0		£0		£0		£58,563	£1,289	£0	£0		£281,712
Jun-19	-	_	£0	£0		£0		£0		£31,766	£789	£0	£0		£176,489
		VII	20	£0		£0		£0		£72,825	£1,266	20	£0		£322,278
	R	UI	£0	£0		£0		£0		£21,541	£556	£0	£0		£124,733
Jul-19		WI CI	£0	£0		£0		£0		£58,309	£1,112	£0	£0		£272,909
	R		20	£0		£0		£0		£14,025	£541	20	£0		£113,019
Aug-19	N	AI .	٤0	٤0	٤0	٤0	٤0	٤0	£21,010	£3,567	£109	٤0	٤0	£0	£24,687

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-18	ROI	£85,513,434	٤0	£691,820	£303,976		£94,253	£188,330		£0	٤0	٤0	£86,795,628
	NI	£37,437,280	£0	£170,090	£85,702	£898	£51,265	£45,028	£384	£0	٤0	٤0	£37,790,647
Apr-18	ROI	£69,267,92 4	£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	٤0	£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	٤0	£96,900,668
	NI	£23,049,174	£7,260,826	£111,164	£58,347	£686	£114,206	£136,262	£823	٤0	£0	٤0	£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	٤0	£884	£129,714,001
	NI	£32,258,574	£7,261,868	£115,238	£62,628		£183,374	£89,625		£852	£0	£2	£39,974,138
Jul-18	ROI	£86,768,139	£19,045,125	£1,383,691	£307,142		£47,761	£123,685		£0	£0	£0	£107,680,698
	NI	£25,508,813	£6,579,825	£161,500	£42,347		£124,667	£69,402		£0	£0	٤0	£32,488,356
Aug-18		£101,015,744	£17,337,990	£549,108	£161,828		£49,204	£91,882		£145,525	٤0	٤0	£119,354,176
	NI	£31,815,843	£6,244,149	£243,991	£41,050		£10,283	£27,631		£7,589	٤0	٤0	£38,391,874
Sep-18	ROI	£94,348,675	£24,483,726	£469,838	£87,398		£34,655	£85,446		£0	٤0	£0	£119,512,381
_	NI	£30,233,883	£7,164,947	£67,373	£14,752	£295	£6,469	£22,731			£0	٤0	£37,510,502
Oct-18	$\overline{}$	£30,964,136	£22,562,931	£878,875	£189,837	£5,160	£148,618	£39,721		£0	٤0	٤0	£54,790,411
	NI	£11,418,621	£7,231,162	£107,709	£30,084	£1,123	£8,612	£2,161		٤0	٤0	٤0	£18,799,581
Nov-18	ROI	٤0	٤0		£185,071		£320,379	£79,187		£2,649	٤0	£8	£1,753,261
	NI	٤0	٤0		£67,787	£1,659	£86,279	£34,163		£38,925	٤0	£155	£563,074
Dec-18		£0	٤0		£170,134		£328,215	£88,275		٤0	٤0	٤0	£1,401,613
	NI	£0	٤0		£67,787	£1,659	£71,328	£21,036		£0	٤0	٤0	£410,943
Jan-19	ROI	£0	£0		£73,932	£2,088	£400,379	£112,477	£2,266	£0	٤0	٤0	£1,087,652
	NI	£0	٤0		£40,658	£870	£72,043	£22,306		£0	٤0	٤0	£328,286
Feb-19		٤0	٤0		٤0		£289,397	£81,399		£0		٤0	£386,010
	NI	£0	٤0	,	٤0		£38,659	£15,295		£0	٤0	٤0	£61,110
Mar-19		٤0	£0		£0			£71,163		£0	٤0	٤0	£369,398
	NI	٤0	£0		٤0			£23,663	£465	£0	٤0	٤0	£107,570
Apr-19		٤0	٤0		٤0			£18,188		٤0	٤0	٤0	£110,928
	NI	٤0	٤0		٤0			£38,999				٤0	£178,008
May-19		٤0	٤0		٤0			£27,410			٤0	٤0	£175,099
	NI	٤0	٤0		٤0			£58,483		£0	٤0	٤0	£284,325
Jun-19	ROI	٤0	٤0		٤0			£31,680		£0	٤0	£0	£176,212
	NI	20	£0		٤0			£72,799		£0	£0	£0	£322,212
	ROI	£0	£0		٤0			£21,650		٤0		£0	£128,599
Jul-19	NI	٤0	£0		٤0			£58,342		£0	£0	£0	£273,049
	ROI	20	£0		£0			£14,845		£0	£0	£0	£113,728
Aug-19	NI	٤0	٤0	٤0	٤0	£0	£20,978	£3,739	£109	£0	٤0	٤0	£24,826

Table 11 - Total Payments by Month

Appendix H: Full Balancing Costs

Appendix I: MSP Algorithms