

Capacity Market - Initial Auction Information Pack IAIP2223T-4

This Initial Auction Information Pack provides information relating to items listed within Section D.3 of the Capacity Market Code for the T-4 Capacity Auction for the Capacity Year 2022/2023, which is expected to be held on 28th March 2019. The auction will be referred to within this document as the 2022/2023 T-4 Capacity Auction. The Capacity Year will be referred to in this document as the 2022/2023 T-4 Capacity Year.

All information set out in this document relates solely to the 2022/2023 T-4 Capacity Auction.

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1. Introduction

1.1 Background and purpose

This Initial Auction Information Pack¹ provides information relating to items listed within Section D.3 of the Capacity Market Code for the Capacity Auction for the Capacity Year 2022/2023, which is expected to be held on 28th March 2019. The auction will be referred to within this document as the 2022/2023 T-4 Capacity Auction.

In accordance with D.1.1.1 of the Capacity Market Code, the Capacity Year 2022/2023 is the period commencing at the start of the Trading Day beginning at 23:00 on 30th September 2022 and ending at the end of the Trading Day ending at 23:00 on 30th September 2023.

All information set out in this document relates solely to the 2022/2023 T-4 Capacity Auction.

In order to participate in a Capacity Auction, a party must be a fully registered and qualified participant in the Capacity Market. Information relating to the registration process can be found via the I-SEM Capacity Market Registration section of the SEMO website².

Please note that information published within this pack may be subject to amendment within the Final Auction Information Pack per Capacity Market Code, Section D.3.1.4. Care has been taken within this document to clearly note where information is final or where it is indicative and subject to change.

The Final Auction Information Pack is due to be published by 7th March 2019. Per Section D.3.1.5 of the Capacity Market Code, before acting in reliance on any information contained within this document, please take care to ensure any amendments post the publication of the Final Auction Information Pack have been taken into consideration.

1.2 Units

For quantities specified in MW, 'MW' refers to a megawatt of de-rated capacity, unless otherwise stated

For prices specified in €/MW per year or £/MW per year, 'year' refers to a 12-month year, unless otherwise stated.

Settlement of prices in units based on a 12 month year is provided for in accordance with paragraph F.17.1.1 of the Trading and Settlement Code.

In this document, unless specifically stated, Euro $(\mathbf{\xi})$ values will apply to Participants located in Ireland and Sterling (\mathbf{f}) values will apply to Participants located in Northern Ireland. The Capacity Auction will be conducted in Euros, with Sterling offers converted to Euros at the Annual Capacity Payment Exchange Rate.

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¹ Capitalised terms in this document have the definition ascribed to them in the Capacity Market Code.

² http://lg.sem-o.com/ISEM/Pages/ISEMCapacityMarket.aspx



1.3 Contact Details

The following are the official contact details that should be used for any queries you may have relating to a Capacity Auction:

Postal Correspondence:

FAO: Front Office Capacity Market Operations The Oval 160 Shelbourne Road Ballsbridge Dublin 4 D04 FW28 Ireland

Email Correspondence:

capacitymarket@sem-o.com
Phone Correspondence:

If you have any questions on the application process or details please contact: 1800 726772 (ROI) or 0800 0726772 (NI) +353 (1) 2370584 (International)

1.4 Disclaimer

EirGrid plc (EirGrid) and, SONI Limited (SONI) in their capacity as System Operators are required by the Capacity Market Code to publish the Initial Auction Information Pack for a Capacity Auction. This publication discharges that obligation.

EirGrid and SONI have followed accepted industry practice in the collection and analysis of data available. Prior to taking business decisions, interested parties should not rely on the data set out in this information pack as a substitute for obtaining separate and independent advice in relation to the matters covered by this information pack. Information in this document does not amount to a recommendation or advice in respect of any possible investment. The use of information contained within this information pack for any form of decision making is done so at the user's own risk. This information pack should be read in conjunction with the Capacity Market Code and Trading and Settlement Code including any amendments to these rules.

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The Oval, 160 Shelbourne Road, Ballsbridge, Dublin 4, Ireland.



2. Capacity Market Code Items

This document contains values for items listed within Section D.3.1.2 of the I-SEM Capacity Market Code. Information determined by the Regulatory Authorities per Section D.3.1.3 is described as approved.

2.1 De-Rating Curves

D.3.1.2 (a) the final De-Rating Curves, defining De-Rating Factors by unit Initial Capacity and by Technology Class (including for Interconnectors) to be used in the Capacity Auction;

The De-Rating Curves have been calculated by the System Operators and submitted to the Regulatory Authorities for their determination in accordance with Section D.3.1.3 (a) of the Capacity Market Code. The approved De-Rating Curves are set out in Table 1, Table 2, Table 3 and Table 4 below:





Table 1 –De-Rating Curves by Technology Class and Initial Capacity

Table 1 –De-Rating Curves by Technology Class and Initial Capacity							
Initial Capacity (IC)	DSU >6 hrs ³	Gas Turbine	Hydro	Steam Turbine	Interconnector ⁴	System Wide ⁵	
(MW not de-rated)							
0 ≤ IC ≤ 10	0.900	0.920	0.864	0.877	0.866	0.900	
10 < IC ≤ 20	0.899	0.919	0.862	0.875	0.864	0.899	
20 < IC ≤ 30	0.898	0.918	0.859	0.873	0.862	0.898	
30 < IC ≤ 40	0.896	0.918	0.857	0.871	0.860	0.896	
40 < IC ≤ 50	0.895	0.917	0.855	0.869	0.858	0.895	
50 < IC ≤ 60	0.894	0.916	0.852	0.867	0.856	0.894	
60 < IC ≤ 70	0.892	0.916	0.850	0.865	0.853	0.892	
70 < IC ≤ 80	0.891	0.915	0.848	0.863	0.851	0.891	
80 < IC ≤ 90	0.890	0.914	0.845	0.861	0.849	0.890	
90 < IC ≤ 100	0.888	0.913	0.843	0.860	0.847	0.888	
100 < IC ≤ 110	0.887	0.913	0.841	0.857	0.844	0.887	
110 < IC ≤ 120	0.886	0.913	0.839	0.855	0.842	0.886	
120 < IC ≤ 130	0.884	0.912	0.837	0.852	0.839	0.884	
130 < IC ≤ 140	0.883	0.912	0.835	0.850	0.836	0.883	
140 < IC ≤ 150	0.881	0.911	0.832	0.847	0.833	0.881	
150 < IC ≤ 160	0.879	0.910	0.830	0.844	0.830	0.879	
160 < IC ≤ 170	0.877	0.909	0.827	0.842	0.827	0.877	
170 < IC ≤ 180	0.875	0.908	0.824	0.839	0.824	0.875	
180 < IC ≤ 190	0.873	0.906	0.821	0.836	0.821	0.873	
190 < IC ≤ 200	0.871	0.905	0.819	0.833	0.818	0.871	
200 < IC ≤ 210	0.868	0.903	0.816	0.830	0.815	0.868	
210 < IC ≤ 220	0.865	0.902	0.814	0.827	0.811	0.865	
220 < IC ≤ 230	0.862	0.901	0.812	0.824	0.808	0.862	
230 < IC ≤ 240	0.859	0.900	0.809	0.820	0.804	0.859	
240 < IC ≤ 250	0.857	0.899	0.807	0.817	0.801	0.857	
250 < IC ≤ 260	0.854	0.898	0.805	0.814	0.797	0.854	
260 < IC ≤ 270	0.852	0.896	0.803	0.810	0.794	0.852	
270 < IC ≤ 280	0.850	0.894	0.801	0.807	0.790	0.850	
280 < IC ≤ 290	0.848	0.893	0.799	0.804	0.787	0.848	
290 < IC ≤ 300	0.846	0.891	0.798	0.801	0.783	0.846	
300 < IC ≤ 310	0.844	0.889	0.796	0.797	0.779	0.844	
310 < IC ≤ 320	0.842	0.888	0.794	0.793	0.775	0.842	
320 < IC ≤ 330	0.839	0.886	0.791	0.790	0.771	0.839	
330 < IC ≤ 340	0.837	0.884	0.789	0.786	0.767	0.837	
340 < IC ≤ 350	0.834	0.882	0.787	0.782	0.763	0.834	
350 < IC ≤ 360	0.832	0.881	0.785	0.778	0.759	0.832	
360 < IC ≤ 370	0.829	0.879	0.782	0.775	0.755	0.829	
370 < IC ≤ 380	0.826	0.877	0.780	0.771	0.751	0.826	
380 < IC ≤ 390	0.822	0.876	0.777	0.767	0.747	0.822	
390 < IC ≤ 400	0.819	0.874	0.775	0.763	0.743	0.819	
400 < IC ≤ 410	0.816	0.872	0.772	0.759	0.739	0.816	
410 < IC ≤ 420	0.814	0.870	0.769	0.755	0.735	0.814	
420 < IC ≤ 430	0.811	0.868	0.766	0.751	0.730	0.811	
430 < IC ≤ 440	0.808	0.866	0.763	0.747	0.726	0.808	
440 < IC ≤ 450	0.805	0.864	0.760	0.742	0.721	0.805	
450 < IC ≤ 460	0.801	0.862	0.757	0.738	0.717	0.801	
460 < IC ≤ 470	0.798	0.860	0.754	0.734	0.712	0.798	
470 < IC ≤ 480	0.794	0.857	0.751	0.730	0.708	0.794	
480 < IC ≤ 490	0.791	0.855	0.748	0.725	0.703	0.791	
490 < IC ≤ 500	0.787	0.853	0.745	0.721	0.699	0.787	
430 × 10 2 300	0.767	0.055	0.743	0.721	0.033	0.767	

³ In accordance with SEM Committee decision <u>SEM-18-030</u>, DSUs with a Maximum Down Time of more than 6 hours should apply the appropriate de-rating factor based on the values set out in table 1. DSUs with a Maximum Down Time of 6 hours or less should apply the appropriate de-rating factor based on the values set out in table 3- Other Storage.

⁴ The final de-rating factor for Interconnectors is calculated by multiplying the marginal de-rating factor that applies to their size class by the External Market De-rating Factor. The External Market De-rating Factor for this auction will be 0.60 for interconnectors from Great Britain to Ireland or Northern Ireland.

⁵ New Technology (i.e. a technology for which there is currently no technology class) should use the System Wide derating curve.



Table 2 – De-Rating Curves for pumped hydro storage units by Initial Capacity and duration of storage at full output

		Hours of Storage											
Initial Capacity (IC) (MW)	0.0	0.5	1.0	1.5	2.0	2.5	3.0	3.5	4.0	4.5	5.0	5.5	6.0 or greater
0 ≤ IC ≤ 10	0	0.207	0.353	0.469	0.550	0.607	0.648	0.678	0.702	0.726	0.751	0.779	0.811
10 < IC ≤ 20	0	0.205	0.351	0.466	0.547	0.604	0.645	0.675	0.700	0.724	0.749	0.777	0.808
20 < IC ≤ 30	0	0.193	0.339	0.452	0.532	0.589	0.632	0.663	0.689	0.714	0.739	0.766	0.796
30 < IC ≤ 40	0	0.187	0.333	0.445	0.524	0.582	0.625	0.657	0.683	0.708	0.734	0.761	0.789
40 < IC ≤ 50	0	0.181	0.326	0.438	0.516	0.574	0.618	0.651	0.678	0.703	0.729	0.755	0.783
50 < IC ≤ 60	0	0.175	0.320	0.430	0.508	0.567	0.611	0.644	0.672	0.697	0.723	0.750	0.776
60 < IC ≤ 70	0	0.169	0.314	0.423	0.501	0.559	0.604	0.638	0.666	0.692	0.718	0.744	0.769
70 < IC ≤ 80	0	0.166	0.310	0.418	0.496	0.554	0.599	0.634	0.662	0.689	0.715	0.741	0.765
80 < IC ≤ 90	0	0.167	0.309	0.416	0.494	0.553	0.598	0.632	0.661	0.687	0.714	0.739	0.763
90 < IC ≤ 100	0	0.167	0.308	0.415	0.492	0.551	0.596	0.631	0.660	0.686	0.712	0.737	0.761
100 < IC ≤ 110	0	0.168	0.307	0.413	0.491	0.549	0.595	0.629	0.658	0.685	0.711	0.736	0.759
110 < IC ≤ 120	0	0.169	0.307	0.411	0.489	0.548	0.593	0.628	0.657	0.684	0.710	0.734	0.757
120 < IC ≤ 130	0	0.167	0.304	0.407	0.485	0.544	0.589	0.624	0.653	0.680	0.706	0.731	0.754
130 < IC ≤ 140	0	0.164	0.299	0.402	0.479	0.538	0.583	0.618	0.647	0.674	0.700	0.725	0.748
140 < IC ≤ 150	0	0.161	0.294	0.396	0.473	0.532	0.577	0.612	0.641	0.669	0.695	0.720	0.743
150 < IC ≤ 160	0	0.158	0.289	0.391	0.467	0.526	0.571	0.606	0.635	0.663	0.689	0.714	0.738
160 < IC ≤ 170	0	0.155	0.285	0.385	0.461	0.520	0.564	0.599	0.629	0.657	0.684	0.709	0.732
170 < IC ≤ 180	0	0.152	0.281	0.380	0.456	0.514	0.558	0.593	0.623	0.652	0.678	0.703	0.727
180 < IC ≤ 190	0	0.150	0.277	0.375	0.450	0.508	0.552	0.587	0.618	0.646	0.673	0.698	0.721
190 < IC ≤ 200	0	0.148	0.273	0.370	0.445	0.502	0.546	0.581	0.612	0.640	0.667	0.692	0.716

Table 3 –De-Rating Curves for Other Storage units by Initial Capacity and duration of storage / demand response at full output

		Hours of Storage											
Initial Capacity (IC) (MW)	0.0	0.5	1.0	1.5	2.0	2.5	3.0	3.5	4.0	4.5	5.0	5.5	6.0 or greater
0 ≤ IC ≤ 10	0	0.241	0.394	0.516	0.599	0.659	0.701	0.731	0.754	0.777	0.800	0.827	0.858
10 < IC ≤ 20	0	0.237	0.390	0.512	0.595	0.655	0.697	0.727	0.751	0.774	0.797	0.824	0.855
20 < IC ≤ 30	0	0.220	0.373	0.492	0.575	0.635	0.679	0.711	0.736	0.760	0.785	0.812	0.841
30 < IC ≤ 40	0	0.211	0.364	0.482	0.565	0.625	0.670	0.702	0.729	0.753	0.779	0.806	0.834
40 < IC ≤ 50	0	0.202	0.355	0.472	0.554	0.615	0.660	0.694	0.721	0.746	0.772	0.799	0.827
50 < IC ≤ 60	0	0.193	0.346	0.462	0.544	0.604	0.650	0.685	0.713	0.739	0.766	0.793	0.820
60 < IC ≤ 70	0	0.184	0.337	0.451	0.533	0.594	0.641	0.676	0.705	0.732	0.759	0.786	0.812
70 < IC ≤ 80	0	0.179	0.330	0.444	0.526	0.587	0.634	0.670	0.700	0.727	0.755	0.782	0.807
80 < IC ≤ 90	0	0.177	0.327	0.440	0.522	0.583	0.631	0.667	0.697	0.725	0.752	0.779	0.805
90 < IC ≤ 100	0	0.175	0.324	0.436	0.518	0.580	0.628	0.664	0.694	0.722	0.750	0.777	0.802
100 < IC ≤ 110	0	0.173	0.320	0.432	0.514	0.576	0.624	0.661	0.692	0.720	0.748	0.774	0.799
110 < IC ≤ 120	0	0.172	0.317	0.427	0.510	0.573	0.621	0.658	0.689	0.718	0.745	0.772	0.797
120 < IC ≤ 130	0	0.170	0.314	0.424	0.506	0.569	0.617	0.654	0.685	0.714	0.742	0.768	0.793
130 < IC ≤ 140	0	0.169	0.311	0.420	0.502	0.564	0.613	0.650	0.681	0.710	0.738	0.764	0.789
140 < IC ≤ 150	0	0.168	0.309	0.417	0.498	0.560	0.608	0.645	0.676	0.706	0.734	0.760	0.785
150 < IC ≤ 160	0	0.167	0.306	0.413	0.494	0.556	0.604	0.640	0.672	0.701	0.729	0.756	0.781
160 < IC ≤ 170	0	0.166	0.303	0.410	0.490	0.552	0.599	0.636	0.668	0.697	0.725	0.752	0.776
170 < IC ≤ 180	0	0.165	0.301	0.406	0.486	0.547	0.594	0.631	0.663	0.693	0.721	0.747	0.772
180 < IC ≤ 190	0	0.164	0.298	0.402	0.482	0.542	0.589	0.626	0.658	0.688	0.716	0.743	0.768
190 < IC ≤ 200	0	0.163	0.295	0.398	0.477	0.538	0.584	0.621	0.653	0.683	0.712	0.739	0.763

Note: the values of Initial Capacity in units of MW are values prior to the application of De-Rating Factors.



Table 4 - De-rating Factors for Wind and Solar

Wind	Solar
0.089	0.109

2.2 Final Capacity Requirement

D.3.1.2 (b) the final Capacity Requirement for the Capacity Year to be used in the Capacity Auction;

The Capacity Requirement has been calculated by the System Operators and submitted to the Regulatory Authorities for their determination in accordance with Section D.3.1.3 (b) of the Capacity Market Code. The approved Capacity Requirement is set out in Table 5 —Capacity Requirement below:

Table 5 - Capacity Requirement

Capacity Requirement (MW)	
7,524 MW	

Please note that a proportion of the Capacity Requirement will be held back from this T-4 capacity auction to the corresponding T-1 capacity auction for the capacity year 2022/23. As set out in <u>SEM-18-155</u>, the amount to be withheld will be determined by the Regulatory Authorities at the T-4 Final Auction Information Pack stage and this will be reflected as adjustments to the Demand Curve and the Locational Capacity Constraint Area minimum MW values.

2.3 Indicative Demand Curve

D.3.1.2 (c) an indicative Demand Curve to be used in the Capacity Auction;

The Demand Curve is determined by the Regulatory Authorities in accordance with section F.3 of the Capacity Market Code. The approved **indicative** Demand Curve is set out in Table 6 below:

Table 6 - Indicative Demand Curve to be used in the Capacity Auction

De-Rated Capacity (MW)	Demand Curve Point (€/MW per year)
0	138,450
6959.59	138,450
7524.00	92,300
8652.60	0

Note: This Demand Curve is indicative. The final Demand Curve will be set by the Regulatory Authorities prior to the issue of the Final Auction Information Pack, and shall be confirmed within the Final Auction Information Pack.



2.4 Locational Capacity Constraints

D.3.1.2 (d) for each Locational Capacity Constraint for the relevant Capacity Year to be used in the Capacity Auction, the final nodes on the Transmission System (and the Distribution System, as applicable) to which the Locational Capacity Constraint applies;

In accordance with Section C.2 of the Capacity Market Code and the approved Locational Capacity Constraints methodology (SEM-17-040), the System Operators calculate and submit to the Regulatory Authorities any Locational Capacity Constraints applicable to the Capacity Year for their determination. The approved Level 1 and Level 2 Locational Capacity Constraints are set out in Table 7 and Table 8 below:

Table 7 - Level 1 Locational Capacity Constraints

Level	Locational Capacity Constraint Area Name	Associated Level 2 Locational Constraint Area(s)	Locational Capacity Constraint Area Nodes	Minimum MW
1	L1-1: Northern Ireland	-	All nodes within Northern Ireland	Value to be provided in Final Auction Information Pack
1	L1-2: Ireland	L2-1: Greater Dublin	All nodes within Ireland	Value to be provided in Final Auction Information Pack



Table 8 – Level 2 Locational Capacity Constraints

Level	Locational Capacity Constraint Area Name	Associated Level 1 Locational Constraint Area	Locational Capacity Constraint Area Nodes	Minimum MW
2	L2-1: Greater Dublin	L1-2: Ireland	1. Adamstown 110 kV station [ADM] 2. Artane 110kV station [ART] 3. Baltrasna 110kV station [BAL] 4. Barnakyle 110kV station [BKY] 5. Belcamp 220/110 kV station [BGD] 7. Blackrock 110kV station [BLA] 8. Cabra 110kV station [CAB] 9. City West 110kV station [CTW] 10. Cloghran 110kV station [CLG] 11. Clonee 220kV station [CLN] 12. College Park 110kV station [COL] 13. Cookstown 110/38kV station [COU] 15. Corkagh 110kV station [CKG] 16. Cromcastle 110kV station [CRM] 17. Cruiserath 220kV station [CRM] 17. Cruiserath 220kV station [DTN] 19. Finglas 220/110kV station [FIN] 20. Fortunestown 110kV station [FIN] 21. Francis Street 110kV station [FRA] 22. Glasmore 110kV station [GA] 23. Grange 110kV station [GRA] 24. Grange Castle 110kV station [HAR] 26. Heuston Square 110kV station [HEU] 27. Huntstown 220kV station [HUN] 28. Inchicore 220/110kV station [KUD] 31. Kilmahud 110kV station [KLD] 32. Kilmore 110kV station [MCE] 34. McDermott 110kV station [MCE] 35. Milltown 110kV station [MCE] 36. Milltown 110kV station [MCE] 37. Milltown 110kV station [MCE] 38. Macetown 110kV station [MCE] 39. North Quays 110kV station [MCB] 31. Kilmapur 110kV station [MCB] 32. Kilmore 110kV station [MCB] 33. Nacetown 110kV station [MCB] 34. McDermott 110kV station [MCB] 35. Milltown 110kV station [MCB] 36. Milltown 110kV station [MCB] 37. Nangor 110kV station [MSP] 38. Newbury 110kV station [MSP] 39. North Quays 110kV station [PN] 40. Pelletstown 110kV station [PN] 41. Pelletstown 110kV station [PN] 42. Poolbeg 220/110kV station [POP] 44. Ringsend 110kV station [RFB] 45. Ryebrook 110kV station [MSB] 46. Stevenstown 110kV station [MBK] 57. Wolfe Tone 110kV station [WOL]	Value to be provided in Final Auction Information Pack

 $^{^{6}}$ Cookstown 38 kV is fed from Inchicore which is in the LCC. Cookstown 10 kV is fed from Carrickmines and hence is not in the LCC.



2.5 Awarded Capacity

D.3.1.2 (e) at the date of the Initial Auction Information Pack, how much Awarded Capacity has already been procured for the relevant Capacity Year;

The Awarded Capacity is set out in Table 9 below:

Table 9 - Awarded Capacity

Awarded Ca	apacity (MW)
	0

2.6 Auction Price Cap

D.3.1.2 (f) the final Auction Price Cap to be used in the Capacity Auction (in Euro and Sterling);

As set out in the SEM Committee decision (<u>SEM-18-155</u>), the approved Auction Price Caps are set out in Table 10 below:

Table 10 - Auction Price Caps

Auction Price Cap (€/MW per year)	Auction Price Cap (£/MW per year)
138,450	131,222.91

2.7 Existing Capacity Price Cap

D.3.1.2 (g) the final Existing Capacity Price Cap to be used in the Capacity Auction (in Euro and Sterling);

As set out in the SEM Committee decision (<u>SEM-18-155</u>), the approved Existing Capacity Price Caps are set out in Table 11 below:

Table 11 - Existing Capacity Price Cap

Existing Capacity Price Cap (€/MW per year)	Existing Capacity Price Cap (£/MW per year)
46,150	43,740.97



2.8 New Capacity Investment Rate Threshold

D.3.1.2 (h) the final €/MW rate of the New Capacity Investment Rate Threshold to be used in the Capacity Auction;

As set out in the SEM Committee decision (<u>SEM-18-155</u>), the approved Existing Capacity Price Caps are set out in Table 12 below:

Table 12 - New Capacity Investment Rate Threshold

New Capacity Investment Rate Threshold (€/MW)	New Capacity Investment Rate Threshold (£/MW)
300,000	284,340

2.9 Annual Stop-Loss Limit Factor

D.3.1.2 (i) the final Annual Stop-Loss Limit Factor applicable to Awarded Capacity allocated in the Capacity Auction;

As set out in the SEM Committee decision (<u>SEM-18-155</u>), the approved Annual Stop-Loss Limit Factor is set out in Table 13 below:

Table 13 - Annual Stop-Loss Limit Factor

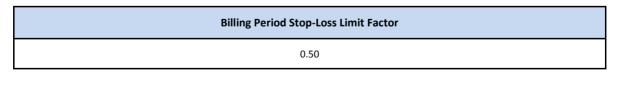
Annual Stop-Loss Limit Factor	
1.5	

2.10 Billing Period Stop-Loss Limit Factor

D.3.1.2 (j) the final Billing Period Stop-Loss Limit Factor applicable to Awarded Capacity allocated in the Capacity Auction;

As set out in the SEM Committee decision (<u>SEM-18-155</u>), the approved Billing Period Stop-Loss Limit Factor is set out in Table 14 below:

Table 14 – Billing Period Stop-Loss Limit Factor





2.11 Annual Capacity Payment Exchange Rate

D.3.1.2 (k) the indicative Annual Capacity Payment Exchange Rate applicable to Awarded Capacity allocated in the Capacity Auction;

The approved indicative Annual Capacity Exchange Rates are set out in Table 15 below:

Table 15 - Annual Capacity Exchange Rates

Annual Capacity Payment Exchange Rate (£/€)	Annual Capacity Payment Exchange Rate (€/£)
0.9478	1.0551

This value has been used to convert Euro values of the Auction Price Cap, the Existing Capacity Price Cap and the New Capacity Investment Rate Threshold into Sterling values.

Note: the final Annual Capacity Payment Exchange Rate will be included in the Final Auction Information Pack. This rate has been calculated using the same approach for calculating the existing SEM Annual Capacity Exchange Rate.

2.12 Increase and Decrease Tolerance

D.3.1.2 (I) the final allowed Increase Tolerance and Decrease Tolerance by Technology Class that may be applied by a Participant in its Application for Qualification to Capacity Market Unit de-ratings;

As set out in the SEM Committee decision (<u>SEM-18-030</u>), the approved Increase and Decrease Tolerances are set out in Table 16 below:

Table 16 - Increase and Decrease Tolerances per Technology Class

Technology Class	INCTOL(%)	DECTOL(%)
All except DSUs	0	0
DSUs	0	100

Note 1: The DECTOL for the DSU Technology Class also applies to any demand reduction component of a Candidate Unit that is part of an Autoproducer Site (where the demand reduction component is calculated as the Autoproducer Demand Reduction Volume / Maximum Export Capacity).

Note 2: In accordance with SEM Committee decision <u>SEM-18-030</u>, where satisfactory evidence is provided to the System Operators, the DECTOL shall be 100% for a Candidate Unit that, due to relevant emissions legislation, has its running hours restricted to an extent that would reasonably be considered to prevent reliable delivery of their De-rated Capacity at times of scarcity, e.g. the 500 hour limits set out in Annex V of the Industrial Emission Directive (2010/75) in relation to NOx emissions.



2.13 Performance Securities

D.3.1.2 (m) in respect of Performance Securities:

- (i) the final Performance Security Posting Dates/ Events applicable to Awarded New Capacity allocated in the Capacity Auction; and
- (ii) for each Performance Security Posting Date/ Event, the final €/MW rate to be applied in setting Performance Securities applicable to Awarded New Capacity allocated in the Capacity Auction;

As set out in the SEM Committee decision (<u>SEM-18-155</u>), the approved final Performance Security Posting Dates/ Events and final performance security rates are set out in Table 17 below:

Table 17 - Performance Security Dates and Rates

Date / Event	Performance Security Rate (€/MW)
More than 13 months prior to beginning of Capacity Year	10,000
From 13 months prior to beginning of Capacity Year	30,000
From beginning of Capacity Year	40,000

2.14 Termination Charges

D.3.1.2 (n) the final €/MW fee rates for calculating Termination Charges applicable to Awarded New Capacity allocated in the Capacity Auction;

As set out in the SEM Committee decision (<u>SEM-18-155</u>), the approved final Termination Charge rates are set out in Table 18 below:

Table 18 – Termination Charge Rates

Date / Event	Termination Charge Rate (€/MW)
More than 13 months prior to beginning of Capacity Year	10,000
From 13 months prior to beginning of Capacity Year	30,000
From beginning of Capacity Year	40,000



2.15 Administered Scarcity Price

D.3.1.2 (o) anticipated values for the Full Administered Scarcity Price and the Reserve Scarcity Price Curve applicable to the Capacity Year;

As set out in the SEM Committee decision (<u>SEM-18-155</u>), the approved anticipated values of the Full Administered Scarcity Price and the Reserve Scarcity Price Curve are set out in Table 19 below:

Table 19 - Anticipated Administered Scarcity Price Curve

Short Term Reserve (MW)	Administered Scarcity Price (€/MWh)
Demand Control	25% of VoLL
0	25% of VoLL
500	500

In Calendar Year 2018, VoLL was set to €11,128.26/MWh (see SEM-17-071). In accordance with SEM-18-155 the SEM Committee will move to publishing VoLL on a calendar year basis, and the values will be updated annually in line with inflation.

2.16 Strike Price

D.3.1.2 (p) anticipated values for the parameters listed in paragraph F.16.1.1 and F.16.1.5 of the Trading and Settlement Code to be applied in determining the Strike Price in accordance with the Trading and Settlement Code for the Capacity Year; and

The approved anticipated values to be applied in determining the Strike Price are set out in Table 20 below:

Table 20 – Anticipated Strike Price calculation components

Strike Price Component	Value	Unit
PCARBON _m	PCARBON _m Index	€/tCO2e
PFUELNG _m	[PFUELNG _m Index (p/therm) x 0.01 (£/p) + PFUELNG _m Transport (£/therm)] x Exchange Rate (€/£) x 9.48 (therm/GJ) x 3.6 (GJ/MWh)	€/MWh
PFUELO _m	[PFUELO _m Index (\$/t) x Exchange Rate (€/\$) + PFUELO _m Transport (€/t)] x 0.025 (t/GJ) x 3.6 (GJ/MWh)	€/MWh
PCARBON _m Index	ICE ECX EUA Futures – EUA - (monthly) ⁷	€/tCO2e
PFUELNG _m Index	ICE UK Natural Gas Index (monthly)	p/therm
PFUELNG _m Transport	0.0424 ⁸	£/therm
PFUELO _m Index	Platt's Forward Curve (monthly) for monthly swap transactions for 1% sulphur free on board (FOB) fuel oil cargoes in North West Europe (NWE) for the relevant month (AAEGR00)	\$/t

⁷ The December price for a given year will apply to all months falling within that year.

⁸ NI natural gas transport adder used in I-SEM PLEXOS Forecast Model 2016-17.



PFUELO _m Transport	50 ⁹	€/t
FTHEORYPU _y	15	%
FCARBONING _y	0.202	tCO2e/MWh
FCARBONINO _y	0.277	tCO2e/MWh
PTHEORYDSU _y	500	€/MWh
Exchange Rate (€/£)	The Trading Day Exchange Rate as defined in the Trading and Settlement Code	€/£
Exchange Rate (€/\$)	The rate set at 17:00 the day before the Trading Day, from the same source as used for the Trading Day Exchange Rate	€/\$
therm per GJ	9.4810	therm/GJ
LSFO calorific value	0.025 ¹¹	t/GJ

2.17 Capacity Auction Timetable

D.3.1.2 (q) the final Capacity Auction Timetable as it relates to events after the publication of the Initial Auction Information Pack (subject to section D.2).

The approved Capacity Auction Timetable is set out in Table 21 below:

Table 21 – Capacity Auction Timetable

	Event	Date
1	Initial Auction Information Pack Date: the last publication date for the Initial Auction Information Pack	28 th September 2018
2	Opt-out Notification Date: the last date a Participant can submit an Opt-Out Notification	11 th October 2018
3	Exception Application Date: the last time a Participant can make an Exception Application to the Regulatory Authorities	25 th October 2018
4	Qualification Application Date: the last date a Participant can submit an Application for Qualification in respect of the Capacity Auction	25 th October 2018
5	Provisional Qualification Results Date: the date by which the System Operators are expected to inform persons who submit Applications for Qualification of Provisional SO Qualification Decisions in respect of the Capacity Auction	4 th January 2019
6	Final Qualification Submission Date: the date by which the System Operators are expected to provide Final Qualification Results in respect of the Capacity Auction to the Regulatory Authorities for approval	19 th February 2019
7	Date for finalising the Locational Capacity Constraint Limits for the Capacity Auction	19 th February 2019

⁹ Based on ROI LSFO transport adder used in I-SEM PLEXOS Forecast Model 2016-17.

¹⁰ I-SEM PLEXOS Forecast Model 2017-17

¹¹ I-SEM PLEXOS Forecast Model 2016-17



8	Final Qualification Results Date: the date by which the System Operators are expected to inform persons who submit Applications for Qualification of Final Qualification Decisions in respect of the Capacity Auction	7 th March 2019
9	Qualification Results Publication Date: the date by which the System Operators are expected to publish the total Qualified capacity in respect of the Capacity Auction	7 th March 2019
10	Final Auction Information Pack Date: the date by which the System Operators are expected to publish the Final Auction Information Pack for the Capacity Auction	7 th March 2019
11	Capacity Auction Submission Commencement: the earliest date and time that Participants may submit Capacity Auction Offers in respect of Capacity Market Units Qualified to participate in the Capacity Auction	21 st March 2019 10:00
12	Capacity Auction Submission End: the last date and time until Participants may submit Capacity Auction Offers in respect of Capacity Market Units Qualified to participate in the Capacity Auction	28 th March 2019 10:00
13	Capacity Auction Run Start: the day and time that the System Operators initiate the run of the software program referred to in paragraph F.8.5.1 in respect of the Capacity Auction	28 th March 2019 12:00
14	Capacity Auction Completion Date: the date by which the System Operators are expected to complete the Capacity Auction (including the Capacity Auction Monitor's review)	2 nd April 2019
15	Capacity Auction Provisional Results Date: the date by which the System Operators are expected to provide provisional Capacity Auction results to Participants	2 nd April 2019
16	Capacity Auction Approval Date: the date by which the Regulatory Authorities are expected to approve the Capacity Auction results	25 th April 2019
17	Capacity Auction Results Date: the date the System Operators are expected to publish the Capacity Auction results	29 th April 2019
18	Performance Security Date: the last date for Participants to provide Performance Securities to the System Operators for Awarded New Capacity allocated in the Capacity Auction	2 nd May 2019

2.18 Timeframe for Reviewable Decisions and Qualification Disputes

Appendix C: Table B: Timeframe for Reviewable Decisions and Qualification Disputes.

The approved timetable for Reviewable Decision and Qualification Disputes is set out in Table 212 below:

Table 22 – Timeframe for Reviewable Decisions and Qualification Disputes

	Event	Date
1	Timeframe within which Applications for Review must be lodged	8 th January 2019
2	Timeframe within which System Operators may reject a noncomplying Application for Review	10 th January 2019
3	Timeframe within which Participant must comply with a request for further information	15 th January 2019
4	Timeframe within which System Operators must notify Participant of outcome of their reconsideration	22 nd January 2019

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5	Latest date for giving a Dispute Notice in relation to a Qualification Dispute	24 th January 2019
6	Latest date by which the CMDRB shall give its decision in relation to a Qualification Dispute	19 th February 2019

2.19 Implementation Progress Reporting Schedule

- J.4.2.3 The System Operators shall publish:
- (a) the reporting schedule for Awarded New Capacity initially in the applicable Capacity Auction Timetable; and
- (b) any amended reporting schedule within two Working Days of receiving the schedule or amended schedule from the Regulatory Authorities.

There shall not be any fixed reporting dates between the 2022/2023 T-4 Capacity Auction and the 2022/2023 Capacity Year. The obligation on the Participant with Awarded Capacity remains to report upon achieving the following Milestones (where applicable):

- (i) Substantial Financial Completion;
- (ii) Commencement of Construction Works; and
- (iii) Substantial Completion.



3. Capacity Market Code Items Change Table

Information contained within this Initial Auction Information Pack (IAIP) may be subject to change during the publication of the Final Auction Information Pack (FAIP). The FAIP is due to be published by 7th March 2019. The below table provides a breakdown of Capacity Market Code items which are deemed to be Final/Indicative and Anticipated.

Table 223 - Capacity Market Code Items Change Table

Code Item	IAIP	FAIP
De-Rating Curves	Final	
Capacity Requirement	Final	
Indicative Demand Curve	Indicative	Final
Locational Capacity Constraint Areas	Final	
Locational Capacity Constraint Minimum Requirement		Final
Awarded Capacity	Final	
Auction Price Cap	Final	
Existing Capacity Price Cap	Final	
New Capacity Investment Rate Threshold	Final	
Annual Stop-Loss Limit Factor	Final	
Billing Period Stop-Loss Limit Factor	Final	
Annual Capacity Payment Exchange Rate	Indicative	Final
Increase and Decrease Tolerance	Final	
Performance Securities	Final	
Termination Charges	Final	
Administered Scarcity Price	Anticipated	
Strike Price	Anticipated	
Capacity Auction Timetable	Indicative	Final