



I-SEM 2021/22 T-2 Capacity Auction
Independent Auction Monitor Report

12th December 2019

Commission for Regulation of Utilities and
the Northern Ireland Authority for Utility
Regulation

CONFIDENTIAL



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I. INDEPENDENT ASSURANCE REPORT

This report sets out our conclusions in relation to the monitoring of the processes and procedures followed by the System Operators (EirGrid and SONI Ltd; SOs) in conducting the 2021/2022 T-2 Capacity Auction, with respect to Capacity Auction Submissions submitted between Thursday 28/11/2019 10:00 and 05/12/2019 10:00, to ensure that it has been correctly carried out in accordance with the SOs' obligations under the Capacity Market Code (CMC).

Our monitoring duties have been carried out using the International Standard on Assurance Engagements (ISAE) 3000 (Revised) "Assurance Engagements Other than Audits or Reviews of Historical Financial Information" issued by the International Federation of Accountants (IFAC).

I.1. SCOPE OF THIS REPORT

This report is produced in accordance with the terms of our engagement contract, dated 14th November 2017, for the purposes of reporting to the Regulatory Authorities (RAs) – the Commission for Regulation of Utilities (CRU) and the Northern Ireland Authority for Utility Regulation (UR) – in connection with CEPA's arrangement as the Capacity Auction Monitor for the I-SEM Capacity Auctions.

Under the CMC, the SOs have various obligations with respect to qualification for and conducting of the Capacity Auctions. The latest version of the CMC and its associated procedures are available here:

<https://www.semcommittee.com/news-centre/publication-i-sem-crm-capacity-market-code-decision>

Approved and pending modifications to this version of the CMC are available here:

<https://www.sem-o.com/rules-and-modifications/capacity-market-modifications/>

CEPA's role as the appointed Capacity Auction Monitor for the I-SEM is to provide independent assurance to the market and the RAs that the SOs have correctly carried out their obligations under the CMC in respect of qualification for, and running of, Capacity Auctions, as set out in the Terms of Reference for the Capacity Auction Monitor.¹

We monitored the processes and procedures followed by the SOs for the Capacity Auction, as far as possible, in accordance with our Terms of Reference for this engagement. We provide our conclusions (in Section 1.4 below) in relation to compliance with the CMC based on our obligations. This report is provided in accordance with Section B.10.4 of the Capacity Market Code, which sets out the requirement for the Capacity Auction Monitor to provide a report to the RAs:

- confirming the list of Participants with Capacity Market Units that have been allocated Awarded Capacity;
- stating whether or not the Capacity Auction Monitor considers that the Capacity Auction was conducted in accordance with the CMC; and
- identifying any of the SOs' actual or potential non-compliance with the CMC.

Note that, except where expressly stated, we did not audit or otherwise verify the information provided to us by the SOs in the course of our work. A separate Capacity Market Auditor is required to be in place

¹ SEM Committee (2017): 'Capacity Remuneration Mechanism – Terms of Reference for the Capacity Market Auditor and Capacity Auction Monitor', SEM-17-023.



under the CMC, with its obligations set out within the Capacity Market Auditor Terms of Reference. For the avoidance of doubt, CEPA would like to make clear that we are a professional economic advisory firm and not professional accountants.

1.2. OUR APPROACH

We developed a set of protocols and analytical tools to monitor the processes and procedures followed by the SOs for the Capacity Auction.

In carrying out our duties, we have followed a system of quality control, professional conduct and ethical behaviour which we consider to be of a standard at least as demanding as that required by ISAE 3000 (Revised). This includes documented policies and procedures related to our monitoring activities, leadership responsibilities for quality control in the firm, independence and ethical requirements and management of human resources.

We have performed our work as the appointed Capacity Auction Monitor based on our fundamental principles of integrity, objectivity, professional competence and due care, confidentiality and professional behaviour.

1.3. INHERENT LIMITATIONS

Our conclusions are based on historical information. The projection of any information or conclusions in this report to any future periods would be inappropriate.

Our examination excludes audit procedures, and accordingly we do not express an audit opinion on the information. We note that the procedures we performed were not designed to and are not likely to reveal fraud.

An outline of the work we performed for the Capacity Auction is included in Appendix A.

1.4. CONCLUSIONS

Our conclusions in this report reflect reasonable assurance.

We believe that the procedures performed, and the evidence obtained, provide us with a reasonable basis that, except for the matters described in Section 4 of our report, the Capacity Auction was conducted by the SOs in accordance with the requirements of the CMC.

Actual and potential instances of non-compliance are summarised in Section 4.

1.5. USE OF THE REPORT

This report has been prepared for the exclusive use of the RAs in accordance with the scope of our engagement contract and the RAs' Terms of Reference for the Capacity Auction Monitor.

Our work has been undertaken solely for the purpose of assessing that the SOs have correctly carried out the obligations placed on them under the CMC in carrying out the Capacity Auction. Our work was not planned or conducted with any other objective in mind, and so cannot be relied on for any other purpose. With the exception of providing it to the RAs and the SOs, and publishing it on the SEM Committee website, our report is not to be recited or referred to in any document, copied or made available (in whole or part) to any person without our prior written express consent. To the fullest extent permitted by law,



CEPA does not accept or assume responsibility to anyone, other than the RAs, for this report or for the conclusions we have formed.

Cambridge Economic Policy Associates

Cambridge Economic Policy Associates Ltd

London, United Kingdom

12th December 2019





2. BACKGROUND AND CONTEXT

2.1. BACKGROUND

In the I-SEM Capacity Market, capacity providers sell qualified capacity to the market to meet the capacity requirement in a future capacity year. Capacity providers who are successful in the Capacity Auction receive a regular capacity payment; in return, they have an obligation to generate when the system is stressed.

The operation of the Capacity Market and the roles and responsibilities of the market operator – split jointly between the SOs and Single Electricity Market Operator (SEMO) – are governed by the CMC and the Trading and Settlement Code.

2.1.1. Our role as Capacity Auction Monitor

The Terms of Reference for the Capacity Auction Monitor state that:

“The purpose of the Capacity Auction Monitor is to provide independent assurance to the market and the Regulatory Authorities that the System Operators’ are correctly carrying out their obligations under the Capacity Market Code (CMC) in respect of qualification for and running of Capacity Auctions.” and that:

“The Capacity Auction Monitor (“the Monitor”) will be responsible for assuring the processes associated directly with Capacity Auctions, i.e. from the start of qualification through to the determination of the final auction results.”

As Capacity Auction Monitor, we are required to produce a Report on the Capacity Auction, within two Working Days after the SOs have submitted the provisional Capacity Auction Results to the RAs, that:

- confirms the list of Participants with Capacity Market Units that have been allocated Awarded Capacity;
- states whether or not the Capacity Auction Monitor considers that the Capacity Auction was conducted in accordance with the CMC; and
- where applicable, identifies any actual or potential non-compliance with the CMC or other actual or potential irregularity in the conduct of the Capacity Auction, together with the Capacity Auction Monitor’s assessment as to the likely consequences of the actual or potential noncompliance or irregularity.

This report summarises our findings in relation to the Capacity Auction run by the SOs on 05/12/2019.

2.2. OBJECTIVES AND SCOPE

The CMC paragraph B.10.2.1 sets out that:

“The Capacity Auction Monitor shall monitor the processes and procedures followed by the System Operators in carrying out the Qualification Process, conducting Capacity Auctions and related activities under this Code, in accordance with the terms of reference determined by the Regulatory Authorities.”

The basic tasks set out for the Capacity Auction Monitor are:

- monitoring the Qualification Process to ensure that the SOs have complied with the CMC;
- being present at the auctions, with full read access to all key software, including access to all bids and all communications between the SOs and all bidders;



- monitoring the application of algorithms and calculations;
- reporting on whether it considers that the SOs have conducted the Capacity Auction in accordance with the CMC;
- identifying any actual or potential breach of the rules and regulations or other actual or potential irregularities in the conduct of the Capacity Auction by the SOs and an assessment of the consequences; and
- making recommendations on the changes to the CMC, Auction Guidelines and User Guides.

As Capacity Auction Monitor, we are required to report on all issues that we identify, irrespective of materiality.

Explicitly considered as within scope of the role of the Capacity Auction Monitor is to monitor compliance with the methodology employed by the SOs to determine Locational Capacity Constraints (LCCs) in the auction process (as referred to in Sections C.2 and F.4 of the CMC). Also, explicitly within scope is monitoring the application of the capacity auction algorithm used by the SOs to clear the Capacity Auction.

2.3. SCOPE EXCLUSIONS

In line with our Terms of Reference, the scope of our review excluded the following:

- Secondary trading arrangements (referenced specifically within Chapter H of the CMC).
- Direct investigation of market manipulation: However, the Terms of Reference state that the Capacity Auction Monitor should bring any incidents of potential market manipulation to the attention of the RAs, should it come across them in carrying out its duties.
- The determination of the LCCs and their underlying methodology: The Capacity Auction Monitor's scope in relation to LCCs is limited to assessing compliance by the SOs with the methodology for determining LCCs, including accordance with relevant procedures and process documentation.
- Auditing of the processes carried out by the SOs: The CMC requires a Capacity Market Auditor to be appointed separately from the Capacity Auction Monitor. Under our Terms of Reference, we are not required to carry out an audit of the processes followed, or information provided, by the SOs in running the auction.
- Monitoring of compliance with obligations of Section L.7 of the CMC regarding SO reporting of REMIT Data on behalf of Participants.





3. AUCTION RESULTS

The Capacity Auction Submission Commencement date for the T-2 Auction was at 10:00 on 28th November 2019.

The Capacity Auction Submission End date took place at 10:13 on 5th December 2019, 13 minutes later than the Capacity Auction Timetable scheduled time of 10:00. No offers were received after 10:00. This issue is discussed further in Issue Log 015 in Appendix B.2.

The Capacity Auction Run Start occurred at 12:00 on 5th December 2019 and was completed within a minute of initiation. The auction clearing process was completed within the 24-hour Allowed Timeframe.

The Capacity Auction was run using the Capacity Market Platform (CMP) version 1.1.2.1 according to information displayed in the CMP.

In line with the Final Auction Information Pack (FAIP), the parameters of the Demand Curve used in the 2021/22 T-2 Auction are set out in Table 3.1.

Table 3.1: Final Demand Curve used in the Capacity Auction, as in FAIP 2022/22 T-2

De-Rated Capacity (MW)	Demand Curve Point (€/MW per year)
0	138,450
6,756	138,450
6,756	92,300
7,769.4	0

The capacity requirements to satisfy LCC requirements were as set out in Table 3.2.

Table 3.2: LCCs and minimum MW required, as in FAIP 2022/22 T-2

LCC Area Name	Minimum MW
L1-1: Northern Ireland	1,830
L1-2: Ireland	5,616
L2-1: Greater Dublin	1,484

A total of 130 offers were submitted from 104 CMUs (out of a total of 122 qualified CMUs) with the total capacity offered equal to 7,790.583 MW.

A total of 7,511.541 MW cleared in the auction with 101 CMUs being awarded capacity. The Auction Clearing Price was €45,950/MW per year (£40,969.02/MW per year²).

In the unconstrained solution, a total of [§<] MW of capacity was scheduled. The Price Setting Offer in the unconstrained solution was an inflexible offer. Based on the amount of capacity scheduled in the unconstrained solution, L1-2 and L2-1 were both satisfied.

² Converted using the Annual Capacity Payment Exchange rate published in the Final Auction Information Pack (€1 = £0.8916).





In the constrained solution, an additional [X] MW of capacity (net) was cleared, made up of [X] MW removed and [X] MW added as compared to the unconstrained solution.³ All of these added/removed offers were inflexible, had a duration of one year, and were associated with existing units. All LCC minimum MW requirements were satisfied in the constrained solution.

Table 3.3 shows the relevant quantities.

Table 3.3: Summary of changes between the unconstrained and the constrained solution

CMU ID	Type	LCC Area	Offered Quantity (MW)	Cleared Q in unconstrained solution (MW)	Cleared Q in constrained solution (MW)	Difference (MW)
[X]	[X]	[X]	[X]	[X]	[X]	[X]
[X]	[X]	[X]	[X]	[X]	[X]	[X]
[X]	[X]	[X]	[X]	[X]	[X]	[X]
[X]	[X]	[X]	[X]	[X]	[X]	[X]
Net capacity of these units				[X]	[X]	[X]
Total for the entire Capacity Auction				[X]	[X]	[X]

The offers that cleared only in the constrained solution ([X] and [X]) were cleared at their respective offer prices of [X]/MW per year and [X]/MW per year (equal to their Unit Specific Offer Price Cap), compared to the auction clearing price of €45,950.00/MW (or £40,969.02/MW per year. [X] partially cleared in the unconstrained solution, where it set the Auction Clearing Price. However, this offer was inflexible, and it was scheduled for [X] MW in the constrained solution.

Table 3.4 lists the participants and corresponding CMUs that have been awarded capacity in the T-2 Auction.

³ The Capacity Auction clearing process involves steps to ‘remove’ some capacity that was scheduled in the unconstrained solution. These steps were implemented as a result of a CMC Modification that affects the Interim Auction Solution Methodology, and which was required to comply with the State Aid decision to disallow the clearing of additional capacity to resolve local capacity constraints within an auction (see SEM-O (2019) “[Capacity Market Code Urgent Modifications Set 2: Decision Paper](#)”)





Table 3.4: List of participants and CMUs provisionally awarded capacity in the T-2 Capacity Auction for the Capacity Year 2021/22

Party Name	Party ID	Participant ID	CMU ID	Technology class	Location	Capacity Type	Quantity offered	Quantity awarded
AC Automation (UK) Ltd	PY_000109	PT_500064	DSU_501200	Demand Side Unit	NI	Existing	[X]	6.824
Aughinish Alumina Ltd	PY_000024	PT_400024	GU_400120	Gas Turbine	IE	Existing	[X]	57.472
			GU_400121	Gas Turbine	IE	Existing	[X]	57.472
Bord Gais ROI	PY_000027	PT_400028	GU_400930	Gas Turbine	IE	Existing	[X]	374.736
BRI Green Energy Ltd	PY_000068	PT_400062	GU_401720	Wind	IE	Existing	[X]	1.828
Contour Global Solutions (Northern Ireland) Limited	PY_000081	PT_500048	GU_500900	Gas Turbine	NI	Existing	[X]	2.740
			GU_500904	Gas Turbine	NI	Existing	[X]	10.960
Craiggore Energy Limited	PY_034080	PT_502518	GU_503340	Wind	NI	New	[X]	2.209
Cushaling Power Ltd	PY_000083	PT_400078	GU_401010	Gas Turbine	IE	Existing	[X]	52.548
			GU_401011	Gas Turbine	IE	Existing	[X]	52.548
Dublin Waste to Energy Supply Ltd.	PY_000152	PT_400198	GU_402030	Steam Turbine	IE - Dublin	Existing	[X]	51.537
Edenderry Supply Co	PY_000147	PT_400169	GU_401860	Steam Turbine	IE	Existing	[X]	96.877
EirGrid Interconnector Designated Activity Company	PY_000097	IO_EIDAC	I_ROIEWIC	Interconnector	IE	Existing	[X]	217.000
Electricity Exchange Limited	PY_000114	PT_400116	DSU_401400	Demand Side Unit	IE	Both existing and new	[X]	44.802
			DSU_401870	Demand Side Unit	IE	Both existing and new	[X]	25.102



Party Name	Party ID	Participant ID	CMU ID	Technology class	Location	Capacity Type	Quantity offered	Quantity awarded
			DSU_402090	Demand Side Unit	IE	Both existing and new	[X]	15.898
			DSU_402100	Demand Side Unit	IE	Both existing and new	[X]	9.414
			DSU_402120	Demand Side Unit	IE	Both existing and new	[X]	11.065
			DSU_403520	Demand Side Unit	IE	Both existing and new	[X]	8.202
			DSU_403560	Demand Side Unit	IE	New	[X]	5.614
		PT_502516	DSU_503460	Demand Side Unit	NI	New	[X]	3.091
Empower Generation Limited	PY_000111	PT_500073	GU_501230	Gas Turbine	NI	Both existing and new	[X]	11.903
Endeco Technologies Limited	PY_000126	PT_400133	DSU_401530	Demand Side Unit	IE	Both existing and new	[X]	25.515
			DSU_401910	Demand Side Unit	IE	Both existing and new	[X]	6.603
			DSU_402180	Demand Side Unit	IE	Both existing and new	[X]	9.074
		PT_500099	DSU_501460	Demand Side Unit	NI	Both existing and new	[X]	12.505
Energia Customer Solutions	PY_000043	PT_400043	DSU_401590	Demand Side Unit	IE	Existing	[X]	4.280
Energia Power Generation Limited	PY_000044	PT_400044	GU_400540	Gas Turbine	IE - Dublin	Existing	[X]	342.000



Party Name	Party ID	Participant ID	CMU ID	Technology class	Location	Capacity Type	Quantity offered	Quantity awarded	
Energy Trading Ireland Limited	PY_000113	PT_400111	DSU_403620	Demand Side Unit	IE	New	[X]	2.810	
			PT_500067	DSU_501380	Demand Side Unit	NI	Existing	[X]	7.485
				DSU_501510	Demand Side Unit	NI	Existing	[X]	4.896
				DSU_501590	Demand Side Unit	NI	New	[X]	17.855
				DSU_501600	Demand Side Unit	NI	Existing	[X]	4.542
EnerNOC Ireland Limited	PY_000088	PT_400090	DSU_401270	Demand Side Unit	IE	Both existing and new	[X]	42.001	
			DSU_401610	Demand Side Unit	IE	Both existing and new	[X]	11.154	
			DSU_401620	Demand Side Unit	IE - Dublin	Existing	[X]	7.823	
			DSU_401800	Demand Side Unit	IE - Dublin	Existing	[X]	8.453	
			DSU_401850	Demand Side Unit	IE - Dublin	Existing	[X]	8.568	
			DSU_403020	Demand Side Unit	IE - Dublin	Existing	[X]	8.652	
			DSU_403030	Demand Side Unit	IE - Dublin	New	[X]	8.959	
			DSU_403040	Demand Side Unit	IE - Dublin	New	[X]	9.145	



Party Name	Party ID	Participant ID	CMU ID	Technology class	Location	Capacity Type	Quantity offered	Quantity awarded
			DSU_403050	Demand Side Unit	IE - Dublin	New	[X]	8.959
			DSU_403080	Demand Side Unit	IE	Existing	[X]	3.755
			DSU_403120	Demand Side Unit	IE	Both existing and new	[X]	16.424
			DSU_403450	Demand Side Unit	IE	New	[X]	11.703
			DSU_403470	Demand Side Unit	IE	New	[X]	8.400
		PT_500098	DSU_501450	Demand Side Unit	NI	Existing	[X]	5.082
EP Ballylumford Limited	PY_000056	PT_500040	GU_500283	Gas Turbine	NI	Existing	[X]	52.548
			GU_500284	Gas Turbine	NI	Existing	[X]	52.548
EP Kilroot Limited	PY_000070	PT_500045	GU_500820	Gas Turbine	NI	Existing	[X]	37.699
			GU_500821	Gas Turbine	NI	Existing	[X]	37.699
			GU_500822	Steam Turbine	NI	Existing	[X]	197.571
			GU_500823	Steam Turbine	NI	Existing	[X]	199.630
			GU_500824	Gas Turbine	NI	Existing	[X]	26.455



Party Name	Party ID	Participant ID	CMU ID	Technology class	Location	Capacity Type	Quantity offered	Quantity awarded
			GU_500825	Gas Turbine	NI	Existing	[X]	26.455
ESB	PY_000030	PT_400030	CAU_400301	Hydro	IE	Existing	[X]	192.386
			GU_400181	Gas Turbine	IE	Existing	[X]	81.450
			GU_400182	Gas Turbine	IE	Existing	[X]	81.450
			GU_400183	Gas Turbine	IE	Existing	[X]	81.450
			GU_400270	Steam Turbine	IE	Existing	[X]	217.170
			GU_400272	Steam Turbine	IE	Existing	[X]	217.170
			GU_400324	Gas Turbine	IE - Dublin	Existing	[X]	204.010
			GU_400325	Gas Turbine	IE - Dublin	Existing	[X]	204.010
			GU_400360	Pumped Hydro Storage	IE	Existing	[X]	55.188
			GU_400361	Pumped Hydro Storage	IE	Existing	[X]	55.188
			GU_400362	Pumped Hydro Storage	IE	Existing	[X]	55.188
			GU_400363	Pumped Hydro Storage	IE	Existing	[X]	55.188



Party Name	Party ID	Participant ID	CMU ID	Technology class	Location	Capacity Type	Quantity offered	Quantity awarded
			GU_400850	Gas Turbine	IE	Both existing and new	[X]	364.626
		PT_400031	GU_400430	Wind	IE	Existing	[X]	3.995
		PT_400033	CAU_400302	Wind	IE	Existing	[X]	6.711
			DSU_401330	Demand Side Unit	IE	Existing	[X]	10.951
		PT_400037	GU_400500	Gas Turbine	IE - Dublin	Existing	[X]	353.165
		PT_500024	GU_500040	Gas Turbine	NI	Existing	[X]	356.581
Evishagaran Wind Farm Ltd	PY_034083	PT_502519	GU_503360	Wind	NI	New	[X]	3.751
Huntstown Power Company	PY_000033	PT_400035	GU_400480	Gas Turbine	IE - Dublin	Existing	[X]	296.172
Indaver Energy Limited	PY_000101	PT_400087	GU_401230	Steam Turbine	IE	Existing	[X]	14.484
iPower Solutions Ltd	PY_000093	PT_500053	DSU_503480	Demand Side Unit	NI	New	[X]	4.923
			GU_501130	Gas Turbine	NI	Existing	[X]	56.558
Moyle Interconnector Limited	IO_MOYLE	IO_MOYLE	I_NIMOYLE	Interconnector	NI	Existing	[X]	201.600
Power NI Energy Limited Power Procurement Business (PPB)	PY_000034	PT_500027	GU_500130	Gas Turbine	NI	Existing	[X]	218.348

REDACTED



Party Name	Party ID	Participant ID	CMU ID	Technology class	Location	Capacity Type	Quantity offered	Quantity awarded
			GU_500131	Gas Turbine	NI	Existing	[X]	218.348
			GU_500140	Gas Turbine	NI	Existing	[X]	89.052
Powerhouse Generation Limited	PY_000128	PT_400144	DSU_401660	Demand Side Unit	IE	Both existing and new	[X]	4.934
		PT_500078	DSU_501330	Demand Side Unit	NI	Both existing and new	[X]	11.754
			DSU_501560	Demand Side Unit	NI	New	[X]	11.455
Ronaver Energy Limited	PY_000194	PT_400460	GU_403000	Gas Turbine	IE	Existing	[X]	1.814
			GU_403960	Other Storage	IE	New	[X]	4.140
SSE Airtricity Limited	PY_000021	PT_400021	CAU_400500	Wind	IE	Existing	[X]	18.055
SSE Generation Ireland Limited	PY_000071	PT_400064	GU_400750	Steam Turbine	IE	Existing	[X]	45.414
			GU_400751	Steam Turbine	IE	Existing	[X]	45.414
			GU_400752	Steam Turbine	IE	Existing	[X]	187.264
			GU_400753	Steam Turbine	IE	Existing	[X]	187.264
			GU_400762	Gas Turbine	IE	Existing	[X]	389.296



Party Name	Party ID	Participant ID	CMU ID	Technology class	Location	Capacity Type	Quantity offered	Quantity awarded
			GU_400770	Gas Turbine	IE	Existing	[X]	46.931
			GU_400771	Gas Turbine	IE	Existing	[X]	46.931
			GU_400780	Steam Turbine	IE	Existing	[X]	47.112
			GU_400781	Steam Turbine	IE	Existing	[X]	47.112
Tynagh Energy Limited	PY_000041	PT_400041	GU_400530	Gas Turbine	IE	Existing	[X]	342.000
Veolia Alternative Energy Ireland Limited	PY_000122	PT_400124	DSU_401490	Demand Side Unit	IE	Existing	[X]	10.421
			DSU_401880	Demand Side Unit	IE	Both existing and new	[X]	15.750
Winter Winds Ltd.	PY_034082	PT_402568	GU_403890	Other Storage	IE	New	[X]	2.277



The participants listed in Table 3.5 submitted offers for CMUs in the T-2 Auction but were **not** awarded any capacity.

Table 3.5: List of participants provisionally not awarded capacity in the T-2 Capacity Auction for the Capacity Year 2021/22

Party Name	Party ID	Participant ID	CMU ID	Technology class	Location	Capacity Type	Quantity offered	Quantity awarded
Energia Customer Solutions	PY_000043	PT_400043	DSU_402040	Demand Side Unit	IE	Existing	[✂]	0.000
ESB	PY_000030	PT_400030	GU_400271	Steam Turbine	IE	Existing	[✂]	0.000
		PT_500024	GU_500041	Gas Turbine	NI	Existing	[✂]	0.000



4. SUMMARY OF ISSUES IDENTIFIED WITH THE CAPACITY AUCTION PROCESS

We performed our role as Capacity Auction Monitor in relation to the 2021/22 T-2 Capacity Auction, which took place on 05/12/2019 in line with our obligations to monitor the conduct of the SOs in operating the Capacity Auctions.

4.1. SUMMARY OF ISSUES

In carrying out our duties, we identified three issues that we consider constitute non-compliance with the CMC, noting our obligation to report all issues to the RAs irrespective of materiality. The table below sets out a high-level summary of actual or potential instances of non-compliance identified within the Capacity Auction process. Detailed issue logs are included in Appendix B.

Table 4.1: Summary of issues identified within the Capacity Auction process⁴

Issue number	Description of issue
013	The SOs are required to make an LCC determination under F.4.1.4 two Working Days after the Provisional Qualification Results Date (by 03/09/2019); it was delayed by four Working Days.
015	CMC F.6.2.1 states that Participants shall only be allowed to submit offers between the Capacity Auction Submission Commencement Date (in this auction, 10:00 28/11/2019) and Capacity Auction Submission End (in this auction, 10:00 05/12/2019). Submission End was delayed until 10:13. No offers were received after 10:00.
017	CMC L.2.5 outlines the SOs obligations during testing and upgrading of systems and communication channels. On 25/11/2019, the SOs undertook an update of the CMP Production environment at 13:00, which ended at 13:19 and required an outage of the CMP Production environment during this time. This was conducted in a manner that was non-compliant with notification and other requirements of L.2.5.1, L.2.5.2 and L.2.5.4.

4.2. FURTHER CONSIDERATIONS

4.2.1. Publication of Capacity Auction Results

The Capacity Auction Results were shared with the RAs on 05/12/2019. Participants were informed of their results through the CMP on 10/12/2019 via email. Provisional Capacity Auction Results are due to be published on 17/12/2019. CMC F.9.1.1 sets out the requirements of Capacity Auction Results:

- F.9.1.1(a) requires that Participants are informed of all Awarded Capacity and the associated Capacity Payment Price and capacity duration. The SOs are required to make this available to the Participants through the CMP on 10/12/2019, as required by the Capacity Auction Timetable, and to notify Participants by email.

⁴ Issue numbers are assigned to potential instances of non-compliance as they are identified. Issue numbers missing from the table above may be associated with issues that were included in the Monitor's Qualification Report for this Auction, or may reflect issues that have been investigated and determined not to represent non-compliance with the CMC.



- F.9.1.1(b) requires that SOs provide an updated Implementation Plan for any New Capacity that was awarded in the Capacity Auction. The SOs informed us that they intend to issue this with the publication of Provisional Capacity Auction Results on 17/12/2019.
- F.9.1.1(c) is not applicable for this auction as all LCCs were satisfied in the constrained solution.

4.2.2. Chapter L: Data and information systems

Chapter L of the CMC sets out the SOs' requirements in relation to data and information systems, including communication between SOs and Participants, any system failures which affect the qualification or auction process, as well as publication of auction data in relation to the qualification or auction process. We do not monitor all communications between SOs and Participants, but rather rely primarily on the SOs and the RAs to notify us when issues arise. This is supplemented by onsite monitoring during the auction process.

The SOs informed us that a maintenance outage of the CMP occurred on 25th November 2019, three Working Days before Capacity Auction Submission Commencement. This outage was planned to take place between 13:00 and 14:00; the outage lasted for 19 minutes. Participants were informed of the planned outage through an email sent at 08:34 on the 25th November. Issue Log 017 in Appendix B discusses the process around this outage in more detail.

We did not witness any communications failures (Section L.4 of the CMC) in relation to the T-2 Auction. In addition, SOs notified us directly during our site visit that no communications failures occurred.

In addition to participants being able to submit offers on the Capacity Market Platform, the SOs provide a Manual Offer Submission channel for participants who have difficulties in submitting offers on the Capacity Market Platform. The SOs confirmed that there were no manual offer submissions by Participants.



APPENDIX A SUMMARY OF WORK PERFORMED

Our fieldwork was completed on the 5th and 6th of December 2019 at the SO' premises at The Oval, Shelbourne Road, Dublin.

The sections of the CMC checked at the time of issuing this report are outlined in the table below.

CMC Section	CMC Subsection	Paragraph
C. De-Rating and Capacity Concepts	C.2 Locational Capacity Constraints	C.2.1.2
C. De-Rating and Capacity Concepts	C.2 Locational Capacity Constraints	C.2.2.2
C. De-Rating and Capacity Concepts	C.2 Locational Capacity Constraints	C.2.3.1
C. De-Rating and Capacity Concepts	C.2 Locational Capacity Constraints	C.2.3.2
D. Pre Capacity Auction Process	D.2 Capacity Auctions and Timetables	D.2.1.10
D. Pre Capacity Auction Process	D.2 Capacity Auctions and Timetables	D.2.1.11
D. Pre Capacity Auction Process	D.2 Capacity Auctions and Timetables	D.2.1.14
D. Pre Capacity Auction Process	D.2 Capacity Auctions and Timetables	D.2.1.16
D. Pre Capacity Auction Process	D.2 Capacity Auctions and Timetables	D.2.1.17
E. Qualification	E.1 Purpose of Qualification Process	E.1.1.4
E. Qualification	E.4 Application for Qualification	E.4.1.8
E. Qualification	E.5 Exception Applications	E.5.1.9
E. Qualification	E.8 Qualification Calculations	E.8.9.1
E. Qualification	E.8 Qualification Calculations	E.8.9.2
E. Qualification	E.9 Notification of Qualification Decisions	E.9.3.3
E. Qualification	E.9 Notification of Qualification Decisions	E.9.3.5
E. Qualification	E.9 Notification of Qualification Decisions	E.9.3.6
E. Qualification	E.9 Notification of Qualification Decisions	E.9.4.1
E. Qualification	E.9 Notification of Qualification Decisions	E.9.4.2
E. Qualification	E.9 Notification of Qualification Decisions	E.9.4.3
E. Qualification	E.9 Notification of Qualification Decisions	E.9.4.4
E. Qualification	E.9 Notification of Qualification Decisions	E.9.4.9
E. Qualification	E.9 Notification of Qualification Decisions	E.9.4.10
E. Qualification	E.9 Notification of Qualification Decisions	E.9.4.11
E. Qualification	E.9 Notification of Qualification Decisions	E.9.5.1
F. Capacity Auctions	F.1 General	F.1.2.2
F. Capacity Auctions	F.2. Capacity Auction Participation	F.2.1.1
F. Capacity Auctions	F.3 Demand Curve	F.3.1.1
F. Capacity Auctions	F.3 Demand Curve	F.3.1.2
F. Capacity Auctions	F.3 Demand Curve	F.3.1.6
F. Capacity Auctions	F.3 Demand Curve	F.3.1.7



CMC Section	CMC Subsection	Paragraph
F. Capacity Auctions	F.4 Determination of Locational Capacity Constraints for a Capacity Auction	F.4.1.1
F. Capacity Auctions	F.4 Determination of Locational Capacity Constraints for a Capacity Auction	F.4.1.2
F. Capacity Auctions	F.4 Determination of Locational Capacity Constraints for a Capacity Auction	F.4.1.4
F. Capacity Auctions	F.4 Determination of Locational Capacity Constraints for a Capacity Auction	F.4.1.5
F. Capacity Auctions	F.4 Determination of Locational Capacity Constraints for a Capacity Auction	F.4.1.6
F. Capacity Auctions	F.4 Determination of Locational Capacity Constraints for a Capacity Auction	F.4.1.7
F. Capacity Auctions	F.5 Publication of Final	F.5.1.1
F. Capacity Auctions	F.5 Publication of Final	F.5.1.2
F. Capacity Auctions	F.5 Publication of Final	F.5.1.3
F. Capacity Auctions	F.6 Capacity Auction Submissions	F.6.1.1
F. Capacity Auctions	F.6 Capacity Auction Submissions	F.6.2.1
F. Capacity Auctions	F.7 Capacity Auction Offers	F.7.1.1
F. Capacity Auctions	F.7 Capacity Auction Offers	F.7.1.2
F. Capacity Auctions	F.7 Capacity Auction Offers	F.7.1.3
F. Capacity Auctions	F.8 Conduct of Capacity Auction	F.8.1.1
F. Capacity Auctions	F.8 Conduct of Capacity Auction	F.8.2.1
F. Capacity Auctions	F.8 Conduct of Capacity Auction	F.8.2.2
F. Capacity Auctions	F.8 Conduct of Capacity Auction	F.8.3.2
F. Capacity Auctions	F.8 Conduct of Capacity Auction	F.8.3.3
F. Capacity Auctions	F.8 Conduct of Capacity Auction	F.8.3.4
F. Capacity Auctions	F.8 Conduct of Capacity Auction	F.8.3.5
F. Capacity Auctions	F.8 Conduct of Capacity Auction	F.8.4.2
F. Capacity Auctions	F.8 Conduct of Capacity Auction	F.8.4.3
F. Capacity Auctions	F.8 Conduct of Capacity Auction	F.8.4.4
F. Capacity Auctions	F.8 Conduct of Capacity Auction	F.8.4.5
F. Capacity Auctions	F.8 Conduct of Capacity Auction	F.8.4.6
F. Capacity Auctions	F.8 Conduct of Capacity Auction	F.8.4.7
F. Capacity Auctions	F.8 Conduct of Capacity Auction	F.8.5.1
F. Capacity Auctions	F.8 Conduct of Capacity Auction	F.8.6.1
F. Capacity Auctions	F.9 Capacity Auction Results	F.9.1.1
F. Capacity Auctions	F.9 Capacity Auction Results	F.9.3.1
K. Exchange Rates	K.2 Methodology	K.2.1.6





CMC Section	CMC Subsection	Paragraph
L. Data and Information Systems	L.2 Methodology	L.2.2.2
L. Data and Information Systems	L.2 Methodology	L.2.3.1
L. Data and Information Systems	L.2 Methodology	L.2.4.3
L. Data and Information Systems	L.2 Methodology	L.2.4.4
L. Data and Information Systems	L.2 Methodology	L.2.5.1
L. Data and Information Systems	L.2 Methodology	L.2.5.2
L. Data and Information Systems	L.2 Methodology	L.2.5.3
L. Data and Information Systems	L.2 Methodology	L.2.5.4
L. Data and Information Systems	L.2 Methodology	L.2.5.5
L. Data and Information Systems	L.2 Methodology	L.2.6.2
L. Data and Information Systems	L.2 Methodology	L.2.6.3
L. Data and Information Systems	L.3 Submission, Validation and Rejection of Data Transactions	L.3.1.1
L. Data and Information Systems	L.3 Submission, Validation and Rejection of Data Transactions	L.3.1.3
L. Data and Information Systems	L.3 Submission, Validation and Rejection of Data Transactions	L.3.1.6
L. Data and Information Systems	L.3 Submission, Validation and Rejection of Data Transactions	L.3.1.7
L. Data and Information Systems	L.3 Submission, Validation and Rejection of Data Transactions	L.3.1.8
L. Data and Information Systems	L.4 Communications Failures	L.4.2.1
L. Data and Information Systems	L.4 Communications Failures	L.4.2.3
L. Data and Information Systems	L.4 Communications Failures	L.4.3.1
L. Data and Information Systems	L.4 Communications Failures	L.4.3.3
L. Data and Information Systems	L.4 Communications Failures	L.4.3.4
L. Data and Information Systems	L.4 Communications Failures	L.4.4.2
L. Data and Information Systems	L.4 Communications Failures	L.4.4.3
L. Data and Information Systems	L.4 Communications Failures	L.5.4.1
M. Interim Arrangements	M.4 Interim Solutions for Conducting Capacity Auctions	M.4.1.3
M. Interim Arrangements	M.4 Interim Solutions for Conducting Capacity Auctions	M.4.1.4
M. Interim Arrangements	M.4 Interim Solutions for Conducting Capacity Auctions	M.4.1.7
M. Interim Arrangements	M.5 Locational Capacity Constraints	M.5.1.1
M. Interim Arrangements	M.5 Locational Capacity Constraints	M.5.1.2
M. Interim Arrangements	M.6 Alternative Auction Solution Methodology	M.6.1.2
M. Interim Arrangements	M.6 Alternative Auction Solution Methodology	M.6.1.3
M. Interim Arrangements	M.6 Alternative Auction Solution Methodology	M.6.1.5
M. Interim Arrangements	M.6 Alternative Auction Solution Methodology	M.6.1.6





CMC Section	CMC Subsection	Paragraph
M. Interim Arrangements	M.6 Alternative Auction Solution Methodology	M.6.1.7

We note that the above checks were conducted (where applicable) at the level of numerical rounding specified under CMC L.5.4 for calculations and published quantities.





APPENDIX B SUMMARIES OF OBSERVED ISSUES RESULTING FROM THE CAPACITY AUCTION

B.1. ISSUE LOG 013

Issue ID	Affected auction(s)	Issue status	Compliance status
013	2021/22 T-I Capacity Auction	Closed	Non-compliant
Summary			
The SOs are required to make an LCC determination under F.4.1.4 two Working Days after the Provisional Qualification Results Date (by 03/09/2019); it was delayed by four Working Days.			
Description of issue			
<p>F.4.1.4 requires that the SOs make a determination regarding LCCs, as specified in F.4.1.1, no later than two Working Days after the Provisional Qualification Results Date. The Provisional Qualification Results Date was the 30/08/2019, making the deadline for F.4.1.4 03/09/19.</p> <p>The values defined in F.4.1.1 were submitted to the RAs on 09/09/19. This delay resulted from the delay to publication of the Provisional Qualification Results – the determination was made two Working Days following the delayed publication of the Provisional Qualification Results (which took place on 05/09/19).</p>			
Capacity Auction Monitor's comments			
This issue represents technical non-compliance with F.4.1.4. It resulted from the delay in publication of Provisional Qualification Results, which is discussed in Section 4.2 of the Independent Monitor's Report on the Qualification Process for this Auction.			



B.2. ISSUE LOG 015

Issue ID	Affected auction(s)	Issue status	Compliance status
015	2021/22 T-2 Capacity Auction	Closed	Non-compliant
Summary			
<p>CMC F.6.2.1 states that Participants shall only be allowed to submit offers between the Capacity Auction Submission Commencement Date (in this auction, 10:00 28/11/2019) and Capacity Auction Submission End (in this auction, 10:00 05/12/2019). Submission End was delayed until 10:13. No offers were received after 10:00.</p>			
Description of issue			
<p>CMC F.6.2.1 states that Participants shall only be allowed to submit offers between the Capacity Auction Submission Commencement Date (in this auction, 10:00 28/11/2019) and Capacity Auction Submission End (in this auction, 10:00 on 05/12/2019). CMC F.8.1.1(a) requires that the SOs conduct each Capacity Auction in accordance with the applicable Capacity Auction Timetable, which includes the Capacity Auction Submission Commencement Date and Capacity Auction Submission End.</p> <p>Capacity Auction Submission End was scheduled in the Capacity Auction Timetable to occur at 10:00 on 05/12/2019. At this time, the SOs manually initiated Submission End and the CMP (on the SOs' view, not available in the Monitor's view of the CMP) changed to state that it was "processing" Submission End.</p> <p>At 10:06, with Submission End still indicated as "processing", the SOs raised an urgent request to the software providers to investigate. The SOs confirmed that the software providers then intervened:</p> <p style="padding-left: 40px;"><i>"the root cause was as a result of the TaskRunner hanging in a running state, which is a valid state in CMP. This was resolved by restarting the TaskRunner which then allowed the Gate to close [Submission End]."</i></p> <p>Submission End was completed at 10:13.</p> <p>The CMC defines Capacity Auction Submission End as the</p> <p style="padding-left: 40px;"><i>"date and time until which Participants will be able to submit Capacity Auction Offers in respect of Capacity Market Units Qualified to participate in the Capacity Auction."</i></p> <p>Due to the delay to closure of the submission window, Participants may have been able to submit offers after Capacity Auction Submission End. However, data exported from the CMP, including timestamps of when offers were submitted, show that no offers were made after 10:00 (the latest offer was received at 09:46:08).</p>			
Capacity Auction Monitor's comments			
<p>This is technical non-compliance with CMC F.6.2.1 and F.8.1.1(a).</p> <p>Given that no offers were submitted after 10:00, and the delay did not cause a subsequent delay in Capacity Auction Run Start, we do not consider that this error has had any material impact on the Capacity Auction.</p>			





B.3. ISSUE LOG 017

Issue ID	Affected auction(s)	Issue status	Compliance status
017	2021/22 T-2 Capacity Auction	Closed	Non-compliant
Summary			
<p>CMC L.2.5 outlines the SOs obligations during testing and upgrading of systems and communication channels. On 25/11/2019, the SOs undertook an update of the CMP Production environment at 13:00, which ended at 13:19 and required an outage of the CMP Production environment during this time. This was conducted in a manner that was non-compliant with notification and other requirements of L.2.5.1, L.2.5.2 and L.2.5.4.</p>			
Description of issue			
<p>CMC section L.2.5 contains the obligations of Parties during Testing and Upgrading of Systems and Communication Channels.</p> <p>On 25/11/2019, the SOs undertook an update of the CMP Production environment at 13:00, which ended at 13:19 and required an outage of the CMP Production environment during this time. The SOs stated that the purpose of this was to “to fix some minor known defects/issues within CMP.”</p> <p>CMC L.2.5.1 requires the SOs to “co-ordinate and facilitate testing of the Capacity Market Platform and the interfaces to Communication Channels as described under Agreed Procedure 5 “System Operation, Testing, Upgrading and Support””.</p> <p>The SOs informed that Monitor that “this was deemed to be an Application Release under Table 2 of AP5”. In Table 2 of AP5, an Application Release is described as “Implementation of application software or system change as a result of approved Modification Proposal(s) or a change originating from the System Operators’ internal change management process. Section 2.2.2 above sets out further detail in relation to Scheduled Releases and the procedure in relation to change management for Scheduled Releases is set out at section 3.2 below.”.</p> <p>The procedure in relation to the Application Release is set out in Section 3.2 of AP5.⁵ Step 6 of Section 3.2.1 “Change Management for Scheduled Releases” requires that the SOs issue notification of the Application Release via email and on the SO website to Participants at least one week prior to the release date. We have requested a copy of any such email and website notification from the SOs but it has not been provided.</p> <p>In addition to the above, AP5 requires the SOs to “remind Participants and the Market Operator of the Implementation one Working Day prior to the scheduled day for the Implementation”, which would have been 22/11/19. We have requested a copy of any such communication from the SOs but it has not been provided.</p> <p>AP5 also requires that “when the Implementation is complete, the System Operators shall, as soon as practicable, inform Participants and the Market Operator by publishing the information on the System Operators’ website”. This was also requested from the SOs but no evidence that this occurred was provided.</p> <p>On the basis of the above assessment, we can conclude that the SOs were not fully compliant with requirements of AP5 with regard to the CMP update, and therefore are non-compliant with L.2.5.1.</p> <p>CMC L.2.5.2 requires the SOs to “provide reasonable prior notice to all affected Parties of any proposed testing, upgrading or down-time of the Capacity Market Platform or the Communication Channels”. The SOs did not notify the Participants of this update until 08:34 on 25/11/19 via an email stating:</p> <p style="padding-left: 40px;"><i>“In advance of the 2020/2021 T-1 Capacity Auction, please be advised that an update of the CMP Production environment is required.</i></p>			

⁵ SEM Committee (2017) “[Agreed Procedure 5: System Operation, Testing, Upgrading and Support](#)”





This update is scheduled to take place today (25/11/2019) from 13:00-14:00 and will require an outage of the CMP Production environment during this time.

This will have no effect on offers submitted prior to the start of this outage.

Offers for the 2020/2021 T-1 Capacity Auction may be submitted after this outage until Capacity Auction Submission End at 10:00am on Tuesday November 26th.”

Due to the SOs internally approving the update to the CMP via email on 22/11/19 at 15:40, we deem that the SOs did not provide reasonable prior notice to the Participants of the down-time of the CMP.

CMC L.2.5.4 requires the SOs to “*shall ensure that the scheduled testing or down-time will, where practicable, be scheduled in a manner which does not preclude Capacity Auction Offers, Secondary Auction Bids and Secondary Auction Offers Data being submitted in the timescales provided for in the relevant Capacity Auction Timetable or Secondary Trade Information Pack (as applicable)*”.

The CMP testing prevented participants from submitting Capacity Auction Offers and there has been no evidence provided by the SOs to suggest that the testing could not have been undertaken before the Auction Offer Submission window.

Therefore, we deem this non-compliant with L.2.5.4.

Capacity Auction Monitor’s comments

We consider this to be non-compliant with L.2.5.1, L.2.5.2 and L.2.5.4. As this outage took place three Working Days before Capacity Auction Submission Commencement, we consider it unlikely that there was any material impact on the Auction.

