

# I-SEM 2023-24 T-4 Capacity Auction Independent Auction Monitor Report

Commission for Regulation of Utilities (CRU) and the  
Northern Ireland Authority for Utility Regulation  
(NIAUR)

5 May 2020

As updated 11 May 2020

**AUCTION REPORT**

---

## **Important notice**

This report was prepared by CEPA<sup>1</sup> for the exclusive use of the recipient(s) named herein.

The information contained in this document has been compiled by CEPA and may include material from other sources, which is believed to be reliable but has not been verified or audited. Public information, industry and statistical data are from sources we deem to be reliable; however, no reliance may be placed for any purposes whatsoever on the contents of this document or on its completeness. No representation or warranty, express or implied, is given and no responsibility or liability is or will be accepted by or on behalf of CEPA or by any of its directors, members, employees, agents or any other person as to the accuracy, completeness or correctness of the information contained in this document and any such liability is expressly disclaimed.

The findings enclosed in this report may contain predictions based on current data and historical trends. Any such predictions are subject to inherent risks and uncertainties.

The opinions expressed in this document are valid only for the purpose stated herein and as of the date stated. No obligation is assumed to revise this report to reflect changes, events or conditions, which occur subsequent to the date hereof.

CEPA does not accept or assume any responsibility in respect of the document to any readers of it (third parties), other than the recipient(s) named therein. To the fullest extent permitted by law, CEPA will accept no liability in respect of the report to any third parties. Should any third parties choose to rely on the report, then they do so at their own risk.

---

<sup>1</sup> "CEPA" is the trading name of Cambridge Economic Policy Associates Ltd (Registered: England & Wales, 04077684), CEPA LLP (A Limited Liability Partnership. Registered: England & Wales, OC326074) and Cambridge Economic Policy Associates Pty Ltd (ABN 16 606 266 602).

## Contents

<b>1. INDEPENDENT ASSURANCE REPORT .....</b>	<b>4</b>
1.1. Scope of the report.....	4
1.2. Our approach .....	4
1.3. Inherent limitations.....	5
1.4. Conclusions .....	5
1.5. Use of the report .....	5
<b>2. BACKGROUND AND CONTEXT.....</b>	<b>6</b>
2.1. Background.....	6
2.2. Our role as Capacity Auction Monitor .....	6
2.3. Objectives and scope.....	6
2.4. Scope exclusions.....	7
<b>3. AUCTION RESULTS.....</b>	<b>8</b>
3.1. CMUs provisionally awarded capacity in this Capacity Auction .....	10
3.2. CMUs provisionally not awarded capacity in this capacity auction.....	17
<b>4. SUMMARY OF ISSUES IDENTIFIED WITH THE CAPACITY AUCTION PROCESS .....</b>	<b>19</b>
4.1. Summary of issues .....	19
4.2. Further considerations .....	19
<b>APPENDIX A SUMMARY OF WORK PERFORMED.....</b>	<b>26</b>
<b>APPENDIX B SUMMARIES OF OBSERVED ISSUES RESULTING FROM THE CAPACITY AUCTION PROCESS</b>	<b>30</b>

## **1. 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 Capacity Market Auction for the 2023/2024 T-4 Capacity Auction, with respect to Capacity Auction Submissions submitted between Tuesday 21/04/2020 and Monday 27/04/2020 10:00, to ensure that it has been correctly carried out in accordance with the SOs' obligations under the Capacity Market Code (CMC).

### **1.1. SCOPE OF THE 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 – 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 Market Auctions.

Under the CMC, the SOs have various obligations with respect to qualification for and conducting of the Capacity Auctions. These obligations apply to Capacity Auctions which the SOs are required to satisfy under the CMC. The SEM Committee's decision approving the CMC and its associated procedures are available here:

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

The most up to date version of the CMC, and approved and pending modifications, are available here:

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

CEPA's role as the appointed Capacity Auction Monitor for the I-SEM is to provide independent assurance to the market and the Regulatory Authorities (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.<sup>2</sup>

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 CMC, 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 this Code; and
- identifying any actual or potential non-compliance with the CMC by the SOs.

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 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.

---

<sup>2</sup> SEM Committee (2017): 'Capacity Remuneration Mechanism – Terms of Reference for the Capacity Market Auditor and Capacity Auction Monitor', SEM-17-023.

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 the attached 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 in relation to the T-4 Capacity Auction for the 2023/2024 Capacity Year.**

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 Ltd  
London, United Kingdom  
11<sup>th</sup> May 2020

## **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 that assists with funding generation capacity and, 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.

### **2.2. 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.

Because the date on which the SOs submit the provisional Capacity Auction Results to the RAs is not a fixed date (it takes place at some point between Capacity Auction Run Start and Capacity Auction Provisional Results Date), we agreed an alternative deadline for this report for this Capacity Auction with the RAs: two Working Days after Capacity Auction Provisional Results are provided to Participants through the CMP. This provides certainty for all parties in when to expect the Capacity Auction Monitor’s report, and is in line with the requirement for the Monitor’s Qualification Report to be provided two Working Days after the PQR are provided to Participants through the CMP.

This report summarises our findings in relation to the Capacity Auction run by the SOs on 27/04/2020.

### **2.3. 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.

## **2.4. 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 the 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-4 Auction was at 10:00 on 21/04/2020.

The Capacity Auction Submission End date took place at 10:00 on 27/03/2020. Capacity Auction Run Start occurred at 12:00 on 27/04/2020 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 1.1.3.3 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 2023/24 T-4 Auction are set out in Table 3.1

Table 3.1: Final Demand Curve used in the Capacity Auction, as in FAIP 2023/24 T-4

De-Rated Capacity (MW)	Demand Curve Point (€/MW per year)
0	138,450
6,169.75	138,450
6,670	92,300
7,670.5	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 2023/24 T-4

LCC Area Name	Minimum MW
L1-1: Northern Ireland	1,882
L1-2: Ireland	5,341
L2-1: Greater Dublin	1,637
L2-2: Rest of Ireland	0

A total of 177 offers were submitted from 124 CMUs (out of a total of 172 qualified CMUs) with the total capacity offered equal to 8,413.442 MW.

A total of 7,322.471 MW cleared in the auction with 115 CMUs being awarded capacity. The Auction Clearing Price was €46,149/MW per year (£43,666.18/MW per year).

In the unconstrained solution, a total of [x] MW of capacity was scheduled. The Price Setting Offer in the unconstrained solution was an inflexible offer. Based on the amount of capacity in-merit in the unconstrained solution, two of the LCCs (L1-2: Ireland and L2-1: Greater Dublin) were satisfied.

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. All of the offers added were from new units, were located in the L1-1 LCC area (Northern Ireland) and were inflexible. All offers of New Capacity added in the constrained solution (i.e. that were in addition to the unconstrained solution) had a duration of 10 years, with one exception (which had a duration of 1 year). All LCC minimum MW requirements were satisfied in the constrained solution.

In line with the CMC Modification, 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<sup>3</sup>, and in accordance with the Interim

<sup>3</sup> SEM-O (2019) "[Capacity Market Code Urgent Modifications Set 2: Decision Paper](#)"



Auction Solution Methodology, additional steps were applied in the constrained solution to ‘remove’ some capacity that was scheduled in the unconstrained solution. Table 3.3 shows the relevant quantities.

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

CMU ID	Capacity type(s) offered by this CMU	LCC Area	CMU's total Offered Quantity (MW)	CMU's total cleared Q in unconstrained solution (MW)	CMU's total cleared Q in constrained solution (MW)	Increase in MW cleared in constrained vs unconstrained solution
[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]
[X]	[X]	[X]	[X]	[X]	[X]	[X]
[X]	[X]	[X]	[X]	[X]	[X]	[X]
[X]	[X]	[X]	[X]	[X]	[X]	[X]
<b>Total of these units</b>					[X]	[X]
<b>Total in entire Capacity Auction</b>					[X]	[X]

Notes: [X]

The offers that were cleared only in the constrained solution were cleared at their respective offer prices of:

- [X]
- [X]
- [X]; and
- [X]

compared to the Auction Clearing Price of £43,666.18/MW per year.

Based on the outcome of the T-4 Auction, Table 3.4 lists the participants and corresponding CMUs that have been provisionally awarded capacity.

### 3.1. CMUs PROVISIONALLY AWARDED CAPACITY IN THIS CAPACITY AUCTION

Table 3.4: List of participants and CMUs provisionally awarded capacity in the T-4 Capacity Auction for the Capacity Year 2023/24

Party Name	Party ID	Participant ID	CMU ID	Technology class	LCC Area	Capacity Type	Quantity offered (MW)	Quantity awarded (MW)
AC Automation (UK) Ltd	PY_000109	PT_500064	DSU_501200	Demand Side Unit	Northern Ireland	Existing	[X]	6.832
Aughinish Alumina Ltd	PY_000024	PT_400024	GU_400120	Gas Turbine	Ireland	Existing	[X]	57.54
			GU_400121	Gas Turbine	Ireland	Existing	[X]	57.54
Bord Gais ROI	PY_000027	PT_400028	GU_400930	Gas Turbine	Ireland	Existing	[X]	377.4
BRI Green Energy Ltd	PY_000068	PT_400062	GU_401720	Wind	Ireland	Existing	[X]	1.728
			GU_404190	Wind	Ireland	Existing	[X]	3.024
			GU_404200	Wind	Ireland	Existing	[X]	2.16
			GU_404210	Wind	Ireland	Existing	[X]	4.08
CONTOURGLOBAL SOLUTIONS (NORTHERN IRELAND) LIMITED	PY_000081	PT_500048	GU_500900	Gas Turbine	Northern Ireland	Existing	[X]	2.755
			GU_500904	Gas Turbine	Northern Ireland	Existing	[X]	11.021
Cushaling Power Ltd	PY_000083	PT_400078	GU_401010	Gas Turbine	Ireland	Existing	[X]	52.664
			GU_401011	Gas Turbine	Ireland	Existing	[X]	52.664
Data and Power Hub Services Limited	PY_034087	PT_402571	GU_404220	Gas Turbine	Ireland - Greater Dublin	New	[X]	52.664
			GU_404230	Gas Turbine	Ireland - Greater Dublin	New	[X]	52.664
Drumkee Energy Limited	PY_034079	PT_502517	GU_503330	Other Storage	Northern Ireland	New	[X]	7.91
Dublin Waste to Energy Supply Ltd	PY_000152	PT 400198	GU_402030	Steam Turbine	Ireland - Greater Dublin	Existing	[X]	51.66

Party Name	Party ID	Participant ID	CMU ID	Technology class	LCC Area	Capacity Type	Quantity offered (MW)	Quantity awarded (MW)
Edenderry Supply Co	PY_000147	PT_400169	GU_401860	Steam Turbine	Ireland	Existing	[X]	96.878
EIRGRID INTERCONNECTOR DESIGNATED ACTIVITY COMPANY	PY_000097	IO_EIDAC	I_ROIEWIC	Interconnector	Ireland	Existing	[X]	219.5
Electricity Exchange Limited	PY_000114	PT_400116	DSU_401400	Demand Side Unit	Ireland	Both existing and new	[X]	32.839
			DSU_401870	Demand Side Unit	Ireland	Both existing and new	[X]	24.283
			DSU_402090	Demand Side Unit	Ireland	Both existing and new	[X]	8.783
			DSU_402100	Demand Side Unit	Ireland	Existing	[X]	7.448
			DSU_402120	Demand Side Unit	Ireland	Existing	[X]	9.813
			DSU_403520	Demand Side Unit	Ireland	Both existing and new	[X]	9.154
			DSU_403560	Demand Side Unit	Ireland	New	[X]	6.274
			DSU_403630	Demand Side Unit	Ireland	New	[X]	9.375
			DSU_403640	Demand Side Unit	Ireland	New	[X]	7.476
		PT_502516	DSU_503460	Demand Side Unit	Northern Ireland	New	[X]	6.28
Empower Generation Limited	PY_000111	PT_500073	GU_501230	Gas Turbine	Northern Ireland	Existing	[X]	11.969

Party Name	Party ID	Participant ID	CMU ID	Technology class	LCC Area	Capacity Type	Quantity offered (MW)	Quantity awarded (MW)
ENDECO TECHNOLOGIES LIMITED	PY_000126	PT_400133	DSU_401530	Demand Side Unit	Ireland	Both existing and new	[X]	30.261
			DSU_401910	Demand Side Unit	Ireland	Both existing and new	[X]	10.199
			DSU_402180	Demand Side Unit	Ireland	Both existing and new	[X]	10.268
		PT_500099	DSU_501460	Demand Side Unit	Northern Ireland	Both existing and new	[X]	15.611
Energia Customer Solutions Limited	PY_000043	PT_400043	DSU_401590	Demand Side Unit	Ireland	Existing	[X]	4.28
Energia Customer Solutions NI Limited	PY_000042	PT_500030	GU_503350	System Wide	Northern Ireland	New	[X]	8.15
Energia Power Generation Limited	PY_000044	PT_400044	GU_400540	Gas Turbine	Ireland - Greater Dublin	Existing	[X]	344.4
			GU_404020	System Wide	Ireland - Greater Dublin	New	[X]	2.04
			GU_404040	System Wide	Ireland - Greater Dublin	New	[X]	15.6
Energy Trading Ireland Limited	PY_000113	PT_400111	DSU_403510	Demand Side Unit	Ireland	New	[X]	4.48
			PT_500067	DSU_501380	Demand Side Unit	Northern Ireland	Existing	[X]
		DSU_501510	Demand Side Unit	Northern Ireland	Both existing and new	[X]	8.064	
		DSU_501600	Demand Side Unit	Northern Ireland	Both existing and new	[X]	5.376	
		DSU_501610	Demand Side Unit	Northern Ireland	New	[X]	4.877	

Party Name	Party ID	Participant ID	CMU ID	Technology class	LCC Area	Capacity Type	Quantity offered (MW)	Quantity awarded (MW)
			DSU_503490	Demand Side Unit	Northern Ireland	New	[X]	5.025
EnerNOC Ireland Ltd	PY_000088	PT_400090	DSU_401270	Demand Side Unit	Ireland	Both existing and new	[X]	43.102
			DSU_401610	Demand Side Unit	Ireland	Both existing and new	[X]	7.263
			DSU_401620	Demand Side Unit	Ireland - Greater Dublin	Existing	[X]	9.513
			DSU_401800	Demand Side Unit	Ireland - Greater Dublin	Existing	[X]	9.435
			DSU_401850	Demand Side Unit	Ireland - Greater Dublin	Existing	[X]	9.563
			DSU_403020	Demand Side Unit	Ireland - Greater Dublin	Existing	[X]	9.657
			DSU_403030	Demand Side Unit	Ireland - Greater Dublin	Existing	[X]	10.186
			DSU_403040	Demand Side Unit	Ireland - Greater Dublin	Existing	[X]	10.206
			DSU_403050	Demand Side Unit	Ireland - Greater Dublin	Existing	[X]	9.813
			DSU_403080	Demand Side Unit	Ireland	Both existing and new	[X]	15.815
			DSU_403120	Demand Side Unit	Ireland	Both existing and new	[X]	19.191
			DSU_403450	Demand Side Unit	Ireland	New	[X]	13.022
			DSU_403470	Demand Side Unit	Ireland	New	[X]	9.375

Party Name	Party ID	Participant ID	CMU ID	Technology class	LCC Area	Capacity Type	Quantity offered (MW)	Quantity awarded (MW)
		PT_500098	DSU_501450	Demand Side Unit	Northern Ireland	Existing	[X]	5.417
EP BALLYLUMFORD LIMITED	PY_000056	PT_500040	GU_500283	Gas Turbine	Northern Ireland	Existing	[X]	52.301
			GU_500284	Gas Turbine	Northern Ireland	Existing	[X]	52.301
			GU_503720	Gas Turbine	Northern Ireland	Existing	[X]	218.912
			GU_503730	Gas Turbine	Northern Ireland	Existing	[X]	218.912
			GU_503740	Gas Turbine	Northern Ireland	Existing	[X]	88.328
EP KILROOT LIMITED	PY_000070	PT_500045	GU_500820	Gas Turbine	Northern Ireland	Existing	[X]	37.823
			GU_500821	Gas Turbine	Northern Ireland	Existing	[X]	37.823
			GU_500824	Gas Turbine	Northern Ireland	Existing	[X]	26.39
			GU_500825	Gas Turbine	Northern Ireland	Existing	[X]	26.39
			GU_503430	Gas Turbine	Northern Ireland	New	[X]	80.03
			GU_503440	Gas Turbine	Northern Ireland	New	[X]	258.06
ESB	PY_000030	PT_400030	CAU_400301	Hydro	Ireland	Existing	[X]	190.912
			GU_400182	Gas Turbine	Ireland	Existing	[X]	81.54
			GU_400183	Gas Turbine	Ireland	Existing	[X]	81.54
			GU_400270	Steam Turbine	Ireland	Existing	[X]	218.595
			GU_400272	Steam Turbine	Ireland	Existing	[X]	218.595
			GU_400324	Gas Turbine	Ireland - Greater Dublin	Both existing and new	[X]	204.47
			GU_400325	Gas Turbine	Ireland - Greater Dublin	Both existing and new	[X]	204.47
			GU_400360	Pumped Hydro Storage	Ireland	Existing	[X]	57.086

Party Name	Party ID	Participant ID	CMU ID	Technology class	LCC Area	Capacity Type	Quantity offered (MW)	Quantity awarded (MW)
			GU_400361	Pumped Hydro Storage	Ireland	Existing	[X]	57.086
			GU_400362	Pumped Hydro Storage	Ireland	Existing	[X]	57.086
			GU_400363	Pumped Hydro Storage	Ireland	Existing	[X]	57.086
			GU_400850	Gas Turbine	Ireland	Existing	[X]	367.21
			GU_403610	Gas Turbine	Ireland - Greater Dublin	New	[X]	3.83
			GU_403620	Gas Turbine	Ireland - Greater Dublin	New	[X]	3.83
			GU_403680	Gas Turbine	Ireland - Greater Dublin	New	[X]	3.83
		PT_400033	CAU_400302	Wind	Ireland	Existing	[X]	9.794
			DSU_401330	Demand Side Unit	Ireland	Both existing and new	[X]	11.057
		PT_400037	GU_400500	Gas Turbine	Ireland - Greater Dublin	Existing	[X]	355.655
		PT_500024	GU_500040	Gas Turbine	Northern Ireland	Existing	[X]	359.1
			GU_500041	Gas Turbine	Northern Ireland	Existing	[X]	47.673
Grange Backup Power Limited	PY_034059	PT_402551	GU_403450	Gas Turbine	Ireland - Greater Dublin	New	[X]	104.026
Huntstown Power Company	PY_000033	PT_400035	GU_400480	Gas Turbine	Ireland - Greater Dublin	Existing	[X]	297.54
Indaver Energy Limited	PY_000101	PT_400087	GU_401230	Steam Turbine	Ireland	Existing	[X]	14.569
	PY_000093	PT_000093	GU_501130	Gas Turbine	Northern Ireland	Existing	[X]	56.87

Party Name	Party ID	Participant ID	CMU ID	Technology class	LCC Area	Capacity Type	Quantity offered (MW)	Quantity awarded (MW)
iPower Solutions Ltd		PT_500053	DSU_503050	Demand Side Unit	Northern Ireland	New	[X]	8.669
			DSU_503420	Demand Side Unit	Northern Ireland	New	[X]	3.836
			DSU_503480	Demand Side Unit	Northern Ireland	New	[X]	4.928
Moyle Interconnector Limited	IO_MOYLE	IO_MOYLE	I_NIMOYLE	Interconnector	Northern Ireland	Existing	[X]	203.4
Mullavilly Energy Limited	PY_034078	PT_502515	GU_503320	Other Storage	Northern Ireland	New	[X]	7.91
Powerhouse Generation Limited	PY_000128	PT_400144	DSU_401660	Demand Side Unit	Ireland	Both existing and new	[X]	5.514
		PT_500078	DSU_501330	Demand Side Unit	Northern Ireland	Both existing and new	[X]	13.079
			DSU_501560	Demand Side Unit	Northern Ireland	New	[X]	12.475
Ronaver Energy Limited	PY_000194	PT_400460	GU_403000	Gas Turbine	Ireland	New	[X]	1.824
			GU_403960	System Wide	Ireland	New	[X]	4.88
SCOTTISHPOWER RENEWABLES (UK) LIMITED	PY_034089	PT_402573	GU_404260	Other Storage	Ireland	New	[X]	11
			GU_404270	Other Storage	Ireland	New	[X]	0.741
SSE Airtricity Limited	PY_000021	PT_400021	CAU_400500	Wind	Ireland	Existing	[X]	24.049
SSE Generation Ireland Limited	PY_000071	PT_400064	GU_400762	Gas Turbine	Ireland	Existing	[X]	392.08
			GU_400770	Gas Turbine	Ireland	Existing	[X]	47.034
			GU_400771	Gas Turbine	Ireland	Existing	[X]	47.034



Party Name	Party ID	Participant ID	CMU ID	Technology class	LCC Area	Capacity Type	Quantity offered (MW)	Quantity awarded (MW)
			GU_400780	Gas Turbine	Ireland	Existing	[X]	47.216
			GU_400781	Gas Turbine	Ireland	Existing	[X]	47.216
TYNAGH ENERGY LIMITED	PY_000041	PT_400041	GU_400530	Gas Turbine	Ireland	Existing	[X]	344.4
Veolia Alternative Energy Ireland Limited	PY_000122	PT_400124	DSU_401490	Demand Side Unit	Ireland	Existing	[X]	11.631
			DSU_401880	Demand Side Unit	Ireland	Both existing and new	[X]	15.75
Winter Winds Ltd.	PY_034082	PT_402568	GU_403890	Other Storage	Ireland	New	[X]	2.684

### 3.2. CMUs PROVISIONALLY NOT AWARDED CAPACITY IN THIS CAPACITY AUCTION

The participants listed in Table 3.5 submitted offers for CMUs in the T-4 Auction but were not awarded any capacity.

Table 3.5: List of participants provisionally not awarded capacity in the T-4 Capacity Auction for the Capacity Year 2023/24

Party Name	Party ID	Participant ID	CMU ID	Technology class	LCC Area	Capacity Type	Quantity offered (MW)	Quantity awarded (MW)
Belfast Power Limited	PY_034055	PT_502506	GU_503220	Gas Turbine	Northern Ireland	New	[X]	0
Energia Customer Solutions Limited	PY_000043	PT_400043	DSU_402040	Demand Side Unit	Ireland	Existing	[X]	0
Energia Power Generation Limited	PY_000044	PT_400044	GU_404050	Gas Turbine	Ireland - Greater Dublin	New	[X]	0
			GU_404100	Gas Turbine	Ireland - Greater Dublin	New	[X]	0

Party Name	Party ID	Participant ID	CMU ID	Technology class	LCC Area	Capacity Type	Quantity offered (MW)	Quantity awarded (MW)
EnerNOC Ireland Ltd	PY_000088	PT_400090	DSU_403090	Demand Side Unit	Ireland - Greater Dublin	New	[<del>]	0
			DSU_403430	Demand Side Unit	Ireland - Greater Dublin	New	[<del>]	0
EP KILROOT LIMITED	PY_000070	PT_500045	GU_503410	Gas Turbine	Northern Ireland	New	[<del>]	0
ESB	PY_000030	PT_400030	GU_400271	Steam Turbine	Ireland	Existing	[<del>]	0
			GU_404140	Gas Turbine	Ireland - Greater Dublin	New	[<del>]	0

## 4. SUMMARY OF ISSUES IDENTIFIED WITH THE CAPACITY AUCTION PROCESS

We performed our role as Capacity Auction Monitor in relation to the 2023/24 T-4 Capacity Auction, which took place on 27/04/2020, in line with our obligations to monitor the conduct of the SOs in operating the Capacity Auctions. In Section 4.1, we summarise the identified instances of non-compliance with the areas of the CMC within the Monitor’s scope, before presenting some additional considerations in Section 4.2.

### 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 process<sup>4</sup>*

Issue number	Description of issue
014	<p>CMC E.9.2.1 and CMC E9.4.9 require that the SOs notify relevant Participants of their Provisional SO Qualification Decisions and Final Qualification Decisions, respectively. E.9.4.1 specifies the decisions that must be prepared as part of Final Qualification Decisions shared with the RAs. The components that must be included in SO Qualification Decisions are set out in E.9.1.1.</p> <p>Some components are missing from the Participant level reports and from the report shared with the RAs.</p>
015	<p>The SOs are required by CMC E.9.4.11 to inform Participants of changes between the Provisional Qualification Results (PQR) and the Final Qualification Results (FQR). The SOs satisfy this by applying notes in the Capacity Market Platform (CMP), supplemented by emails to provide information that cannot be reasonably shared through the CMP.</p> <p>Three CMUs’ Minimum Firm Transmission Capacities (MFTC) were changed between PQR and FQR, affecting their Firm Offer Requirements (FOR). The FOR is included in the PQR and FQR, but the SOs did not inform the Participant of the change to the FOR between the PQR and FQR. The issue does not seem to have had a material effect on the Capacity Auction, as the Participant submitted offers in line with the updated FORs into the Capacity Auction for all three CMUs.</p>
016	<p>Due to the delay to the publication of PQRs, the SOs were unable to meet the deadline set out in CMC F.4.1.4 (two Working Days after the PQR Date).</p>

### 4.2. FURTHER CONSIDERATIONS

This sub-section contains comments and observations that we believe do not represent non-compliance with the CMC, but we consider it appropriate to summarise for the RAs’ attention.

#### 4.2.1. Publication of Capacity Auction Results

CMC F.9.1.1 sets out the requirements of Capacity Auction Results, with F.9.2.1 requiring that the SOs take reasonable endeavours to provide these items to the Participants by the Capacity Auction Provisional Results Date (30/04/2020). There is no explicit deadline in F.9.3 for providing these items to the RAs, but they must be shared

<sup>4</sup> Issue numbers are assigned to potential instances of non-compliance as they are identified. Issue numbers missing from the table (e.g. Issue 013) may reflect issues investigated as part of 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.

with the RAs for approval. Table 4.2 summarises the CMC requirements and the SOs’ provision of the required information.

Table 4.2: Summary of information shared in line with F.9.1.1, F.9.2.1., and F.9.3.1 to date

CMC paragraph and component of Capacity Auction Results	Provision to Participants under F.9.2.1	Provision to the RAs under F.9.3.1
F.9.1.1(a) The Awarded Capacity and the associated Capacity Payment Price and capacity duration.	This was made available to the Participants through the CMP on 30/04/2020.	This was provided to the RAs by email on 27/04/2020.
F.9.1.1(b) An updated Implementation Plan for any New Capacity that was awarded in the Capacity Auction.	The SOs have informed us that they intend to issue this in the public report issued on the Capacity Auction Provisional Results Publication Date on 05/05/2020.	
F.9.1.1(c) The quantity by which the LCCRQ was not satisfied (if applicable)	This is not applicable as each LCCRQ was satisfied in the constrained solution.	

The SOs have confirmed their intention to provide F.9.1.1(b) to Participants on the Capacity Auction Provisional Results Publication Date (05/05/2020) “*As per standard practice for auctions held to date*” rather than on the Capacity Auction Provisional Results Date. A similar delay was mentioned in the Monitor’s report on the T-4 2022/23, T-1 2020/21, and T-2 2021/22 Capacity Auctions.

The inclusion of “reasonable endeavours” in F.9.2.1 means that the SOs have some flexibility in their deadline to allow for circumstances that make it difficult for the SOs to provide these components by the Capacity Auction Provisional Results Date (30/04/2020). However, the SOs have stated their intention to provide this on the Capacity Auction Provisional Results Publication Date (i.e. later than the Capacity Auction Provisional Results Date) “*as per standard practice*”. This suggests that there is no intention or attempt to provide F.9.1.1(b) by the Capacity Auction Provisional Results Date. If this intention remains for all future auctions, it may be more appropriate for the SOs to submit a CMC Modification Proposal to make this timeline formal in the CMC and to provide Participants with a clearer expectation.

#### 4.2.2. Capacity Auction Timetable

##### Amending and re-publishing the Capacity Auction Timetable

Our T-4 2023/2024 Qualification Report, in Section 4.2.2, discusses the delay to publication of PQR. As a result of these delays, in December 2019 the SOs proposed a change in Capacity Auction Timetable, as permitted under CMC D.2.1.10. The SOs informed participants of the proposed updated timetable by email on 20/01/2020, emphasising that this had not been approved or rejected.

The RAs rejected the SOs’ proposal and set out an alternative Amended Timetable under CMC D.2.1.10. The RAs provided this to the SOs on Friday 14/02/2020.

The SOs published the Amended Timetable on 18/02/2020, in line with D.2.1.11, which requires the SOs to publish any amended Capacity Auction Timetable within two Working Days of it being approved or amended by the RAs.

##### Code modification to allow this T-4 Auction to take place 41 months prior to the Capacity Year

Capacity Auction Run Start in the amended Capacity Auction Timetable was scheduled to take place outside of the time period allowed for a T-4 Auction under CMC D.2.1.5(d): it allows it to take place between 42 and 54 months prior the start of the relevant Capacity Year. The new scheduled Capacity Auction Run Start was 41 months prior.

To enable this Auction to take place, the RAs progressed an urgent CMC Modification CMC\_02\_20 to add a new CMC section (M.10) which applies only to the T-4 Auction for the Capacity Year 2023/24. This was approved on,

and effective from, 12/02/2020. It allows this Capacity Auction specifically to take place between 52 and 40 months prior to the Capacity Year, allowing the Capacity Auction Run Start to take place in April as in the updated plan.<sup>5</sup>

## Capacity Auction Submission Commencement

The Capacity Auction Timetable did not include a **time of day** for Capacity Auction Submission Commencement. The Capacity Auction Timetables for the Capacity Auctions to date have presented Capacity Auction Submission Commencement as shown in Table 4.3 below.

*Table 4.3: Summary of detail given for Capacity Auction Submission Commencement*

Capacity Auction	Capacity Auction Submission Commencement
T-1 2018/2019	11 <sup>th</sup> Dec 2017 <sup>6</sup>
T-1 2019/2020	06/12/2018 10:00
T-1 2020/2021	19/11/2019
T-2 2021/2022	28/11/2019
T-4 2022/2023	21/03/2019 10:00
T-4 2023/2024 (original)	12/03/2020
T-4 2023/2024 (amended)	21/04/2020
T-4 2024/2025	14/01/2021

Capacity Auction Submission Commencement has in each Capacity Auction been listed in the CMP as taking place at 10:00AM on the relevant date, and has been carried out at 10:00AM as planned. But, as shown above, it has only twice been listed in the Capacity Auction Timetable as taking place at 10:00AM.

We consider that it would be appropriate to provide the time in the Capacity Auction Timetable for Capacity Auction Submission Commencement, particularly given that the CMC refers in several places to the “date and time” of this event (F.6.2.1, Glossary, Appendix C Table A), and because it is in practice scheduled to take place on a specific date and time in each Capacity Auction.

The SOs have indicated that they consider the provision of a time for Capacity Auction Submission Commencement to not be a CMC requirement, because the indicative Capacity Auction Timetable in CMC Appendix C Paragraph 5 Table A does not give an indicative time for Capacity Auction Submission Commencement. We highlight that CMC Appendix C Paragraph 3 states:

“The Capacity Auction Timetable shall specify at a minimum the date for each event identified in the Capacity Auction Timetable. Where no time is specified, the applicable time will be at 5 PM.”

Therefore, if no time is indicated, the implicit time is **at 5:00PM**. In several cases (e.g. publication of Provisional Auction Results) this action can be taken at any time up to 5:00PM on the given day, but in the case of Capacity Auction Submission Commencement the CMC is clear that this activity should be carried out specifically **at the date and time** given in the Capacity Auction Timetable. For the avoidance of confusion, we recommend including the time where a time other than 5:00PM is intended for Capacity Auction Submission Commencement.

<sup>5</sup> SEMC (2020) “[SEM 20 008](#)”

<sup>6</sup> This is from the IAIP and FAIP, the Timetable is not available online.

### 4.2.3. Locational Capacity Constraints (LCCs)

#### LCC Required Quantity (LCCRQ)

The SOs provided values for the LCCRQ for each LCC to the RAs. The LCCRQ were calculated in line with the provisions of F.4.1.1(a). The RAs then provide the SOs with their decision relating to LCCRQ, alongside other parameters (FQR, demand curve, etc). In this process there are two relevant values that differ depending on whether they include the amount of capacity awarded in previous auctions for the relevant capacity year:

- The LCCRQ values calculated by the SOs under F.4.1.1(a), as well as any determination of the LCCRQ by the RAs under F.4.1.8A. These values should be calculated on a **gross** basis (including any amount of Awarded Capacity for the relevant capacity year).
- The values used by the SOs' when conducting the Capacity Auction should be calculated under F.8.2.1.(b)(i). This paragraph refers to the LCC applicable to the Capacity Auction, which is calculated **net** of previously Awarded Capacity for the relevant capacity year (i.e. it represents only capacity that is being procured in this auction). The SOs are required to determine this value by deducting Awarded Capacity from the LCCRQ.

This is the first auction where there is a non-zero already Awarded Capacity for the relevant capacity year, and so is the first auction in which the **gross** and **net** values differ. In the FAIP and FQRs approval letter, the RAs provided the LCCRQ values to be used in this auction as a **net** value, rather than as a **gross** value as defined in the CMC. The SOs included in the FAIP, under F.5.1.3(d), the LCCRQ values provided by the RAs. F.5.1.3(d) requires that the FAIP includes the Locational Capacity Constraint Information applicable to the Capacity Auction; i.e. the value provided by the RAs under F.4.1.8A. According to the CMC Glossary, the Locational Capacity Constraint Information should reflect the LCCRQ (i.e. a gross value).

Following publication of the FAIP, and prior to Capacity Auction Run Start, the SOs sought clarification from the RAs that the LCCRQ values provided in the approval letter were intended to represent the values that should apply in the Capacity Auction determined under F.8.2.1.(b)(i). The RAs confirmed that this was the case.

The configuration of the CMP software at present means that the gross LCCRQ value (published in the FAIP) is entered, the Awarded Capacity is applied and the net value is used to run the auction as required under F.8.2.1.(b)(i).

The SOs therefore used an adjusted LCCRQ, converting the **net** value as provided by the RAs into the **gross** value intended by F.5.1.3(d), when applying F.8.2.1(b)(i). to ensure that the Capacity Auction would seek to procure the correct minimum LCCRQ.

If the SOs had used the given LCCRQ (published in the FAIP) in the Capacity Auction as required by F.8.2.1(b), there would have been a risk that the Auction would clear at a quantity lower than that intended in the RAs' decision. The SOs' actions ensured that the Capacity Auction cleared as intended.

It appears to be a reasonable action by the SOs to correct an issue that arose due to the RAs providing a net figure when the CMC required a gross figure. We do not consider this to be an instance of non-compliance with the CMC by the SOs; we provide this description for information.

## New LCC area introduced for this Capacity Auction

The IAIP and FAIP for the T-4 2023/24 included a new LCC area (L2-2: Rest of Ireland) in addition to the three in all previous Capacity Auctions (L1-1, L1-2, L2-1).<sup>7</sup> The decision to include this LCC Area was made by the SEMC.<sup>8</sup> Table 4.4 below shows all four LCC areas in place for this Capacity Auction, and the relevant LCCRQs.

*Table 4.4: LCC Areas in the T-4 Capacity Auction for the 2023/24 Capacity Year*

Level 1 LCC area	Level 1 LCCRQ	Level 2 LCC area	Level 2 LCCRQ
L1-1: Northern Ireland	1,882 MW		
L1-2: Ireland	5,341 MW	L2-1: Greater Dublin	1,637 MW
		L2-2: Rest of Ireland	0 MW

In the FAIP for the T-4 2023/24 Capacity Auction, L2-2 was set with a LCCRQ of 0 MW.<sup>9</sup>

The SOs undertake testing of the CMP (using a CMP test environment) before each auction to ensure that the Capacity Auction will run as intended. During this testing, the SOs determined that to ensure proper operation of the CMP for Capacity Auction Run Start, it was necessary to remove the L2-2 LCC area from the CMP. This was carried out without affecting the result of the auction due to the LCCRQ being 0 MW.

The SOs have informed us that they have begun engagement with the software provider to ensure that the CMP will not encounter any issues if the LCCRQ for L2-2 is non-zero in a future Capacity Auction.

### 4.2.4. Awarded Capacity displaying incorrectly in the CMP

CMC E.9.5.1 specifies the information that the SOs must publish as part of the publication of FQR. This includes the gross capacity qualified, previously Awarded Capacity, and net capacity qualified (i.e. net of previously Awarded Capacity). This information was reported correctly in the FQR Report<sup>10</sup> published on the Qualification Results Publication Date (03/04/2020). It was also published correctly in the FAIP (in line with CMC F.5.1.3(j)) and appropriately incorporated into the LCC calculations.

There was an issue with the treatment of Awarded Capacity in the CMP. On 24/04/2020, the SOs informed Participants by email that the CMP was incorrectly displaying Awarded Capacity to Participants: some Participants had a non-zero Awarded Capacity, but the CMP was displaying 0 MW Awarded Capacity for all CMUs. As a result, Net De-Rated Capacity (calculated as Gross De-Rated Capacity net of Awarded Capacity) was also reported incorrectly for any CMUs with a non-zero Awarded Capacity. The SOs advised Participants to disregard the values in the CMP and instead to refer to the FQR Report.

As this information remained correct in the FQR Report, this issue does not represent an area of non-compliance with the CMC. While it was not possible for the information presented in the CMP to be corrected prior to the auction, the SOs demonstrated reasonable endeavours in informing Participants of the issue, and directing them to the correct information as in the FQR Report.

This was the first Capacity Auction in which some CMUs have previously Awarded Capacity, and therefore this was also the first time that this issue arose.

<sup>7</sup> In the process of the T-4 2022/23 Capacity Auction, the SOs proposed the introduction of L2-2 to “avoid auction outcomes that are not achievable technically and practically”. Following further discussion including with the RAs, L2-2 was not included in the T-4 2022/23 Capacity Auction.

<sup>8</sup> SEMC (2019) “[SEM-19-048](#)”

<sup>9</sup> SEMC (2020) “[SEM-20-020](#)”

<sup>10</sup> [Final Qualification Results FQR2324 T-4](#)

#### **4.2.5. Update to the Final Auction Information Pack (FAIP)**

On 03/04/2020, the SOs published the FAIP on the SEMO website, as required by CMC F.5.1.2, and informed Participants by email. On 08/04/2020 the SOs informed Participants by email that an updated FAIP had to be republished because, due to an “*administrative pasting error*” there had been some mistakes in Table 6 of the previous version. This table sets out the Qualified CMUs in each LCC Area, as required by CMC F.5.1.3(d)(ii).

The SOs flagged this error to Participants and published a corrected FAIP within three Working Days of the original FAIP Publication Date. The information was corrected before the commencement of the next step scheduled in the Capacity Auction Timetable (Capacity Auction Submission Commencement on 21/04/2020).

#### **4.2.6. 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 approach is typically supplemented by onsite monitoring during the auction process, although for this Auction the Covid-19 pandemic required that both the SOs and the Monitor teams work remotely. For this Auction, with the RAs’ approval we have used conference calling and screen-sharing capabilities to best replicate our on-site visits.

#### **Testing and upgrading of the CMP**

CMC L.2.5 outlines the obligations on the parties, including the SO, during testing and upgrading of systems and communications channels, which for these purposes mostly refers to the CMP. There were two upgrades to the CMP (requiring short outages) between PQR and Capacity Auction Run Start.

CMC L.2.5.5 states that any CMP down-time shall not be considered non-compliance as long as two conditions are met: first, that “*the down-time is of reasonable duration*”, and second that they provide “*reasonable prior notice to all parties*”. We discuss compliance with this point below.

##### **Upgrade on 28/02/2020**

An email on 27/02/2020 notified Participants of a short maintenance outage – considered an ‘upgrade’ using the wording of the CMC – was planned for 28/02/2020 between 08:00 and 08:30. The SOs have stated that the maintenance occurred for only 20-30 minutes, with Participants receiving an update at 10:35 on 28/02/2020 that the CMP could be accessed as usual.

Both requirements of L.2.5.5 appear to have been met: The SOs understood that this update was required with a “reasonable degree of urgency” and on this basis considered it appropriate to provide “just under 24 hours notice”. The 30 minute maintenance outage was scheduled to take place relatively early in the day, and to avoid key milestones in the Capacity Auction Timetable to minimise the likelihood of coinciding with Participants wishing to use the CMP.

##### **Upgrade on 23/04/2020**

An email on 22/04/2020 notified Participants of a short maintenance outage – considered an ‘upgrade’ using the wording of the CMC – was planned for 23/04/2020 between 08:00 and 09:00. The SOs have stated that the maintenance occurred for 30 minutes, with Participants receiving an update at 09:12 on 23/04/2020 that the CMP could be accessed as usual.

Both requirements of L.2.5.5 appear to have been met: The SOs considered the outage was required for “essential functionality deployment” prior to the Auction. The SOs stated that the notice was issued to Participants “*as soon as the System Operators had the deployment window confirmed*”, and on this basis the SOs believe they provided as much notice as reasonably possible. The maintenance outage lasted 30 minutes and, although the down-time occurred during the Capacity Auction Offer Submission window, it was scheduled to take place relatively early in the day to minimise impact. The SOs also assured Participants prior to the outage that it would have no effect on



offers submitted prior to the start of this outage (i.e. they would not be required to re-submit their offers). The maintenance outage therefore does not appear to have materially precluded Capacity Auction Offers and so is considered compliant with CMC L.2.5.4.

### **Communications failures**

We did not witness any communications failures (Section L.4 of the CMC) in relation to the T-4 Auction. In addition, SOs confirmed that no communications failures occurred.

### **Submission of offers**

In addition to participants being able to submit offers on the CMP, the SOs provide a Manual Offer Submission channel for participants who have difficulties in submitting offers on the CMP. There were no manual offer submissions by Participants. There were no SO-generated auction offers either, i.e. all CMUs that were required to make an offer successfully made a valid offer of the required quantity (greater than or equal to their Firm Offer Requirement) through the CMP.

### **Rounding**

In accordance with L.5.4.1, the SOs are to use consistent numerical rounding for all published quantities in accordance with the decimal places detailed in the CMC. We note that our checks were conducted (where applicable) at the level of numerical rounding specified under CMC L.5.4 for calculations and published quantities. Additionally, the Final Auction Information Pack was checked for consistency with the numerical rounding specified for published quantities under CMC L.5.4.1.

## Appendix A **SUMMARY OF WORK PERFORMED**

We typically undertake a site visit for the day of Capacity Auction Submission End and Capacity Auction Run Start. For this Capacity Auction, the Covid-19 pandemic has resulted in travel restrictions that require that both the SOs and the Monitor teams work remotely. For this Auction, the RAs approved our approach of using conference calling and screen-sharing capabilities to best replicate our on-site visits.

The areas of the Code checked at the time of issuing this report are outlined in the table below.

*Table A.1: Summary of CMC sections checked by the Monitor in preparing this report*

CMC Chapter	CMC Subsection	CMC Paragraph	
C. De-Rating and Capacity Concepts	C.2 Locational Capacity Constraints	C.2.1.2	
		C.2.2.2	
		C.2.3.1	
		C.2.3.2	
D. Pre Capacity Auction Process	D.2 Capacity Auctions and Timetables	D.2.1.5	
		D.2.1.9	
		D.2.1.10	
		D.2.1.11	
		D.2.1.14	
		D.2.1.16	
		D.2.1.17	
E. Qualification	E.1 Purpose of Qualification Process	E.1.1.4	
	E.4 Application for Qualification	E.4.1.8	
	E.5 Exception Applications	E.5.1.9	
	E.8 Qualification Calculations	E.8.3.1	
		E.8.9.1	
		E.8.9.2	
	E.9 Notification of Qualification Decisions	E.9.3.3	E.9.3.3
		E.9.3.5	E.9.3.5
		E.9.3.6	E.9.3.6
		E.9.4.1	E.9.4.1
		E.9.4.2	E.9.4.2
		E.9.4.3	E.9.4.3
		E.9.4.4	E.9.4.4
E.9.4.9		E.9.4.9	
E.9.4.10	E.9.4.10		
E.9.4.11	E.9.4.11		
E.9.5.1	E.9.5.1		
F. Capacity Auctions	F.1 General	F.1.2.2	

F.2. Capacity Auction Participation	F.2.1.1
F.3 Demand Curve	F.3.1.1
	F.3.1.2
	F.3.1.6
	F.3.1.7
F.4 Determination of Locational Capacity Constraints for a Capacity Auction	F.4.1.1
	F.4.1.2
	F.4.1.4
	F.4.1.5
	F.4.1.6
	F.4.1.7
F.5 Publication of Final	F.5.1.1
	F.5.1.2
	F.5.1.3
F.6 Capacity Auction Submissions	F.6.1.1
	F.6.2.1
F.7 Capacity Auction Offers	F.7.1.1
	F.7.1.2
	F.7.1.3
F.8 Conduct of Capacity Auction	F.8.1.1
	F.8.2.1
	F.8.2.2
	F.8.2.3
	F.8.3.2
	F.8.3.3
	F.8.3.4
	F.8.3.5
	F.8.4.2
	F.8.4.3
	F.8.4.4
	F.8.4.5
	F.8.4.6
	F.8.4.7
	F.8.5.1
	F.8.6.1
F.9 Capacity Auction Results	F.9.1.1
	F.9.2.1

F.9.3.1

K. Exchange Rates	K.2 Methodology	K.2.1.6
L. Data and Information Systems	L.2 Methodology	L.2.2.2
		L.2.3.1
		L.2.4.3
		L.2.4.4
		L.2.5.1
		L.2.5.2
		L.2.5.3
		L.2.5.4
		L.2.5.5
		L.2.5.1
		L.2.5.2
		L.2.5.3
		L.2.5.4
		L.2.5.5
		L.2.5.1
		L.2.5.2
		L.2.5.3
		L.2.5.4
		L.2.5.5
	L.3 Submission, Validation and Rejection of Data Transactions	L.3.1.1
		L.3.1.3
		L.3.1.6
		L.3.1.7
		L.3.1.8
	L.4 Communications Failures	L.4.2.1
		L.4.2.3
		L.4.3.1
		L.4.3.3
		L.4.3.4
		L.4.4.2
		L.4.4.3
		L.5.4.1
M. Interim Arrangements	M.4 Interim Solutions for Conducting Capacity Auctions	M.4.1.3
		M.4.1.4
		M.4.1.7
		M.6.1.2

M.6 Alternative Auction Solution Methodology	M.6.1.3
	M.6.1.5
	M.6.1.6
	M.6.1.7
M.10 T-4 2023/24	M.10.1.2
	M.10.1.3

---

## Appendix B SUMMARIES OF OBSERVED ISSUES RESULTING FROM THE CAPACITY AUCTION PROCESS

### B.1. ISSUE LOG 014

Issue ID	Affected auction(s)	Issue status	Compliance status
014	2023/2024 T-4 Capacity Auction	Closed	Non-compliant

#### Summary

CMC E.9.2.1 and CMC E.9.4.9 require that the SOs notify relevant Participants of their Provisional SO Qualification Decisions and Final Qualification Decisions, respectively. E.9.4.1 specifies the decisions that must be prepared as part of Final Qualification Decisions shared with the RAs. The components that must be included in SO Qualification Decisions are set out in E.9.1.1.

Some components are missing from the Participant level reports and from the report shared with the RAs.

#### Description of Issue

CMC E.9.4.9 sets out that the SOs shall “*notify Participants of the approved Final Qualification Decisions*”.

CMC E.9.1.1 defines the “*SO Qualification Decisions*” that the SOs are required to notify the Participants of at Provisional Qualification Results (PQR) and Final Qualification Results (FQR).<sup>11</sup> The following components of E.9.1.1 were not included in the Participant level FQR reports in the Capacity Market Platform (CMP):

CMC Para	Qualification parameter	Comment in relation to FQR in T-4 2022/23
E.9.1.1 (b)	Clean status	Not included in CMP FQR.
E.9.1.1 (f)	Relevant LCC area(s)	Not included in CMP FQR.
E.9.1.1 (h)	If the SOs chose a different technology class than that in the application for qualification: the chosen technology class, and the reason(s) for that decision.	The CMP includes a note (TECH_AMEND) indicating if the technology class has been changed. In the relevant case in this Auction, the SOs emailed the Participant separately to share the new Technology Class and the reason for the change.
E.9.1.1 (i)	For Autoproducers: the Autoproducer Offer Price Cap Breakpoint.	The SOs emailed the relevant Participant to let them know the value for this parameter.
E.9.1.1 (k)	If the Alternative Qualification Process was applied: the reason(s) why.	The CMP includes a note (AQP_AMEND) indicating if the Alternative Qualification Process has been applied, but not the reason(s) why.

We flag that there has been a change implemented in the CMP which could not be applied to the Qualification Process for the 2023/2024 T-4 Capacity Auction, but will ensure that the following information is available to Participants in future PQR and FQR in the CMP:

- Clean status.
- Relevant LCC area(s).
- Autoproducer Offer Price Cap Breakpoint.

<sup>11</sup> E.9.1.2 specifies “*Other Qualification Decisions*” that are also part of the Final Qualification Results; these are not discussed here.

- Whether the Alternative Qualification Process has been followed.

The CMP update does not appear to inform the Participants of the new Technology Class, reason(s) for the Technology Class change, or reason(s) for following the Alternative Qualification Process.

There is a separate CMC requirement to share FQRs with the RAs. Almost all required components were determined and shared with the RAs, as required by E.9.4.1. The below requirements were not shared:

- E.9.1.1 (h): Two CMUs have a “TECH\_AMEND” note in their PQR and FQR in the CMP. The SOs provided a separate document with the notification of PQR and FQR, stating that this code is applied because they have determined that “*the Technology Class specified is not appropriate*”. We consider that this does not adequately give the reason(s) for choosing that technology class, as required by E.9.1.1(h).
- E.9.1.1 (k) where the Alternative Qualification Process was applied, the SOs use a note (“AQP\_AMEND”) to indicate this was the case but did not give the reason(s) why.

### Capacity Auction Monitor’s Comments

We consider this to be non-compliance with the CMC requirements for the Final Qualification Decision stage, specifically E.9.4.1 and E.9.4.9.

We previously highlighted this issue in relation to E.9.4.9, in our Qualification Reports for the 2022/23 T-4 Capacity Auction (Issue 004), the 2020/21 T-1 Capacity Auction (Issue 003) and the 2021/22 T-2 Capacity Auction (Issue 002).

We recognise the progress made by the SOs in implementing a change to the CMP that will apply from the next qualification process, and note their use of email notifications to provide Participants with some information not included in the CMP (i.e. E.9.1.1(h) and (i)).

## B.2. ISSUE LOG 015

Issue ID	Affected auction(s)	Issue status	Compliance status
015	2023/2024 T-4 Capacity Auction	Closed	Non-compliant

### Summary

The SOs are required by CMC E.9.4.11 to inform Participants of changes between the Provisional Qualification Results (PQR) and the Final Qualification Results (FQR). The SOs satisfy this by applying notes in the Capacity Market Platform (CMP), supplemented by emails to provide information that cannot be reasonably shared through the CMP.

Three CMUs' Minimum Firm Transmission Capacities (MFTC) were changed between PQR and FQR, affecting their Firm Offer Requirements (FOR). The FOR is included in the PQR and FQR, but the SOs did not inform the Participant of the change to the FOR between the PQR and FQR. The issue does not seem to have had a material effect on the Capacity Auction, as the Participant submitted offers in line with the updated FORs into the Capacity Auction for all three CMUs.

### Description of Issue

CMC E.9.4.11 sets out that: *"Where a Final Qualification Decision has changed relative to the relevant provisional SO Qualification Decision (if applicable), the System Operators shall include in the notification under paragraph E.9.4.9 both the provisional and final decision or value, so as to identify to the Participant what has changed."*

In practice, Participants can access the provisional and final decisions on separate views in the CMP, and changes between the two are identified with 'qualification results notes' added onto the FQR, as displayed in the CMP (e.g. IC\_AMEND). There are also 'qualification results notes' on the PQR and FQR in the CMP, which inform Participants of the changes between their Application for Qualification and the PQR or FQR. In some cases, information cannot be displayed in the CMP, and the SOs instead email Participants with relevant updates (e.g. as noted in Issue Log 014).

In one case, we consider that Participant [redacted] has not been provided with a required note on three of its CMUs: [redacted], [redacted], and [redacted]. The MFTC for all three changed between PQR and FQR through an Application for Review, resulting in a change to the FOR.<sup>12</sup>

- As with changes that are directly brought about through Applications for Review, the SOs informed the Participant of the changes to the MFTC by email.
- The email to the Participant did not mention the change to the FOR that happened as a result of the change to the MFTC (an indirect result of the Application for Review)– the FOR is an explicit component of Final Qualification Decisions (see E.9.1.1(c) and E.9.4.1).
- We cannot see any qualification note in the CMP in relation to the change to the MFTC or FOR.

That the Participant was not informed of the change to the FOR (by either email or through the CMP) appears to be an omission in the SOs' usual method of meeting the requirements of E.9.4.11.

### Capacity Auction Monitor's Comments

This represents non-compliance with E.9.4.11 with respect to the FOR. The Participant submitted offers for all three CMUs equal to the respective FORs, therefore it seems the Participant had sufficient information to make fully informed offers into the Capacity Auction.

We have previously discussed the SOs' approach to E.9.4.11 in our Auction Report for the T-4 2022/23, Issue Log 011.

<sup>12</sup> Our understanding is that the Minimum Firm Transmission Capacity is equal to the Firm Network Access Capacity as referred to in the calculation of the Firm Offer Requirement in CMC E.8.5.



### B.3. ISSUE LOG 016

Issue ID	Affected auction(s)	Issue status	Compliance status
016	2023/2024 T-4 Capacity Auction	Closed	Non-compliant
<b>Summary</b>			
<p>Due to the delay to the publication of PQRs, the SOs were unable to meet the deadline set out in CMC F.4.1.4 (two Working Days after the PQR Date).</p>			
<b>Description of Issue</b>			
<p>CMC F.4.1.1 sets out that the SOs shall determine a series of values relevant for determining how the volume of Qualified Capacity relates to the Locational Capacity Constraints (LCCs) in the Capacity Auction. F.4.1.4 requires that SOs to make a determination under paragraph F.4.1.1, using the PQRs, by two Working Days after the PQR Date – by 23/12/19.</p> <p>Due to the delay to the publication of PQRs until 27/01/20, but without a formal change in this item in the Capacity Auction Timetable, the SOs were unable to meet this requirement. The CMC requirement is linked to the Capacity Auction Timetable, not to the actual date of PQR publication.</p> <p>The determination required by CMC F.4.1.1 was emailed to the RAs on 10/02/2020. An amended version was issued on 13/02/2020 to reflect amendments to the qualification results.</p>			
<b>Capacity Auction Monitor’s Comments</b>			
<p>We consider this to be technical non-compliance with F.4.1.4.</p>			



## **UK**

Queens House  
55-56 Lincoln's Inn Fields  
London WC2A 3LJ

T. **+44 (0)20 7269 0210**

E. **info@cepa.co.uk**

**[www.cepa.co.uk](http://www.cepa.co.uk)**

 **cepa-ltd**  **@cepald**

## **Australia**

Level 20, Tower 2 Darling Park  
201 Sussex St  
Sydney NSW2000

T. **+61 2 9006 1307**

E. **info@cepa.net.au**

**[www.cepa.net.au](http://www.cepa.net.au)**