



Annual Performance report: 2022

December 2022



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1. Introduction

As the appointed Settlement Body for the Capacity Market (“CM”), the Electricity Settlements Company (“ESC”) must, in accordance with Regulation 84 of the Electricity Capacity Regulations 2014 (as amended) (“the Principal Regulations”), produce an annual report on the performance of its functions in respect of each capacity year¹. The annual report must, no later than three months after the end of the capacity year to which it relates, be provided to the Secretary of State for Business, Energy and Industrial Strategy (“BEIS”), and must be published. This annual performance report covers the capacity year starting on 1 October 2021 and ending on 30 September 2022.

The CM was introduced as part of the government’s Electricity Market Reform (EMR) programme, through the Energy Act 2013. The CM is aimed at ensuring security of supply during times of peak demand, through capacity agreements awarded to capacity providers via an auction process. These capacity agreements provide a steady, predictable revenue stream upon which capacity providers can base their future investments, with the aim of ensuring security of supply in future years at the lowest cost to consumers.

ESC is the designated Settlement Body for the CM, and its principal functions are to collect from electricity suppliers the funds to pay out to capacity providers in accordance with the relevant regulations. ESC is a private limited company, wholly owned by the Secretary of State for BEIS, which performs an integral role in the delivery of the CM. It oversees the settlement of the CM to ensure that regular payments are made to capacity providers who have agreed to provide capacity or reduce demand at times of system stress.

2022 has continued the data focus looking at what data we have access to and how we can utilise it further for the benefit of delivery and capacity providers which we will highlight later in the report.

2. Auctions

In order to participate in the capacity auctions, run by National Grid Electricity System Operator (NG ESO), some capacity providers are required at the ‘pre-qualification’ stage to lodge credit cover with ESC (in the form of cash or a letter of credit, or a combination of both).

The T-1 auction held in February 2022 procured 4.99 GW capacity for the 2022/23 capacity year. The clearing price was £75 per kilowatt per year. The final capacity auction that took place in Q1 2022 was the T-4 auction for the 2025/26 capacity year, in which just under 42.4 GW of capacity was secured at a price of £30.59/kW/yr.

¹ “Capacity year” is defined in regulation 2(1) of the Principal Regulations and means “a period of one year starting on 1 October and ending on the following 30 September”.



3. Metering tests

Capacity providers seeking to participate in a capacity auction must, as part of the CM prequalification process, carry out a metering assessment.

From the information provided at the metering assessment, NG ESO will determine whether a metering test is required. ESC is required to perform these metering tests. The tests seek to ensure a capacity provider's metering arrangements correctly reflect the flow of electricity supplied, generated, and consumed within a site. Meter testing is therefore crucial in providing confidence in the integrity of the CM and the meter data that underpins it.

During the 2021/22 capacity year, ESC undertook 81 component tests for 51 capacity market units (CMUs) – 49 for new-build/existing CMUs and two for unproven demand side response (DSR) capacity providers. ESC also completed 16 metering site visits throughout the 2021/22 capacity year as part of its metering assurance programme. The metering aggregation rule information of 949 CMUs across nine capacity years (multi-year agreements) have been validated, 504 CMUs have been validated for the 2022/23 capacity year. ESC has approved 21 changes to capacity provider's metering arrangements.

4. Settlement costs levy

ESC's day-to-day operational costs are funded by suppliers via the settlement costs levy set by the relevant CM regulations. The levy amount is updated annually following a robust and detailed annual business planning and management process.

The settlement costs levy for the financial year 2021/22 was set at £7.472m, a decrease of £0.030m on the previous year's levy of £7.502m. The increase in metering and settlement costs was fully offset by a reduction in professional fees and depreciation.

ESC delivered a good fiscal performance in financial year 2021/22, half of which falls within the period covered by this report, meeting all operational requirements. As a result, the company was in a position to return to suppliers £520k of settlement costs levy collected from suppliers during 2021/2022.



5. High level comparison: 20/21 & 21/22 reports

	2020/21 Annual Report	2021/22 Annual Report
Metering component tests	75	81
Metering site visits	25	16
Settlement costs levy	£7.502	£7.472m

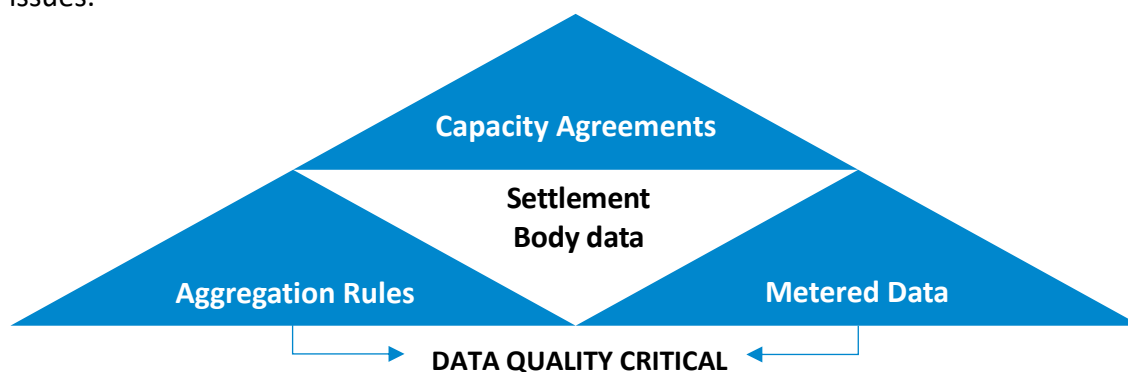
6. Automation & Data Focus

ESC's focus in 2022 has been to maximise the use of existing data to automate highly manual scheme processes and improve the overall level of data quality. Additionally this was to ensure that the data used in potential stress events was validated and utilised appropriately.

1) Automation of Satisfactory Performance Day and Extended Performance process

ESC's development of a new Satisfactory Performance Day and Extended Performance report automating the process for Capacity Providers went live in 2022. This uses existing data to satisfy requirements when there is already a known positive outcome and we worked with the Delivery Body to enable this. ESC automated 90% of the SPD process in March 2022 and automated the remaining 10% of the process for the 2022/23 DY.

There have been several benefits to automating this highly manual process, a critical one is an increased focus on where issues with data exist. CM Scheme Data inputs are important to ensure any automation modelling is successful. If any data inputs are erroneous, then the automation will not work and additional resource is spent by Delivery Partners and Capacity Providers to resolve issues.





2) Improving data quality – initiatives

Metering Aggregation: ESC has put in place proactive initiatives to ensure accurate setup. In the 2020/21 delivery year Metering Aggregation was our largest missing data scenario, leading us to implement payment suspension for the 2021/22 delivery year. We continued this into 2022/23 DY and successfully achieved 96% setup by Delivery Start.

Missing Metered Data: As we increased the level of metering aggregation submission, we had greater visibility of data quality issues through SPD automation. For the 2021/22 DY we identified that missing metered data issues were responsible for 16% of CMU issues during SPD testing and in comparison, missing aggregation rules issues were now less than 1%.

To assist Capacity Providers, we have been monitoring CMU data flows for the existing Delivery Year and implemented an email alert system and payment suspension mechanism when missing Metered Data flow issues exist.

3) Stress Event Preparation

Stress Event risks highlighting a focus on data issues and importance of data quality: It is the responsibility of a Capacity Provider to submit all data for a Stress Event. Data issues would make the settlement of a Stress Event difficult in the timings allowed by the rules and regulations. This data is also not required for payments so has not affected the Settlement body processes. Through the data quality initiatives and SPD process automation we have had a secondary benefit of mitigating unknown risks that are now visible and improving Capacity Provider engagement and behaviour by actively flagged this to Capacity Providers.

Data utilisation: We have established a more efficient process where we will now be utilising our own data rather than requesting data from Capacity Providers. This is a significant change and something that has been welcomed by the market. This will lead to the more efficient delivery of penalty calculations if a Stress Event were to occur.

Review Stress Event timings: Following the Stress Event testing programme ESC instigated in 2021 we found that the days required to deliver was less than the days to get all the data from Capacity Providers and the Delivery Body (and appropriately validated in specific scenarios).

This was discussed with BEIS and led to a letter of comfort being published to ESC to ensure the prioritisation of accuracy in the calculation and issuing of penalties in the case of non-delivery in the Capacity Market.

Full details of this letter are available on the government website '[Issuing of penalties in the Capacity Market - on GOV.UK](#)'. This change was also added to the January 2023 Capacity Market Consultation by BEIS to open up the discussion to implement a more permanent change for future delivery years.



Through this Stress Event preparation work we have reduced administration from Capacity Providers and National Grid ESO, improved overall checks and balances to utilise existing data in a better way.

We have also delivered the following system changes within EMRS during 2021/22 DY:

- Removal of duplication risk of Suspended Capacity Obligation recovery
- Additional fraud prevention activity on Credit Cover returns
- Data defaulting automation
- Line Loss Factor tool to reduce processing time
- Metered data and payment registration portal consolidation to create cost efficiencies

7. The year ahead

We will continue to identify processes within the Capacity Market that require streamlining and automation to reduce the administrative burden on the Capacity Provider. We will be investigating DSR and flexibility technologies' involvement in the Capacity Market, engaging with industry and analysing DSR performance data as part of this process.

Stress Event preparation: We are developing a System Stress Event tool to replicate the System Stress Event calculations for chosen Settlement Periods and Settlement Dates. This is a replacement of the Mock Stress Event activities that have been previously performed. We will be able to send a breakdown to Capacity Providers with active agreements for this Delivery Year to enable them to validate their CMUs status and data accuracy matches with the information held by us. This is the first step in a journey to provide greater data access to Capacity Providers and raise Capacity Provider awareness and understanding of their obligations and CMU status.

If you would like to discuss any part of this report further or have any questions, please email: info@electricitysettlementcompany.uk.

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