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# **Mock System Stress Event Webinar**

4 July 2023

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# Housekeeping



Microphones Off



Cameras Off



This session is being recorded and will be uploaded to the EMRS website with the slides and an updated FAQ

## Slido Links



<https://www.slido.com/>

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# Data Quality & Process Improvements

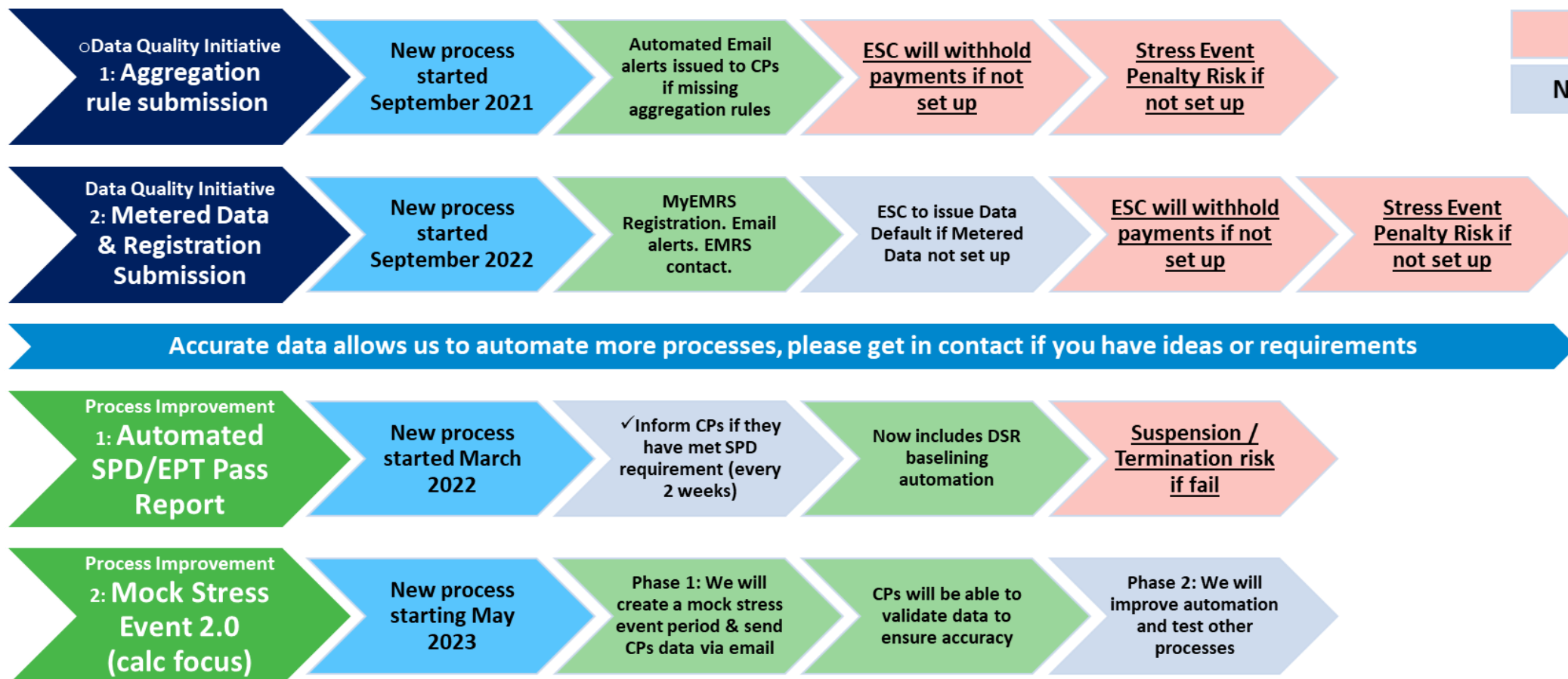
# Data Quality & Process Improvements

**New Process**

**Improvement**

**CP Risk**

**Next steps**





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# Background Information

# Background

## 2018 – Mock Stress Event

- ✦ The intention of the Mock Stress Event (MSE) was to allow end-to-end testing of the processes involved around a Stress Event to give all stakeholders confidence that settlement of a live Stress Event would go smoothly.
- ✦ The Lessons Learned from that exercise were a driver for the Stress Event Project.
- ✦ A joint Stress Event Guide was created by the Delivery Partners.

## 2021/2022 – Testing Summary

- ✦ Based on lessons learned in 2018 recognising the importance of operational effective processes in all CM activities.
- ✦ Settlement & Delivery Bodies conducted comprehensive tests on internal Delivery Partner interfaces.
- ✦ Several manual workarounds were removed.
- ✦ Data quality KPIs for Metering Aggregation Rules and Metered Data were prioritised for 2022/23 DY.

# 2022/23 DY – Change of Stress Event approach

## Calculation Focus

- ✦ The Stress Event Reporting exercise has focused on Data Quality to support the Output and Penalty Calculations.
- ✦ Email notification to alert CPs for a given Settlement Period(s) and Day if their CMU(s) are:
  - Over delivering / underdelivering
  - In breach of any criteria to successfully settle a Stress Event
- ✦ CPs will be able to validate data to ensure accuracy – aim to enhance knowledge and awareness.
- ✦ As the Stress Event Reporting is focused on Data Quality we have not included Volume Reallocation.
- ✦ The Stress Event reporting was run for the following date and period as this was the latest Capacity Market Warning Notice:

**Settlement Date:** 28 November 2022

**Settlement Period:** 37



# 2022/23 DY – Change of Stress Event approach

## Processes Defaulted

To produce this reporting several processes were defaulted, this will affect the overall total of Capacity Providers ALFCO calculation but does not affect individual submissions and pathways. The items defaulted to zero are:

1. Relevant Interruption
2. Interconnector Interruption
3. Declared Availability

## Exception Reasons

As the Stress Event reporting is not an actual Stress Event we have applied the same exceptions as used in the previous Mock Stress Event. The exception reasons are:

1. Not Capacity Committed
2. Aggregation Rules – Data Transfer Issue
3. Missing Aggregation Rules and/or Missing Metered Data
4. DSR CMU
5. Interconnector

Explanations of these exception reasons can be found on the [EMRS website](https://www.emrsettlement.co.uk/change/latest-changes/mock-system-stress-event-reporting/)<sup>1</sup>.

# Stress Event Reporting Outcome

## Stress Event Reporting Outcome

Date	Activity	Total
14 June 2023	Issue Mock System Stress Event Reporting to Capacity Providers with no exceptions identified.	280 emails
21 June 2023	Issue Mock System Stress Event Reporting to Capacity Providers with exceptions identified.	66 emails

## Future Delivery Years

- ✦ Mock Stress Event period to be run twice per Delivery Year at the start of the Delivery Year and again in the new year. There is also the potential to send if there has been a Capacity Market Warning Notice.
- ✦ Capacity Providers will have two weeks to send in any queries they have to the EMRS Service Desk.

## Questions & Answers

Do you think the Mock Stress Event Reporting is useful for Capacity Providers going forwards?



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Q1. Why are CMUs on the exception report if only one component in a multi-component CMU was missing data? Would this be the case in an actual stress event?

The Stress Event Calculation will not run if there is data missing which is why this has been highlighted on the Stress Event Reporting.

This will also be the case in a live Stress Event.

Q2. Why were all DSR CMUs on the exception report, regardless of metering data being missing?

Both DSR CMUs and Interconnector CMUs are currently excluded from reporting.

This is in line with the existing Mock Stress Event testing procedure.

### Q3. Despite being the Primary Party Authority, I didn't receive a copy?

The position of Primary Party Authority is typically reserved for Directors of the company, we have found that many are unaware of what is happening with the Capacity Market and as a result the email about a Stress Event (even Mock) could cause some significant concern and trigger a large amount of confused replies.

In situations where we absolutely need certain data, we will include Primary Party Authorities (such as long overdue Meter Aggregation) but the Mock Stress Event, while important from a data quality and a market readiness perspective is more compatible with the people that are likely to actually be working the account.

Q4. I have a component with a negative meter share and no data being received, will the calculations still run?

If there is no data being received, then the Stress Event Calculation will not run.

As part of this process we have defaulted data if it is missing to enable the calculation to run.

Q5. How will you decide which Settlement Date and Settlement Period to use for future Delivery Years?

Going forward we will be looking to use the first working Tuesday of the month.

The Stress Event Reporting would then be run when SF data was available, this would be ~3 weeks after the settlement date.



Q6. Is there potential to include concurrent Settlement periods in future Reporting?

If there is appetite to include more than one Settlement Period in the reporting, then we can look into doing this in the future.

Q7. Will there be the opportunity in the future to also test the Volume Reallocation process?

Currently we are focusing on this process to ensure the quality of data we are receiving.

As well as quality of data this process will also help with Capacity Provider understanding of the Stress Event Outcome.

In the future if there are Capacity Providers who would find testing the Volume Reallocation process useful then we can look into this.

Q8. Is there a possibility to move the Stress Event System Reporting to MyEMRS in the future?

If Capacity Providers find the Stress Event Reporting useful and is met with positive feedback, then we can look to progress further and use MyEMRS.



## Questions & Feedback

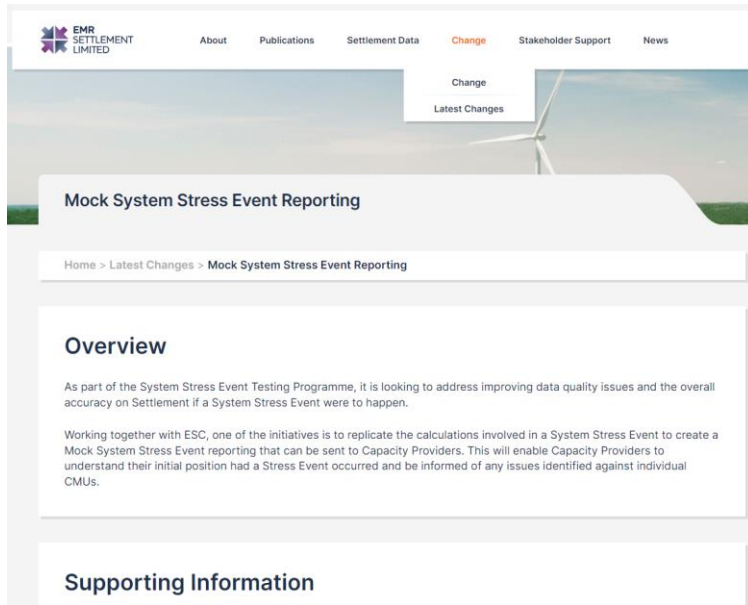
Has the webinar today increased your understanding of the Mock Stress Event Reporting?



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# Further Information

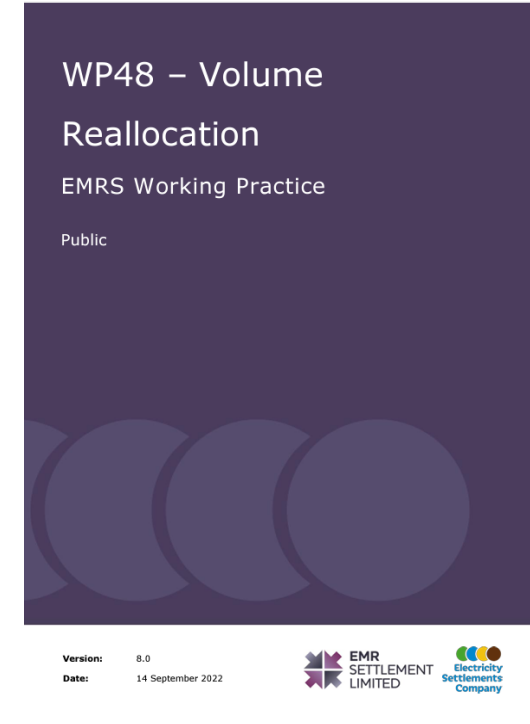


[Mock System Stress Event Reporting page.](#)

Please note this page also includes a link to Frequently Asked Questions for MSE reporting



[Guidance 18 'Capacity Market Stress Event Guide'](#)



[Working Practice 48 Volume Reallocation](#)

## Feedback

Do you have any additional feedback on the Mock Stress Event Reporting (or anything else Capacity Market related)?



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## Appendix

1. Data Items
2. Output calculation as defined in the Rules

# Data Items

Data Item	Meaning	Calculations used in
Company Name	Name of Company owning asset	N/A
EMR Party ID	Party Identifier for Company	N/A
Settlement Date	Settlement Date for Stress Event	N/A
Settlement Period	The Settlement Period in the Settlement Date to which the Stress Event refers	N/A
CMU ID	Unique identifier for the CMU	N/A
AACO	The Auction Acquired Capacity Obligation of the CMU	ALFCO, Penalty Charges, Over Delivery Payments
PTCO	The Physically Traded Capacity Obligation of the CMU	ALFCO, Penalty Charges, Over Delivery Payments
SCO	The Suspended Capacity Obligation of the CMU	ALFCO



# Data Items

Data Item	Meaning	Calculations used in
RfR	Reserve for Response (RfR), used in the LFCO Multiplier, is published by SO in their annual Capacity Report.	ALFCO
ILR	The aggregate volume of load shed (known as the Involuntary Load Reduction) by Distribution Network Operators in the Settlement Period (in MW).	ALFCO
LFCO Multiplier	<p>The LFCO Multiplier sums all CMUs (including Volume Reallocation Registered Participants (VRRP) with no obligation) their Output in MWh for a ½ hr RSP, so doubled. It then adds any Involuntary Load Reduction (ILR) and the Reserve for Response (RfR).</p> <p>The total of the above representing the actual CM response, which is then divided by the total Capacity Obligation (net of any Suspended Capacity Obligation (SCO) because of CMUs failure to demonstrate Satisfactory Performance Days (SPD)) – this gives the Multiplier (or scaling factor), which cannot be greater than 1, ie it cannot increase Capacity Agreement obligations.</p>	ALFCO

# Data Items

Data Item	Meaning	Calculations used in
LFCO	The Load Following Capacity Obligation (LFCO) of a Capacity Committed CMU in a given Settlement Period in MWh	ALFCO
E	Output of a CMU	Output, ALFCO, Penalty Charges
ALFCO	This is a Capacity Provider's committed obligation for a settlement period during a Capacity Market Stress Event, with balancing services taken into account,	ALFCO, Penalty Charges, Over Delivery Payments
IOD	Initial Over Delivered Volumes in MWh	N/A
IUD	Initial Under Delivered Volumes in MWh	N/A
ACMV	The Aggregated traded Capacity Market Volume	Penalty Charges
AE	The Adjusted metered output in MWh (AE) (equal to E plus ACMV)	Penalty Charges, Over Delivery Payments

# Output (E)

Rule	CMU Type	Output (E) Calculation
8.6.1	Generating CMU (other than a Generating CMU that constitutes a Storage Facility)	The aggregate Metered Volume in MWh to three decimal places of each Generating Unit comprised in that Generating CMU
8.6.1	Generating CMU (other than a Generating CMU that constitutes a Storage Facility) and if the Generating CMU is connected to the GB Transmission System	The lower of: (i) the aggregate Metered Volume in MWh to three decimal places of each Generating Unit "k" comprised in that Generating CMU "i"; and  (ii) the aggregate of QMEkj (the aggregate of the Period Expected Metered Volume for each BM Unit comprised in the CMU which is providing a Relevant Balancing Service in a given Settlement Period) for each Generating Unit "k" comprised in that Generating CMU "i"

# Output (E)

Rule	CMU Type	Output (E) Calculation
8.6.2	In the case of a Generating CMU that constitutes a Storage Facility	<p>the sum of <math>A + B - C</math> where:</p> <p>A - is the electricity generated by the Generating CMU as determined in accordance with Rule 8.6.1(a) and 8.6.1(b);</p> <p>B - is the aggregate, for all Generating Units comprised in the Generating CMU, of the Baseline Demand, as determined under Schedule 2A; and</p> <p>C - is the aggregate of the metered Consumption (in MWh) of each Generating Unit comprised in the Generating CMU in Settlement Period "j";</p>
8.6.2A	Interconnector CMU	The Interconnector Scheduled Transfer
8.6.3	DSR CMU	The DSR Volume of that DSR CMU



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