





26 June 2020

Dear Capacity Providers,

## Capacity Market Stress Event Testing Programme for 2020 and 2021

We are writing to inform you of our proposed Capacity Market (CM) Stress Event Testing programme for 2020 and 2021.

We recognise the importance of operational effectiveness of all CM activities, particularly those related to CM Stress Events, and are committed to a programme of activities that tests end-to-end functionality across CM Delivery Partners and the industry.

Our testing programme is based primarily on lessons learned from the mock Stress Event exercise that we carried out in 2018. This was a simulation of the processes that would be required after a CM Stress Event, including data collection and the Capacity Market Volume Reallocation Notification (CMVRN)<sup>1</sup> process. Please see <u>Appendix 1</u> for a summary of the lessons learned from this exercise.

We would like your feedback on our programme of activities for the remaining part of 2020. We'd encourage you to provide your feedback by completing this <u>survey</u> or by emailing <u>info@electricitysettlementscompany.uk</u> by **10 July 2020.** 

### **Testing Programme for 2020**

Our programme is designed to run throughout the rest of 2020, considering resource requirements for industry and the Delivery Partners.

These activities include:

- Improving the visibility of supporting activity in preparation for Stress Events, by sharing our plans and getting your feedback.
- Checking the reliability and suitability of communication channels we would use to communicate with you following a CM Stress Event.
- Ensuring the accuracy of our contact lists for Capacity Providers.
- Testing system functionality and interfaces between Delivery Partners.
- Implementing system improvements including:
  - An online submission of Capacity Market Volume Reallocation Notifications (CMVRN), to help Capacity Providers trade CMVRNs if there is a CM Stress Event
  - Emails to notify rejection of duplicate CMVRN Trade IDs, to help Capacity Providers identify if there is an error with CMVRN data they have submitted
  - Confirmation of receipt for submission of Secure File Transfer Protocol (SFTP) meter data, to help Capacity Providers when they are submitting

We will provide subsequent updates on the progress and delivery of the system changes.

In early 2021, the Delivery Partners with industry will assess the feasibility of undertaking a targeted Mock Stress Event, similar to the event we ran in 2018 (see <u>Appendix 3</u> for further details of this).

<sup>&</sup>lt;sup>1</sup> The CMVRN process allows Capacity Providers to reallocate volumes for any Settlement Period that forms part of a Capacity Market Stress Event from an over-delivering Capacity Market Unit (CMU) to an under-delivering CMU. By reallocating volumes Capacity Providers may be able to reduce potential Penalty Charges, or increase Over-Delivery payments

## Improvements made since the last Mock Stress Event

We would like to take this opportunity to give you an update on progress made against the 2018 Mock Stress Event Feedback and Action Plan. <u>Appendix 1</u> provides full details of the actions, with key updates as follows:

- We published the first unified <u>CM Stress Event Guide</u> in May 2019, which provides Capacity Providers with a single source of information detailing the processes involved in CM Stress Events and their obligations during CM Stress Events. A second version, was published April 2020.
- We delivered changes to allow Capacity Providers to <u>reallocate Demand Side Response (DSR)</u> <u>components</u> within a DSR Capacity Market Units (CMU) in October 2019.
- We implemented Capacity Volume Register (CVR) changes in November 2019 to give Capacity Providers more information about their CM obligations, allowing improved validation and understanding of how changes to other CMUs can impact their obligations by:
  - Providing greater information about how we calculate Adjusted Load Following Capacity Obligation (ALFCO) from Auction Acquired Capacity Obligation (AACO); and
  - Showing how Capacity Providers' calculated Output (E) can change during the Volume Reallocation window.
- We implemented changes to allow Capacity Providers to submit CMVRNs via Secure File Transfer Protocol (SFTP) in November 2019. Once a CMVRN submission is received, automated notifications will also be sent to the Capacity Provider via the preferred method.
- In May 2020, we implemented a change which created the new Metered Data Report and made this available to download on the <u>EMRS Portal</u>.
- We continued work to progress further changes to Capacity Market Rules and Settlement System to improve CM Stress Events.
- We have improved arrangements for sharing data between National Grid ESO and the EMR Delivery Partners.

## Engagement going forward

We would like your feedback on our programme of activities for the remaining part of 2020. We'd encourage you to provide your feedback by completing <u>survey</u> or by emailing <u>info@electricitysettlementscompany.uk</u> by **10 July 2020**.

Kind regards,

## Patrick Bibby,

Head of Scheme Operations (ESC); Telephone: 07767291284 Email: <u>info@electricitysettlementscompany.uk</u>

**Bec Thornton** Auction Manager (National Grid EMR DB) Telephone: 01926 656386 Email: <u>bec.thornton@nationalgrideso.com</u> Matthew Johnson Head of EMR (EMRS) Telephone: 020 7380 4333 Email: <u>contact@emrsettlement.co.uk</u>

# Appendix 1: Mock Stress Event 2018 Feedback and Action Plan

## Metering Data

Feedback:

- No receipt issued by EMRS when Meter Data received by SFTP.
- Meter data subject to change during the stress event as new settlement runs take place.
- Change the way the bespoke meter data is collected instead of SFTP.

Ref	Actions	Target	Owner	Status	Comment
A-1	Send a receipt email once meter data file submitted by SFTP and/or show meter data on the EMRS Portal.	Late 2020	EMRS/ESC	Open	A change request was raised by ESC and is currently being progressed to be implemented for late 2020. EMRS will issue a circular once the change is live.
A-1 a	Data on the EMRS Portal could include data submitted by all meter pathways.	Late 2020	EMRS/ESC	Closed	The new Metered Data Report was introduced in May 2020 and downloaded from the EMRS Portal. EMRS issued <u>EMRC210</u> and <u>EMRC209</u> .
A-2	Review method for collection of bespoke meter data.	2020 (if accepted)	ESC	Open	This was raised as part of Ofgem's five-year Capacity Market review.
A-3	Amend Capacity Market Rules for the volume reallocation process so that data collection process does not start until SF data is published.	2020 (if accepted)	ESC	Open	This was raised as part of Ofgem's five-year Capacity Market review.

## Improvements to Aggregation Rules

- There were fluctuations in the Capacity Volume Register due to changes in Aggregation Rules during the volume reallocation window.
- As a knock on from changes to Aggregation Rules, CMVRNs appear in the latter stage of the process, assessment must be performed on time.

Ref	Actions	Target	Owner	Status	Comment
A-4	Obtain updated component meter information template from participants for 18/19 Delivery Year.	Oct 2018	DB	Closed	Collection of component meter information was successfully completed before the start of the 18/19 and 19/20 Delivery Years.
A-5	Check Aggregation Rules at the start of the Delivery Year, before possible first calculation of stress event in November.	Nov 2018	EMRS	Closed	We carried out checks on aggregation rules ahead of each Delivery Year, we have communicated to individual CMUs where there are gaps.

## Preparation

# of a unified Stress Event Manual

## Feedback:

- All information and guidance should be contained within one document.
- Did not understand the supporting information provided with the invoice, column headings needed.
- Not clear how to obtain contacts for Volume Reallocation between Capacity Providers.
- Lack of clarity around measuring Interconnector output.
- Penalty invoices couldn't be verified.

Number	Actions	Target	Owner	Status	Comment
A-6	Create a Stress Event Manual that collates all information and addresses issues raised in lessons learnt noted above. We will work through Energy UK to agree content.	First version published Jan 2019	EMRS/DB/ESC	Closed	The <u>Stress Event</u> <u>Manual</u> was published in May 2019, and an updated version was published in April 2020.

## Improvements to Communications

- Webinar provided no opportunity for questions of clarification.
- Some Mock Stress Event communications went directly to "Spam".
- There was no general announcement about problems and knock on consequences during the MSE.
- Distribution lists not entirely up to date, so some communications were not received in their entirety.

Number	Actions	Target	Owner	Status	Comment
A-7	In 2019 hold a live webinar	2021	ESC	Open	This will be held ahead
	before the Mock Stress Event				of the next Mock
					Stress Event.
A-8	Stress Event Manual will clarify	May	EMRS/DB/ESC	Closed	Detail about
	the use of the different Delivery	2020			communication
	Partner contact lists and set out				channels was included
	which communications will be				in the unified Stress
	issued and from which mail				Event Guide. We will
	address. Capacity Providers will				work with Delivery
	be encouraged to keep				Partners and industry
	information up to date.				in 2020 to check the
					reliability of
					communication
					channels.
A-9	Add a notification to ESC and	Feb	EMRS/ESC	Open	This will be available
	EMRS homepages flagging that	2020			ahead of the 2021
	a Mock Stress Event is taking				Mock Stress Event.
	place. This will include updates				EMRS has the
	to status.				functionality on the
					EMRS website to apply
					a notification.

# Capacity Volume Register (CVR) and Capacity Metered Volume Reallocation Notifications (CMVRN)

- The updated CVR was not differentiated from previous versions, this created problems in some web browsers as the update was not shown.
- Lack of transparency of CVR and penalty calculations.
- Reason for CMVRN failures should be communicated.
- CVR isn't available for long enough, Capacity Providers are unable to verify numbers.
- Current CMVRN format is complicated, a standard template would correct format issues.

Number	Actions	Target	Owner	Status	Comment
A-10	Time stamping CVR files and keep final version published for one month following the MSE penalty invoices.	Nov 2018	EMRS	Closed	Internal procedures have been updated to incorporate these changes.
A-11	Investigate increasing transparency with Capacity Providers through improvements to the CVR.	Nov 2019	ESC/EMRS	Closed	ESC raised a change request for Settlement System. Improvements were successfully implemented in Nov 2019. This was communicated via <u>EMRC195</u> .
A-12	Investigate increasing transparency with Capacity Providers through improvements to the backing data.	2021	ESC/EMRS	Open	We are working to introduce changes to improve transparency of backing data. We are aiming for implementation in 2021. However, there are dependencies on MRASCO processes, which may impact delivery.
A-13	Investigate possibility of online submission of CMVRNs.	Late 2020	EMRS	Open	ESC raised a change request for Settlement System. This change is being progressed for implementation by late 2020. EMRS will issue a circular once the change is live.
A-14	Investigate possibility of submitting error messages with CMVRN submissions fail.	Nov 2019	EMRS	Closed	ESC raised a change request for Settlement System. Improvements were successfully implemented in Nov 2019. This was communicated via <u>EMRC195</u> .

# **Query Handling**

Feedback

- Large number of queries received from participants.
- Delivery Body (DB) Phone System experienced technical difficulties

Number	Actions	Target	Owner	Status	Comment
A-15	Stress Event Manual and improved webinar will better inform participants.	Jan 2019	EMRS/ESC/DB	Closed	The <u>Stress Event Manual</u> was published in May 2019, and an updated version in April 2020.
A-16	Improve phone system so that query management is improved.	Dec 2018	DB	Closed	Changes have been made to remove call hanging with updates if the lines are fully utilised.
A-17	Increased front line support planned for Mock Stress Event.	Mar 2019	DB	Closed	The front desk support has increased for prequalification which will be utilised in the next Mock Stress Event. In addition, increased resource is scheduled for the next Mock Stress Event.

# Improvements to next Mock Stress Event

- Scope the MSE did not include over-delivery.
- Increase CPs' involvement in the MSE planning.

Number	Actions	Target	Owner	Status	Comment
A-18	Consider over delivery calculations and credit notes within the scope for next Mock Stress Event.	Early 2021	EMRS/DB/ESC	Open	To be discussed as part of scoping for the next Mock Stress Event.
A-19	Engage with Capacity Providers in the preparation for the next Mock Stress Event.	Early 2021	EMRS/DB/ESC	Open	To be included in scoping for the next Mock Stress Event.

# Prepare Capacity Market Rule submissions to clarify data requests for balancing services

- Consideration of how data disputes should be resolved.
- Concern that submission was not received and/or was incorrect.
- Balancing Services data did not appear to get into Capacity Volume Register (CVR).
- Divergence between Capacity Market Rules and guidance documents on submitting balancing services, including treatment of interconnectors.

Number	Actions	Target	Owner	Status	Comment
A-20	Investigate the process for Stress	Jan	ESC	Closed	Detail about the
	Event disputes.	2019			disputes processes
					was included in the
					Stress Event Guide.
A-21	Explain in Stress Event Manual the	Jan	DB	Closed	Detail about the
	difference between Rules and	2019			disputes processes
	guidance on submitting balancing				was included in the
	services.				Stress Event Guide.
A-22	Possible Rule changes for	Nov	DB	Open	This proposal has
	submission of balancing services	2018			been discussed with
	to be submitted to BEIS and				Ofgem and it is on
	Ofgem.				the list of rules for
					suggested changes.
A-23	When Capacity Providers submit	Jan	DB	Closed	Email receipts were
	balancing services files, Delivery	2019			introduced in 2018.
	Body to send receipt email to				
	confirm the information has been				
	received.				





national**gridESO** Electricity Market Reform Delivery Body

# Appendix 2: Our roles in the Capacity Market and Stress Events

The EMR Delivery Partners, in conjunction with BEIS, Ofgem and National Grid ESO, play complementary roles in the Capacity Market.

Table 1 - Our roles in the Capacity Market

Delivery Partner	Role
National Grid EMR Delivery Body	<ul> <li>Deliver the Capacity Market in line with Rules and Regulations by Administering Capacity Market prequalification process, maintaining the Capacity Market Register and running Capacity Market auctions.</li> <li>Advise BEIS on the required de-rated capacity to be procured in the Capacity Auctions.</li> </ul>
Electricity Settlements Company (ESC)	<ul> <li>Manage the Capacity Market settlement operations.</li> <li>Ensure Capacity Providers receive Capacity Payments, funded by collecting Capacity Market Supplier Charge.</li> <li>Manage Credit Cover, undertake meter assurance, collect penalty fees for under-delivery and disburse payments for over-delivery as part of the settlement process.</li> <li>Provide advice and information to BEIS about the Capacity Market Settlement process.</li> </ul>
EMR Settlements Company (EMRS)	<ul> <li>Determine payments and penalties required under the settlement processes for Capacity Providers and Suppliers and issue invoices and credit notes.</li> <li>Receive and validate metered data from Capacity Providers during a Capacity Market Stress Event.</li> <li>Calculate and publish the Capacity Volume Register during a Capacity Market Stress Event.</li> <li>Process, validate and allocate Capacity Market Volume Reallocation Notifications.</li> <li>Issue Data Default Notice.</li> </ul>
National Grid ESO	<ul> <li>EMR Delivery Body (DB) is part of National Grid ESO, but is ring fenced from it via licence conditions.</li> <li>Publish a Capacity Market Notice at least four hours in advance of when it believes that inaction will result in there being less generation available than is required to meet national electricity demand on the transmission system (accounting for additional reserve requirements of approximately 500MW).</li> </ul>





# Appendix 3: What is a Capacity Market Stress Events and a Mock Stress Event?

## **CM Stress Events**

Capacity Providers may be exposed to Capacity Market (CM) penalties if they do not deliver their load-following obligation during CM Stress Events<sup>2</sup>.

After a CM Stress Event has taken place, Capacity Providers must address a number of obligations, including ensuring data is accurately submitted and choosing to engage in the volume reallocation process to manage the risk of under-delivery. After a CM Stress Event, EMRS may issue Capacity Providers with invoices for penalties or credit notes for over-delivery payments.

### **Mock Stress Event**

A Mock Stress Event is an exercise intended to simulate a CM Stress Event, to test processes to ensure both the Delivery Partners and Capacity Providers are operationally ready in the event of a Stress Event occurring.

A Mock Stress Event was carried out in 2017 and 2018 but did not take place in 2019 and 2020 due to the Capacity Market standstill and the prioritisation shift to ensure the Capacity Market could restart with the required regulatory and system changes.

As part of the 2018 Mock Stress Event, Electricity Settlement Company (ESC), the EMR Delivery Body and EMRS worked with industry to carry out a simulated CM Stress Event. This included:

- Multiple warnings sent from the System Operator (SO) to Capacity Providers
- Capacity Providers (CP) data submission validation and testing
- Contract Volume Reallocation Notification and Capacity Volume Register (CVR) processes
- Settlement calculations and penalty invoices testing

Following the 2018 Mock Stress Event, we held a session to discuss the lessons learned, and began progressing a number of changes to our systems and processes, to improve processes around future Mock Stress Events and Stress Events.

<sup>&</sup>lt;sup>2</sup> A CM Stress Event is defined as a System Stress Event that has occurred at least four hours after a Capacity Market Notice has been issued and post-event analysis by National Grid ESO has confirmed that a System Stress Event has occurred. See our guidance for further detail {https://www.lowcarboncontracts.uk/sites/default/files/2020-04/CM%20StressE%20guide%20V2\_1.pdf