MW Dispatch Service - Participation Guidance Document

Applicable in National Grid Electricity Distribution (South West region)

Introduction

This guidance document should be read in conjunction with the MW Dispatch Service Terms (which take priority over this guidance document) which are available on the NGESO website

Version	Effective Date	Change	Page
1.0	30/01/2023	First live version	

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MW Dispatch Service

In collaboration with Distribution Network Operators (DNOs) National Grid Electricity System Operator (NGESO) have developed a Regional Development Programme (RDP) to implement solutions that provide an economic route to connection for Distributed Energy Resource (DER) providers. These solutions will also ensure continued operability of future DER connections in areas of the network where there are limitations/constraints at various points on the transmission system.

The MW Dispatch Service is the first product to be developed through RDP and initially applies to the following Grid Supply Points in the National Grid Electricity Distribution (South West) DNO area:

- Abham
- Alverdiscott
- Axminster
- Bridgwater
- Exeter
- Indian Queens
- Landulph
- Taunton

This MW Dispatch Service is a DER specific ancillary service to manage transmission constraints (in conjunction with the Balancing Mechanism). The MW Dispatch Service is an obligation on all DER with specific conditions in their distribution connection offer/agreement to provide 'visibility and commercial control' (or Deep Connect and Manage), and where this obligation has not been achieved via other means (e.g. the Balancing Mechanism).

The service, regardless of technology, requires Active Response Capability from MW Dispatch Service Providers to reduce real power export output to zero ('turn to zero') when instructed by NGESO. For the avoidance of doubt, batteries that can act as either generation or demand will only be required to reduce generation to zero. Under certain network conditions and when it is economic to do so, NGESO will instruct MW Dispatch Service Providers (via the DNO DERMS system) to 'turn to zero'. If instructed, and providing they comply with the instruction, MW Dispatch Service Providers will be paid for the volume of energy they have curtailed.

This document provides an overview of the MW Dispatch Service. Please note capitalised terms used in this Participation Guidance Document have, where not expressly defined, the meanings given to them in the MW Dispatch Service Terms.

Service Parameters

The MW Dispatch Service is a requirement on DER with specific conditions for 'visibility and commercial control' within their distribution connection agreement and where they have the relevant Control Equipment installed by their DNO. The contractual requirements for the MW Dispatch Service are described in full in the MW Dispatch Service Terms, but the key elements are:

- Active Response Capability 'turn to zero'.
- Minimum 1MW installed capacity.
- Control Equipment - 'visibility and commercial control' infrastructure installed at the generation site by the DNO.
- Respond to instructions (via the Control Equipment) and reduce output to zero MW within a 2min Response Time.
- Providers will submit to NGESO any revision to its 'Utilisation Rate' each day for the following Trading Day.
- Each Trading Day will run from 05:00:00 hours to 04:59:59 the following day
- If instructed, generation output is maintained at zero until a cease instruction is issued.
- Payments will be made by NGESO direct to the provider (based on Utilisation Rate), for each instruction.

Registration Procedure – Prequalification for MW Dispatch

For a DER to participate in the MW Dispatch Service, it must become a Registered Service Provider with NGESO and become prequalified for the service by registering its asset/s and by agreeing to the MW Dispatch Service Terms as published by NGESO. This registration process is all managed via our Single Market Platform (SMP). The SMP portal can be found on the NGESO website here https://portal.nationalgrideso.com/smp/s/login/. If any assistance with this process is required, please contact Commercial.Operation@nationalgrideso.com

This section outlines the process steps for prequalification. Please note that DER participants should allow a minimum of 2 months to register and prepare for participation in the service.

- Step 1 – participant contacts NGESO to request access to Single Market Platform (SMP). Commercial.Operation@nationalgrideso.com
- Step 2 – participant is granted access to SMP and requests registration as a Registered Service Provider
- Step 3 - Registered Service Provider submits asset/s details for pre-qualification for MW Dispatch Service
- Step 4 – Registered Service Provider signs up to the MW Dispatch Service Terms and submits its payment details
- Step 5 – NGESO and DNO validate and undertake any necessary asset testing and validation (DERMS etc)
- Step 6 – NGESO confirms completion of prequalification process – asset/s are now able to provide the MW Dispatch Service and submit any revisions to Utilisation Rates.

Dispatch

NGESO may at any time in a Trading Day issue a Dispatch Instruction for Active Power Response to the DNO and the DNO will forward this to the MW Dispatch Service Provider via the Control Equipment on site. This instruction will be 'open ended' not specifying a duration for the instruction. The DNO will forward each Dispatch Instruction to the DER and provide confirmation back to NGESO that the Dispatch Instruction has been relayed to the DER.

The MW Dispatch Service Provider will comply with each Dispatch Instruction for Active Power Response and ensure that its asset reduces output to zero (0MW) within 2 minutes of receipt by NGESO of the Dispatch Instruction Acceptance from the DNO.

The MW Dispatch Service Provider will maintain delivery of Active Power Response at zero (0MW) until NGESO issue a Cease Instruction to end Active Power Response. This Cease Instruction will be received by the DNO and subsequently forwarded on to the MW Dispatch Service Provider (via DERMS).

Payment

Each Provider will have the opportunity to update its Utilisation Rate (for each DER Unit) each day (by 4pm) for the next following Trading Day to be submitted via the NGESO SMP.

NGESO will pay MW Dispatch Service Providers for the volume of curtailed energy in the form of a Utilisation Payment. The payment will be based on a 'Pay as Bid' price covering the full duration of the curtailment instruction (including ramping down) up to the Cease Instruction. For the avoidance of doubt, there will be no other payment made for the MW Dispatch Service.

NGESO will use the metered MW output data at the point of receipt of the Dispatch Instruction Acceptance from the DNO as the baseline for calculating the curtailed energy volume for the duration of the Dispatch Instruction.

All payments will be subject to Performance Monitoring and any deductions associated with Service Failures, as set out below.

Performance Monitoring

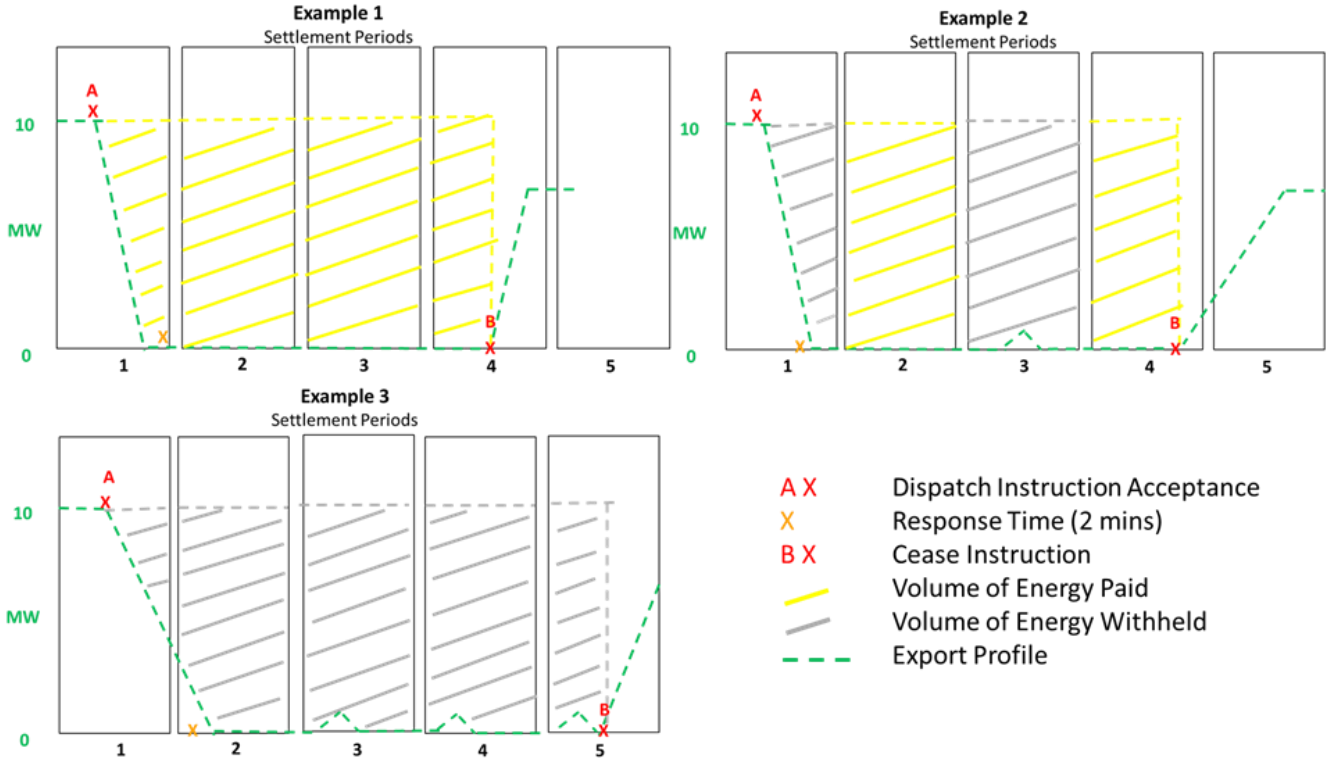
NGESO will monitor the performance of all Dispatch Instructions through the monthly settlement process against the following Service Failure criteria;

Response Time - For each Dispatch Instruction the MW Dispatch Service Provider must reduce output of their asset to zero MW within 2 minutes. This will be measured from the point of receipt by NGESO of a Dispatch Instruction Acceptance from the DNO. Any failure (subject to a tolerance) shall be treated as having occurred in any Settlement Period/s (SP) within the Response Time and no Utilisation Payment for the curtailed energy volume will be made for these Settlement Period/s.

Service Delivery - Having reduced output to zero MW, the asset must maintain this level of output in all Settlement Period/s until such time as NGESO has issued a Cease Instruction. Any failure (subject to a tolerance) shall be treated as having occurred in each applicable Settlement Period and no Utilisation Payment for the curtailed energy volume will be made for the entire Settlement Period/s where this failure occurs.

Please note that a tolerance <= 0.02MW export will be applied to each Dispatch Instruction.

The following section provides some examples of how we will apply the above Service Failures to the payment for the MW Dispatch Service



Example 1

In Example 1 the DER is exporting 10MW in Settlement Period (SP) 1 when acceptance of the Dispatch Instruction (Dispatch Instruction Acceptance) is notified to NGESO by the DNO. The DER achieve the required 2mins response time in SP1.

DER maintains zero MW throughout SP2 and SP3. NGESO then issue a Cease Instruction in SP4 and DER commences ramp up to previous/new export level.

Therefore, the DER is paid for all reduced MW volume (from the baseline of 10MW) for SP1 from the point of Dispatch Instruction Acceptance. The DER is also paid for all reduced MW volume during SP2 and SP3 as the export level was zero, and reduced MW volume is also paid in SP4 up to the point of the Cease Instruction.

Example 2

In Example 2 the DER is exporting 10MW in Settlement Period (SP) 1 when acceptance of the Dispatch Instruction (Dispatch Instruction Acceptance) is notified to NGESO by the DNO. The DER reaches zero MW in SP1, **but fails to achieve the required 2mins response time**. DER maintains zero MW throughout SP2 but **export increases for a brief period in SP3**. The DER maintains zero MW through SP4 until NGESO issues a Cease Instruction and DER commences ramp up to previous/new export level.

Therefore, the DER is **not** paid for any reduced MW volume for SP1 due to the Response Time failure. The DER is paid for all reduced MW volume during SP2 but is **not paid** for any volume in SP3 as the export level increased. Reduced MW volume is paid in SP4 up to the point of the Cease Instruction.

Example 3

In Example 3 the DER is exporting 10MW in Settlement Period (SP) 1 when acceptance of the Dispatch Instruction (Dispatch Instruction Acceptance) is notified to NGESO by the DNO. The DER does not reach zero MW in SP1 **failing to achieve the required 2mins response time**. DER does reach zero MW in SP2 **but not for the entire SP**. DER **export increases for a brief period in SP3, SP4**. DER export also **increases** for a brief period in SP5 prior to the NGESO Cease Instruction when the DER commences ramp up to previous/new export level.

Therefore, due to failures in each SP, the DER is **not paid for any reduced volumes across the entire Dispatch Instruction.**

Settlement

Utilisation Payments will be settled by NGESO on a monthly basis, subject to deductions for Service Failures following performance monitoring, described above. For further information regarding how payment is calculated, and payment terms, please refer to the MW Dispatch Service Terms.

NGESO shall apply MW Dispatch Service energy volumes within Applicable Balancing Services Volume Data (ABSVD) for the MW Dispatch Service Providers.

Please note, it will be the responsibility of the MW Dispatch Service Provider to ensure they have completed the necessary payment information via the SMP. If these details change, they should be promptly updated so that the correct payments are made in a timely manner.

Transparency

NGESO will seek to publish data in line with our other Ancillary Services in the Monthly Balancing Services Summary (MBSS). We will also publish details of all MW Dispatch Service instruction data (anonymised) in near to real time on our website.