MW Dispatch Responses Summary

October 2021

STORE PARTY

ESO responses to stakeholder views

nationalgridESO

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Introduction

Our MW Dispatch Regional Development Programme (RDP) currently focuses on specific areas of Great Britain's electricity network – the South West and South East of England. The objective of this project is to avoid the costs and delays associated with traditional transmission build needed to accommodate new embedded generation in heavily constrained regions by developing an alternative, lower cost market option for distributed energy resources (DERs) to provide a transmission thermal constraint management service to the ESO. This service will complement existing routes to market which are the Balancing Mechanism and Wider Access.

In July 2021, we held two webinars, one with WPD¹ and one with UKPN² to engage DERs on what this new service might look like, focussed specifically around DER that have mandated visibility and control connection terms with their DNO. We also published a set of questions³, along with additional supporting information, on our website to gain further views on our initial proposed service design.

In this document, we summarise the six responses we received to those questions on the service design we intend to use to launch the new service. Following successful trials using the initial service design we will look to enhance the service via subsequent developments. We welcome ongoing stakeholder input as to what these enhancements should be and how those should be prioritised.

Recap of the project and new service

We are introducing a market-based approach to managing transmission constraints areas across the specific Grid Supply Points that the new service will cover (see here for a reminder of which sites are currently applicable). A new transmission constraint service would look to compensate DERs' generation and battery storage for reducing their output at times of system need (MW export in the case of battery storage). This would come after an instruction initiated by NGESO.

In the first instance, this service is being developed for DERs who have visibility and control connection conditions in their connection agreement with their distribution network operator (DNO). It is a means to providing payment for any reduction in output instructed by NGESO. Participants may elect to join the Balancing Mechanism as a Wider Access unit as alternative mechanisms for commercial dispatch.

We also intend to open this service to other DERs, who do not have visibility and control connection conditions and who are not already participating in the Balancing Mechanism (BM) or Wider Access, as a possible revenue stream in the future.

In the first instance, the DNO's Distributed Energy Resources Management System (DERMS) and/or Flexibility Platforms will be used to issue the service instruction to DERs.

¹ Listen to the WPD webinar here:

https://players.brightcove.net/867903724001/default_default/index.html?videoId=6263530902001 ² Listen to the UKPN webinar here:

https://players.brightcove.net/867903724001/default_default/index.html?videoId=6265696511001 ³ The questions and supporting information can be found here:

https://www.nationalgrideso.com/document/201821/download

Summary of responses to service design questions and ESO reflections

Торіс	Question(s) posed	Summary of responses	Proposed way forward
Overall service	 Is the service described one that you would consider providing to NGESO? If not, why? 	Five out of six respondents responded to question 1 and all said that they would consider providing this service to the ESO, assuming that they have assets in the relevant locations that meet the threshold level. One thought that development of the service to encompass aggregation was key to enabling greater service volumes.	We are encouraged by initial feedback received about this service and that people are interested in participation. We note the comment on enabling aggregation and this is discussed further in response to question 11) below. Currently, aggregation is something that we could look to incorporate into the service following a successful launch and trial period but would rely on development of alternative dispatch methods.
	2) Do you foresee any issues with a continuous service approach where you could be asked to provide a service at any time (except for periods of declared unavailability)? If yes, please provide more details.	Most respondents were comfortable with a continuous service approach referred to in question 2. Others pointed out that they would only be available to provide a service when their assets are available and operating.	We understand that not all assets will be available to be instructed on a continuous basis but we should have visibility in our control room of which units are available at any given time. So, when we call it a continuous service, we mean that units may be called upon at any time when exporting.

Pricing	3)	What are your thoughts on the proposed pricing approach i.e. that the service will attract a utilisation price only?	We received differing views on the proposed pricing structure. Some respondents were happy to only receive a utilisation price if called upon to provide a service. Others pointed out that costs would differ by technology type and that having no availability fee would act as a disincentive to participate. One respondent in particular thought that it might be difficult to recoup costs of service participation without an availability fee and another asked if the ESO could provide forecast utilisation rates to be able to make judgement. One respondent considered that if they are reserving assets to participate in this service, there would be an opportunity cost to not entering in other services which should warrant an availability fee.	We still consider that a utilisation fee-only approach is appropriate for this service. With the intention to employ the DNO DERMS / ANM (or equivalent) system to facilitate dispatch instructions, we think that the cost of participation should be small for DERs, but we welcome further discussion on this. We are also working to ensure as much alignment as possible with the Balancing Mechanism where units do not receive an availability fee. The ability to update utilisation pricing on a frequent basis should enable providers to adjust fees relevant to rate of utilination
	4)	How often would you like to be able to update service prices?	Respondents to this question differed in terms of their preferred frequency for submitting price changes. Responses ranged from requesting half hourly to daily or even weekly ability to update. Another wanted to understand more about the service before being able to take a view.	rate of utilisation. We intend to maintain our proposed timescale of facilitating price updates up to BM gate closure. There is a possibility that this frequency might not be feasible for the first trials of the service, but this is a priority for implementation thereafter.

Service instruction	5)	What are your views on the ESO using DNO infrastructure to instruct transmission services?	Again, there were a range of views expressed in response to this question. Two respondents thought that using DNO infrastructure was a potentially pragmatic approach and a sensible way forward, if we can ensure that ESO / DNO instructions do not conflict. On the other hand, another respondent said that using DNO infrastructure is a serious limitation as assets constructed before the wide- scale adoption of ANM have no DNO dispatch infrastructure, despite being located in areas of need. Another respondent opposed the mandatory use of DNO infrastructure to instruct assets but recognised the rationale for using it in this instance. This respondent could therefore support this	We agree that while RDPs are currently being developed to use DNO infrastructure, that this should not be the only route to dispatching this service. As we look to enhance the service, and broaden participation to non-visibility and control DER, we will explore alternative instruction mechanisms including APIs and potentially third party platforms. This will also be key to facilitating aggregation within the service which is discussed further below. We will review the prioritisation of this requirement in line with stakeholder feedback.
			approach If: (a) DNOs can address outstanding questions around conflict of interest management, on how neutrality of all DSO functions will be demonstrated; and	
			(b) The ESO works to introduce alternative routes to instruct MW Dispatch services – such as via the BM Wider Access API.	
			In addition, to enable aggregation of flexibility services, especially from small DER, system operators must offer dispatch via APIs to aggregators.	

Contractual arrangement	6)	This service is a transmission constraint management service from DERs with instructions being facilitated via the DNO's infrastructure. How should liabilities across each party be captured contractually?	A couple of respondents considered that they would need to reflect further on this and get legal input. Another thought that DERs should bear imbalance costs in respect of dispatch instructions which have been properly transmitted to them, but no other liability should fall on DERs. Another thought that DERs should not expect to be liable for the failure of the DNO's infrastructure.	We continue to work on a proposed set of terms and the structure of contractual arrangements for this service in order to engage potential providers further in the coming months.
Instruction parameters	7)	Can your DER units operate in this way or are there any barriers to this design?	The majority of respondents were confident that their assets could operate as the service design described. One suggested expanding this to incorporate portfolios of aggregated domestic scale units and using the same service design for demand turn-down, generation turn-up where/when needed. Another set out that even if DER units can technically operate in this way, there may be other commercial or operational barriers linked to the overall needs of a customer's site that prevent operation.	We understand that parties want to aggregate units and this is something that we will try to accommodate through future service enhancements, recognising that this is a local constraint service. We would be interested in understanding more about other possible specific commercial or operational barriers to entry.
	8)	Are the minimum instruction times and service assumptions reasonable / practical? If not, why not?	Of the three respondents to this question, all thought the instruction times were reasonable and one said that alignment with the BM was sensible. One thought that ramp rate should be a submittable parameter which can range across asset types.	We will maintain our proposed instruction times as set out in the initial service design. Submittable ramp rate is something that we are considering as part of future releases however, we are happy to discuss any issues this may present on an individual project basis.

9) Does alignment with existing BM rules/parameters, including response times, cause any issues? If so, could you give an example?	Of the three respondents to this question, all were largely comfortable that the parameters aligned to the BM. One went on to ask that, beyond aligning with the BM, could the ESO provide any further rationale for its choice of instruction times.	We were keen to align with the BM in order to create a level playing field across providers of constraint management services and therefore used this as a starting point. We will consider improvements to the service over time and will prioritise these according to operational needs and stakeholder feedback.
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Settlement	10) Looking at the two example instructions set out below, which basis for settlement do you prefer? And why?	Typically, respondents thought that either settlement option could be acceptable with a slight preference for Option 2 (snapshot at the start of the instruction). Although one considered that this option should employ a calculated baseline rather than a snapshot at the start of instruction. Another thought that their preference for one settlement approach over another would be driven by the characteristic of the constraint i.e. duration, time of year, time of day. One respondent acknowledged that the ESO would probably end up over-paying with Example 1.	We agree with respondents that option 2 is preferable between the two options to take forward for use in the initial service design. We are aware that there is work ongoing through Open Networks to look at baselining approaches and we will look to align with this work as much as possible. It is likely that calculated baselines will form part of subsequent enhancements to the service following successful trials.
Aggregation	11) Would you be interested in aggregating units for service provision? If so, what volume and technology type?	All respondents expressed interest in being able to aggregate units for this service. The technology types provided included batteries, solar, heat pumps, CHP, industrial load, rooftop schemes and EVs.	As we develop this service, we understand that it is important to many potential providers to be able to aggregate units. We also need to balance this against the system need for the service which is to be able to manage regional constraints. For us, understanding where units are specifically located (ahead of real- time) and having access to their live metering will likely be a factor in being able to facilitate aggregation for this service. In addition, our ability to facilitate aggregation will depend upon further development of dispatch mechanisms. We will look to engage DER and stakeholders further on this topic.

Future enhancements	12) What enhancements / improvements might providers like to see to the initial service design set out here?	One respondent noted that an availability payment would make a very significant difference to the viability of the service. Another thought that moving away from the 1MW limit would improve participation levels.	We continue to consider that provision of this service should not attract an availability payment as it is not a specific 'time of use' service. We also believe that costs of participation by DER should be minimal, but we will engage further on this point.
			We would need to undertake further work to understand if units below 1MW could be accommodated from an instruction perspective.
Engagement	13) How should we engage with you as we develop this MW Dispatch service further? For example, do you think a DER focus group would be beneficial?	Respondents expressed interest in a focus group and thought it could have value although wanted to understand how it would differ to, or complement, existing ESO groups. Two respondents also considered that we should continue to engage via trade associations such as the ADE and Energy UK.	As suggested, we will continue to engage with prospective service providers through Trade Associations in addition to our own engagement events. We will consider the potential role of a DER focus group in more detail to seek further views.
Other general feedback	N/A	One respondent wanted to understand more about the prequalification process for this service and how it can be 'stacked' with other ESO services. They also wanted to have more detail on the timeline for service development beyond the service launch.	We intend to provide more detail on these areas at future engagement events and on our website in the coming months.