Signposting of distribution system needs

Consultation response

August 2018

WESTERN POWER DISTRIBUTION

Serving the Midlands, South West and Wales

Contents

1 Overview

Western Power Distribution (WPD) is the distribution network operator (DNO) for the Midlands, South West and South Wales. We are responsible for delivering electricity to approximately 7.9 million customers in the UK.

During April and May 2018, WPD sought views on its proposals to publish signposting and forecasting information on distribution network system needs as part of its transition to managing more active networks as a Distribution System Operator (DSO).

Facilitating new neutral markets around flexibility will require WPD to share a greater level of information on the performance characteristics of its network than ever before and in a format which is understandable and transparent.

We are fully committed to acting in the best interests of consumers by opening up network requirements to market competition on a business-as-usual basis.

Flexibility can help network and system operators deliver services efficiently and economically at lower costs and timescales than traditional reinforcement. But the success of the market will depend on participants being aware of potential distribution system needs well ahead of the timescales in which DSOs anticipate deploying flexibility. This advance knowledge will enable Distributed Energy Resource (DER) providers to respond quickly and reactively to DSO flexibility tenders and facilitate markets that operate neutrally.

2 Signposting and Forecasting

Within this consultation, WPD described the two sources of information on system needs which it aimed to share: signposting and forecasting. The aim was to develop this new style of presenting information through close engagement with our stakeholders.

A signpost provides general directions to a number of destinations, without defining the exact path in the way a map would. In the same sense, WPD's signposting information directs flexibility providers to the different distribution system needs potentially required under a range of scenarios and timings.

Signposting provides a multiple scenario-based view of future system requirements across a five-year window. It therefore gives the market information on WPD's distribution system needs in areas that we expect to become constrained for demand before we request expressions of interest for flexibility. Signposting starts at Grid Supply Point and Bulk Supply Points, as these voltage levels require the most costly and time-bound reinforcements.

Through this signposting work, we will describe what flexibility behaviour we may want (months required, MWs needed, predicted availability windows) and also to try quantify a likely market volume of energy (MWhs per month).

Forecasting is a more accurate single scenario view of what flexibility is required in an area across a two-year window. WPD will use forecasting information to advise what flexibility it is seeking in expressions of interest, which will test the market to deliver alternatives to conventional reinforcement.

Forecasting explicitly states WPD's flexibility requirements. Being transparent about short-term system needs demonstrates our commitment to openly test the market to compare relevant reinforcement and market flexibility solutions.

Forecasting also describes what flexibility behaviour we need (months required, MWs needed, predicted availability windows) and defines the market volume of energy (MWhs per month).

3 Consultation Responses

WPD received a number of formal responses to the signposting consultation. These views have been amalgamated and are not directly attributed to individuals or organisations.

Question 1: Does "signposting" adequately describe the information being provided? Is there another term that may be more appropriate?

Generally, respondents agreed that signposting adequately described the information being provided, particularly if the information is locational and specific, rather than a more generic assessment of needs, such as a red/amber/green status for large areas of network. Other terms which respondents felt could be used interchangeably were "advance network service notice", "network data provision".

Question 2: Would signposting of system needs be useful in all areas or just those defined as having near-term reinforcement requirements?

A number of responses suggested that the usefulness of having information across all areas would depend on the depth and type of information being shared. An early indication of general system needs would be useful across all areas. However, respondents felt more detailed requirements should be shared nearer to the point when analysis reveals network investment may be triggered, so the information shared will be accurate and representative of actual requirements. The basis of these investment decisions must also be communicated in advance and transparently.

Information on areas where flexibility is not required, i.e. those areas with reinforcement underway or with plentiful capacity would be just as desirable. This would enable flexibility providers to target developments, although it was acknowledged that this data is already published within the Long Term Development Statement (LTDS) and network capacity map information.

Question 3: Would signposting long-term distribution system needs ahead of service tenders be beneficial?

All respondents agreed that long-term signalling to the market would be beneficial and would lead to more informed development of future flexibility. Some responses cautioned that the information provided must be accurate and reflective of the actual procured services or it would diminish the value of the signalling. There was some variation in the absolute length referred to as ‘long-term’; however, most responses agreed that signposting for flexibility services should be at least one year ahead due to the lead times involved in customer recruitment.

Question 4: Do you agree that using scenario modelling to describe a number of potential outlooks for future system requirements is sensible?

Most respondents agreed that information based on scenario modelling was a sensible basis to frame potential needs. A few respondents also felt that scenario modelling should only apply to long-term outlooks and that it should not remain the only source of information. Some responses highlighted scenario modelling’s particular unsuitability for short-term needs. There was common agreement that where scenario planning is to be used, it should be aligned to a common methodology or framework, to ensure consistency with other industry publications e.g. National Grid Future Energy Scenarios.

Question 5: What further caveats or explanatory material would be helpful in understanding the level to which the information should be relied upon or the possible risks to investing based upon the information?

Many responses agreed that there needs to be a sufficient level of explanatory material to allow the user to interpret the level of risk and that any assumptions used in the creation of the data should be shared. Whilst no specific examples of caveats or

explanatory material were suggested, most respondents considered DNOs to be best placed to create that information. A number of responses suggested that probability information on likelihood of service outturn would be a useful addition to understand the risk to investment in flexibility.

One response suggested that where the likelihood of flexibility requirements is predicated on third party actions, i.e. progression of the connections pipeline, then this should be explained and quantified where possible.

Some responses felt that without sufficient information or rigidity in process for procurement, DSOs could be flooded with numerous speculative applications.

Question 6: Is the information provided in Appendix A clear? Is there any further information that would be useful?

All responses indicated that the information contained in Appendix A was presented clearly and represented a significant change in the availability and transparency of information and data about distribution system needs. Further supporting information, such as postcode and population data was also suggested. Most respondents agreed that monthly aggregated profiles were suitable, although there may be additional benefit in being able to change the time base of this information.

Question 7: Could the information be presented in another way which may be more helpful?

There was a uniform consensus across the responses received that the underlying data would be of particular interest to providers of flexibility and that this should be made available at the same time as any graphical descriptions were published.

Some discussion within the responses revolved around the suitability of bar charts versus line or area graphs. There was no particular consensus over which format worked best and most agreed providing the data superseded any further modifications.

Additionally, some respondents mentioned that if this information source was to be scaled upwards and form the basis of a future market, it might be necessary to develop an API so multiple platforms could use the information directly.

Question 8: Would an interactive mapping tool, similar to WPD's Network Capacity Map, help describe the boundaries where these services are geographically required?

All responses felt that an interactive mapping tool would provide enough information for users to determine where the services are required, as long as this information was also downloadable. Some responses favoured additional information on postcodes would be beneficial or suggested more sophisticated formats, such as GIS shapefiles.

Question 9: Would you use an interactive mapping tool which could show information on signposting as well as the live tenders being run by WPD? Should this tool also make the raw data available?

There was full agreement from all respondents that an interactive mapping tool would be useful and all responses received also confirmed that that the underlying data should be made available. Some responses also suggested this tool could also include system needs from other providers to simplify customer information.

Question 10: Would it be desirable to have the system requirements for multiple compatible services simplified into regional system requirements?

Generally, respondents did feel it would be desirable to simplify regional system requirements, and that having a clear and consistent approach to bringing together transmission and distribution system needs would help flexibility providers to understand more easily whole system needs. A number of respondents who favoured this simplification went further and suggested this format should be an industry requirement and that transmission system services should be also regionalised.

Some respondents stressed that a simplification of system needs should be limited to describing the combined requirements and not lead to any commercial aggregation.

Question 11: Would a DSO service such as that presented be stackable with other revenue streams you are likely to pursue?

Having comparable information to facilitate neutral markets was a key theme expressed in the responses. This alignment of information with other services enables the analysis of the ability to stack to be undertaken. Generally, there was agreement that the proposed WPD services were stackable with other revenue streams, except for those ancillary services that explicitly exclude the ability to stack, e.g. Frequency Response services.

Question 12: Do you agree with WPD not imposing exclusivity terms within its flexibility contracts?

There was a clear consensus across the responses that WPD should not impose any exclusivity terms within its contracts and that flexibility providers look favourably upon contracts that do not include these terms.

Question 13: Are there any other services whose exclusivity may prove a barrier to participation with WPD's services?

Some responses to this question focused on the existing exclusivity arrangements imposed by National Grid System Operator for their products, but acknowledged there is some progress to removing these, even if no deadlines have been set for completion. Responses also expressed the importance of ensuring the markets appropriately value the different sources of flexibility.

4 Summary

WPD's approach to facilitating neutral markets around flexibility was received favourably by all respondents to the consultation. By engaging directly with the stakeholders who will be operating in that market and publishing data on system needs in a detailed and transparent manner, we are confident a distribution market for the provision of flexibility can be stimulated. By committing to this direction and stating our intentions for rollout, we can encourage wider participation and create the right environment for sufficient flexibility to be made available to us.

5 Next Steps

WPD will make the following commitments for its future visualisation and data provision for flexibility services based on the consultation response:

✓	Continue to publish both signposting and forecasting data in the proposed formats
✓	Make the raw data available outside our online network flexibility map
✓	Roll out signposting across all areas where it is anticipated that flexibility can economically provide an alternative to reinforcement
✓	Openly test the market to compare relevant reinforcement and market flexibility solutions
✓	Continue to work with other network and system operators through ENA's Open Networks project to provide a consistent approach to using future energy scenarios and when developing flexibility products and services
✓	Take a lead in not imposing exclusivity terms within contracts and encourage other network and system operators to adopt a similar approach
✓	Develop and document supporting information and assumptions in line with the views of a broad stakeholder group

6 Additional Opportunities for Feedback

We are always keen to hear your views on how we plan to publish and share our data. It is important that we get a broad range of stakeholders' opinions and provide a number of opportunities to invite feedback.

Further comments of ideas can be sent to:

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