



Enabling the competitive deployment of storage in a flexible energy system: changes to the electricity distribution licence

Response on behalf of the Solar Trade Association

About us

Since 1978, the Solar Trade Association (STA) has worked to promote the benefits of solar energy and to make its adoption easy and profitable for domestic and commercial users.

A not-for-profit association, we are funded entirely by our membership, which includes installers, manufacturers, distributors, large scale developers, investors and law firms.

Our mission is to empower the UK solar transformation. We are paving the way for solar to deliver the maximum possible share of UK energy by 2030 by enabling a bigger and better solar industry. We represent both solar heat and power, and energy storage. We have a proven track record of winning breakthroughs for solar PV, thermal and energy storage.

In our last survey of STA members, 70% of our members told us they are now considering or are actively involved in energy storage, from domestic through to large scale, and our investor members are seeking opportunities in this space. We run two energy storage working groups, one at residential scale in tandem with our PV Rooftop working group and one at large-scale in tandem with our Large Scale Solar Asset Management working group. We are working closely with government and the regulator on delivery of the smart, flexible energy system

Respondent details

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Would you like this response to remain confidential?	No

Introduction and Background

The STA welcomed the *Smart Energy and Flexibility Plan*, published in July 2017, having submitted evidence prior to the publication of this plan, highlighting the key issues facing the solar and storage industries.

Amongst other issues, one of our concerns on storage policy was the role of DNOs in owning and operating storage, which our members feel may serve to stifle competition in this area, and lead to unfair advantages for DNOs, at the expense of third-party storage operators. We welcome the publication of this consultation, and are pleased to see Ofgem is equally concerned with the distorting effects of DNOs operating storage themselves.

As highlighted in this consultation, DNOs are prohibited from operating large-scale storage over 100MW, and the STA strongly believes this should be applied to sub-100MW storage facilities. This is necessary to encourage a competitive storage market, which will ensure the most economic and efficient storage solutions are utilised. Ofgem has rightly acknowledged the dangers of allowing monopolies to distort a competitive market, and we strongly agree with the unbundling proposals set out in this consultation.

We are pleased to see Ofgem responding to the issue raised by the industry and believe this consultation suitably addresses a number of our members' concerns regarding DNO operation of storage facilities.

Answers to Consultation questions

Chapter 2: Proposed new condition in the electricity distribution licence

Q.1 *Do you agree that the proposed new condition will ensure legal unbundling of DNOs from the operation of storage that benefits from an exemption to hold a generation licence?*

Yes, we believe the new condition 43b prohibiting DNO operation of storage is appropriate and will ensure a legal unbundling of DNOs from the operation of sub-100MW storage, as exists already with large-scale storage facilities.

Q.2 *Do you agree that the same principles of unbundling should apply to IDNOs?*

Yes, we agree the same restrictions on DNO operation of storage should apply to IDNOs, as they will have similar monopolistic features as DNOs, and their participation in the operation of storage, without unbundling, could therefore prevent the establishment of a competitive market.

Do you have any views on the application of the specific new condition proposed here applying to IDNOs?

Yes, we believe condition 43b should be applied to IDNOs too.

Q.3 *Do you agree that DNOs should be able to directly own and operate small-scale storage for the purposes of providing uninterruptible power supplies (UPS) at substations?*

Yes, in this specific circumstance, it is reasonable to allow DNOs to own and operate small-scale storage but only for the express reason of ensuring equipment remains energised in the event of a system outage, as this seems necessary for the DNO's safe management of the system.

Do you agree that DNOs should be able to directly own and operate small-scale storage for the time-limited purposes of emergency restoration and maintenance?

As above, in this specific situation, the STA is of the view that DNOs should be allowed to own and operate small-scale storage to provide continuity of supply in outage situations.

Do you think DNOs should be able to directly own and operate storage for any other specific applications?

No, we do not believe there are any other circumstances in which it would be acceptable for DNOs to own and operate storage, as this will likely have monopoly impacts and thus distort the storage market, creating a disadvantage for third-party storage operators.

Q.4 *Do you have any views on the treatment of existing islanded system generation currently owned by DNOs?*

Given the unique features of islanded system generations, the STA is not opposed to DNOs continuing to own storage, provided that when these assets need replacement, or new storage assets are required, the DNO first seeks a market-based solution. DNO ownership and operation of storage, even on an existing islanded system, should be a last resort when the market is unable to provide a suitable solution.

Do you have any views on the treatment of future use of DNO owned and operated generation of storage in similar island situations?

The STA agrees with the approach put forward in the consultation, whereby in future, DNOs should be required to apply for permission to operate storage assets directly. This ensures the wider market, and the third-parties within, are given the opportunity to participate in islanded system generation, where this is more economic and efficient than DNOs doing so themselves.

Chapter 3: Guidance Document

Q.1 *What are your views on the three high-level criteria proposed as the basis for assessing applications for consent? Do think there are other criteria which should also be included?*

The three high-level criteria proposed in the consultation are appropriate and sufficient to ensure the correct function of a competitive market for storage. In particular, the requirement for DNOs to exhaust market options, and to demonstrate this to Ofgem, will ensure DNO operation of storage is a last resort, and allow for third-party storage providers to enter the market. The STA and our members also welcome the inclusion of criterion 3 (minimised conflicts of interest and mitigated potential distortions), as even when the market cannot

provide a storage solution, the inclusion of this requirement will ensure the storage market does not become monopolistic, and DNOs are not able to use their knowledge of the system to gain unfair advantages.

Q.2 Do you have any other views on the scope or content of the proposed guidance document?

No.

Q.3 Do you have any views on the process that should apply to the assessment of applications?

We welcome the inclusion of stakeholder input and consultations in the procedure to grant consent for DNO operation of storage. We, and our members, feel that transparency is key and the proposed stakeholder engagement will provide the wider industry the opportunity to comment prior to Ofgem's decision. This consultation process may also provide guidance for the future, as barriers to entry for third-party storage providers could be identified during this consultation process.

Chapter 4: Reporting and Monitoring

Q.1 Do you have any views on reporting requirements for DNOs that own/operate storage assets?

The STA considers that robust reporting requirements should be in place for DNOs that own/operate storage assets and that ongoing monitoring is necessary to ensure sufficient unbundling of DNOs and the operation of storage assets by legally separate, but affiliated companies. As highlighted in the consultation, there are business separation rules in place in the DNO licence, and these must apply in the area of storage operation too.

The STA is especially in favour of section 4.4.6, which states that where DNOs are granted consent to operate storage "*there would be a particular onus on the DNO to facilitate development of a market in future*". This measure will ensure that DNOs are proactive in creating a competitive market for storage, as will the time-limits on these consents. This will ensure that DNO operation of storage is temporary, and highlights the direction of travel towards a fully competitive market for storage provision.

Q.2 Are there any particular types of data that, if published, could facilitate entry of competitive parties?

The STA agrees that it is necessary to provide signals from the 'demand side' of the market, and DNOS should be required to clearly signal areas of potential need, sufficiently far enough in advance to allow third-parties to participate. Usage data from existing storage assets would also provide strong signals to third-party storage operators, allowing them to adjust their business models, and tender bids accordingly. Collectively, publishing this data will help to create a competitive market whereby third-parties can economically and efficiently provide storage solutions.

Is there any other information or data that you think DNOs hold about the deployment of storage on their networks that they could usefully make public?

In order to ensure a well-functioning, competitive market for storage, DNOs should publish as much information and data as possible. Heat maps highlighting areas of constraint/capacity on the network are particularly useful, but currently these can be months out of date, severely constraining the storage market. Forecasted heat maps would be very useful for third-party storage providers, but at the very least these should be kept up to date in real-time.

DNOs should provide as much visibility as they can, highlighting any major changes to the networks that may arise in future. This allows third-party storage providers to plan in advance, and will increase their ability to deploy storage competitively and efficiently across the network.