

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

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?

The outline proposal should prevent DNOs from operating storage, as long as the wording captures exempted generator licenced storage. As pointed out in your consultation, ownership by DNOs for sub 100MW projects will not be captured by the new condition. This should be raised as a risk because:

- the storage market in the foreseeable future is likely to be made up of sub 100MW projects;
- profits from ownership of the asset, could still make it onto a DNOs balance sheet;
- as owner of the asset, or majority stake of the asset or fleet of assets, although DNOs would not have direct 'operational control' of the assets, they would have a voice as to how the assets should be deployed and operated in the market;
- DNOs have access to some of the lowest cost of capital in the market place, access to inexpensive strategically located land i.e. next to substations and have strong buying power so would be competing at an unfair advantage in the storage market.

In the short term the risks are low and hopefully Ofgem's messaging on ownership and operation are strong enough to avoid DNOs owning and operating storage in most of cases. However, there is evidence that this is not the case, such as [Northern Power Grid's announcement](#) regarding participation in competitive frequency markets using their existing storage assets. It is justified by NPG through the desire to better understand needs of storage providers, however we note that previous funded innovation projects, such as Smarter Network Storage, should have already provided sufficient similar learning and dissemination on operating batteries in commercial frequency markets which other DNOs could take on board without the need for further trials.

On the exceptional circumstances where a DNO may be able to operate storage, Ofgem should set out a market test framework with a required process for DNOs to follow to fully test the market for solutions before they can decide DNO operation is required.

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

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

We agree that the same principles should apply to IDNOs. In a level playing field, all network operators should practice within the same rules.

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?

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?

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

DNOs should be able to directly own and operate small-scale storage for the purposes of providing uninterruptible power supplies (UPS) at substations. This has been industry practice for many years and we do not consider to be detrimental to the development of competitive markets for flexibility, provided these assets are not utilised for other purposes.

DNOs should be able to own and operate small scale storage solutions for the time-limited purposes of emergency restoration and maintenance to ensure the efficient operation of the networks. DNOs should not be allowed to own and operate storage for grid constraints as this could be provided by a competitive market.

Outside of the purposes of emergency restoration and maintenance, there should not be applications where DNOs need to own and or operate storage. There is a marketplace for network solutions and this should be embraced for all other applications.

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

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

The ownership and operation of generation assets on existing islanded systems is likely the result of regulatory oversight in unbundling requirements. It is difficult to form a view on this issue when no evidence of the current scale of the problem is presented. We would only be able to form a view when presented with figures on the scale of the issue i.e. number of sites and MW of generation capacity currently owned and operated by DNOs. This information would inform whether the issue meets the proportionality test, as to whether a complex regulatory solution is required and would be worthwhile.

For future generation on islanded networks, for consistency with all networks, any solutions a DNO requires that involve generation or flexibility services (e.g. reducing demand) should be tendered for in an open market competition. Only if

the market fails to deliver a solution should a regulated monopoly have to take ownership and or control of a solution.

3. Guidance Document

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

We think the criteria are appropriate. As you note, the guidance document would elaborate further and set out clear expectations for the DNOs. As part of this, as the economic regulator, we would expect Ofgem to set out the requirements for the CBA. This could follow the RIIIO framework or a more up to date framework recognising the need for DSOs and cross networks co-ordination (distribution and transmission) to enable an efficient whole system solution. The aim should be to make it clear how DNOs can fairly assess and present solutions and benefits.

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

See above

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

See above

4. Reporting and monitoring

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

An asset owned and operated by a DNO, with access to cheaper finance or innovation funding, may be able to bid in to additional service markets at lower prices, effectively distorting the market. Therefore, we do not believe it should be acceptable for DNOs to participate in these functions in the first instance.

However, in the event this is carried out for any reason, for example for legacy innovation projects, all revenues for this type of activity should be declared and ideally shared with DNO customers to ensure balancing costs are not increased overall.

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

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??

Information that we believe would be useful to the marketplace is listed below:

- DNO cost benefit analysis on the storage solution, including information on minimum price points and costs of alternative solutions;
- Detailed information in advance of any tenders on DNO constraints with capacity and timings of constraints would help the market mobilise potential solutions in time;
- Connection heatmaps with detailed information on capacity available for storage connections, or to be technology neutral, more detailed information on generation, demand constraints and likely areas requiring alternative reinforcement.