

flexibility@ofgem.gov.uk

Avonbank
Feeder Road
Bristol
BS2 0TB

Andrew White Energy Systems Integration Ofgem 9 Millbank, London SW1P 3GE Telephone 0117 9332175

Email asleightholm@westernpower.co.uk

Our ref

Your ref

Date

27 November 2017

Dear Andrew

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

I am writing on behalf of Western Power Distribution (South Wales) plc, Western Power Distribution (South West) plc, Western Power Distribution (East Midlands) plc and Western Power Distribution (West Midlands) plc in response to Ofgem's consultation on the restriction on the ownership and operation of generation and storage.

## Question 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 agree that the drafting of the proposed new licence condition achieves this. However as recognised by Ofgem there are specific reasons why DNOs needs to own or operate generation or storage.

Question 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?

Yes. We agree that the same unbundling principles should apply to IDNOs.

# Question 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 we agree. However the terms "UPS" does not adequately cover the use of batteries by a DNO. WPD makes widespread use of batteries for protection systems, switchgear tripping and closing functionality as well as for SCADA communications and at our telecoms sites. These are for 110V, 48V and 24V DC supplies and are fitted with rectifiers rather than invertors. As detailed in our ED1 Business Plan we are upgrading battery resilience at our major substations to provide industry standard 72 hour resilience and Black Start resilience.



Serving the Midlands, South West and Wales

- (i) Protection batteries 132kV, EHV and some major HV substations use low voltage supplies for the recharging of batteries. These batteries are used for the operation of power system protection and tripping of circuit breakers at the substation.
- (ii) SCADA batteries enable remote control of switchgear and provide a means to communicate the status of the network to control rooms. We also use batteries across our network in automated protection equipment.
- (iii) Batteries at Telecoms sites the key telecommunications systems include mobile voice communications for the coordination of field staff, telephone land lines to key strategic sites, including Control Centres and Customer Contact Centres and telecommunications infrastructure for SCADA systems.

We would prefer these to be covered by a General Consent. See below.

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

Yes. We support the proposal to allow DNOs to own and/or operate mobile generator units for use in outage situations to keep customers on supply. Please note that mobile generators are rated in kVA rather than kW. Also WPD does use small units rated at less than 50kVA (known as suitcase or wheelbarrow gneretaors). Therefore it would be preferable to just specify the upper limit 1t 1.5 MVA to allow for the deployment of very small generators below 50kW. There is also technology available for mobile generation and/or storage which would need to be provided for.

Over time it is possible that the upper limit may need to be raised to take account of increased demand for electric vehicle charging and electric heating.

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

There are three areas where as a DNO, WPD should be able to own and operate generation/storage. These should be allowed for under the General Direction.

- (a) <u>Last resort provision</u> there may be areas of the network that would benefit from storage provision as a cheaper option than reinforcement or building new assets, where a market based solution was not available or economic i.e where no third party responds to a tender, or WPD is able to provide storage significantly cheaper than third party providers who have responded to a tender.
- (b) <u>Innovation Trials</u> WPD is currently running a number of innovation projects involving small scale generation and storage. DNOs need to be able to apply for permission to runs trials that are part of an innovation project or in other appropriate circumstances.

DNOs should be able apply to apply for consent on a case by case basis. The criteria for assessing specific applications should be set out in the Direction Guidance.



#### (c) Use at company premises

- (i)WPD owns and operates fixed generation and storage as back up supplies to provide resilience at non-operational sites i.e. offices including our Contact Centre and Control Rooms. These are critical for storms and major events including Blackstart.
- (ii) Electric vehicles (EV)are used by WPD staff as part of our initiatives to reduce our business carbon footprint. This involves owning/operating battery units and on site charging points. EVs also have the ability to export onto the electricity network which in future may mean to "vehicle to grid" capability.
- (iii) WPD owns and operates small scale onsite generation/storage at its premises such as roof top solar and wind which helps us offset our business carbon footprint. These may export electricity at times.

We would prefer these to be covered by a General Consent. See below.

# Question 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?

WPD owns and operates generation sets on the Isles of Scilly to meet its P2/6 requirements. We wish to retain these arrangements.

We note that for new islanded sites of this kind, or for <u>replacements of assets</u> at the existing sites, the DNOs would need to apply to Ofgem for permission to operate the assets directly, and to demonstrate that a market-based solution has been sought from a third party.

This restriction needs to be carefully drafted to allow the normal maintenance of the generation assets, which can involve replacing defective or worn parts. This should be further clarified in the Direction Guidance.

#### **Proposed licence drafting**

#### **Condition 42**

The definition of Relevant Exemption Holder needs to clarify that where a direction is granted under 43B, those assets will not fall with the definition of Relevant Undertaking for the purposes of SLC42.

#### **Condition 43B**

This condition prohibits the DNO from any generation or storage activity unless Ofgem has issued a direction consenting to a particular activity. This means that activities are covered which would not even require an exemption such as operating an electric vehicle fleet. Thus Ofgem will need to ensure that its direction is carefully drafted so as to cover all of the relevant activities described above.

The broad process for obtaining a direction should be set out in the licence condition, rather than wholly in the Direction Guidance.



Serving the Midlands, South West and Wales

There are similarities to SLC26 Disposals of assets which specifies the known criteria for allowing disposals and then enables the DNO to apply for a specific consent.

We would prefer uninterruptible power supplies (UPS), emergency response and maintenance fleets, pre-existing islanded generation and storage/generation for internal operational purposes to be specified in a General Consent as an appendix within the licence condition, in a similar way to SLC26.

Then Direction Guidance should specify the criteria for assessing specific cases not covered by the General Consent.

There also needs to be a procedure within the licence condition to enable the DNO to apply for a specific consent under the Direction Guidance. Thought needs to be given to the treatment of Innovation Projects to avoid have duplicate approvals processes.

SLC26 provides for a 2 month notification process. Alternatively the standard derogation wording could be used.

If you wish to discuss any of the aspects of this response in further detail please contact Natasha Richardson at <a href="mailto:nrichardson@westernpower.co.uk">nrichardson@westernpower.co.uk</a> telephone 0117 9332382.

Yours sincerely

ALISON SLEIGHTHOLM

Regulatory & Government Affairs Manager