



## **NEXT GENERATION NETWORKS**

Comparison of price  
incentive models for locally  
matched electricity  
networks.

**Appendix D:  
Virtual Private Wire model  
Regulatory Analysis**



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## Executive Summary

Reference should be made to our report of 8 September 2017, which explains the legal definition of ‘private wires’ (and the related concept of ‘same site’) and the commercial benefit to be gained by supplying electricity on this basis, under the Class C supply licence exemption.

The study has focussed on the concept of a *Network Replicating Private Wire* model, as a more relevant subset of what is permissible under the Class C exemption.

The concept is then extended to a Virtual Private Wire model which has the same characteristics as the Network Replicating Private Wire model but for the fact that it makes use of spare capacity on a licensed distributor’s network (under a lease or some other arrangement) to enable supply between a generator-supplier and its customer(s) who are not on the same site as each other.

However, ownership by the licensed distributor of those network assets being used prevents use of the ‘private wire’ limb of the Class C supply licence exemption and the fact that generator-supplier and its customer(s) are on different sites prevents use of the ‘same site’ limb of the Class C exemption.

To use the Class C supply licence exemption would, therefore, require a change in law to broaden its reach.

An alternative would be to consider the Class A small supplier exemption. However, this limits supply to never more than 5MW (of which no more than 2.5MW can be domestic supply) and requires that all electricity supplied is generated by the supplier. It is possible that a deeming provision in the Class Exemption Order overcomes this.

However, under either Class C or Class A, use of the licensed distributor’s network would itself require the consent of Ofgem to a disposal of part of the licensed distributor’s regulated asset base and may require amendment of the Electricity Act and/or standard licence conditions (or a derogation from them).

One of the key commercial purposes of seeking to rely on Class C or Class A would be to enable significant financial advantage to be gained by the exempt supplier making electricity supplies across a licensed distributor’s network without attracting the substantial charges that are applicable to every other supplier supplying customers over that network. Because of that, it seems unlikely that Ofgem would consent to the leasing arrangement required or that the regulatory changes needed would gather much support.

As such, the VPW model proposed seems unlikely to be deliverable in the current political climate.

*NB: This note only gives a summary of some of the relevant legislation and exemptions. It does not*

*give, nor should anyone reading this note rely on it as, legal advice. Specific legal advice should always be taken, based on the specific facts applying, before setting about any new business seeking to take advantage of a Class Exemption.*

## Virtual Private Wire model

One possible option for encouraging local matching that has been identified is a ‘virtual private wire’ (‘VPW’) approach. A model for this has been defined, focussed on a *Network Replicating Private Wire* model but which, instead of using private wires, uses the licensed distribution network, thereby substantively avoiding the economic inefficiency of duplicating distribution assets.

For the purposes of study, the VPW model has been defined as having the following characteristics:

- there is an arrangement involving at least two parties, a generator (G) and at least one customer (C), for the supply of electricity by G to C;
- G and C are not the same entity (i.e. we are not dealing with 100% self-supply);
- G and C are not on the same site;
- in place of a private wire connection, licensed distribution network assets are used to connect G and C;
- to enable this to happen, spare capacity over those distribution assets is utilised under some kind of leasing arrangement or otherwise;
- there is a Power Purchase Agreement (PPA) between G and C;
- G sells power to C but benefits from a supply licence exemption.

## Regulatory Analysis

Reference should be made to our report of 8 September 2017, which explains the legal definition of ‘private wires’ (and the related concept of ‘same site’).

### The Class C supply licence exemption

Summarising, under the Class C of Schedule 4 to the Electricity Act (Class Exemptions from the Requirement for a Licence) Order 2001 (the ‘**Class Exemptions Order**’), exemption from the requirement to hold a supply licence is available in the context of supplies made:

- between a generator and a consumer, connected by ‘private wires’; or
- between a generator and a consumer, who are on the ‘same site’.

It is this exemption from the requirement to hold a supply licence that gives the most significant pricing advantage to a private wire connected generator-supplier when supplying a private wire connected customer.

However, the VPW model is not compatible with Class C supply licence exemption used for private wire supplies.

Application of the Class C supply licence exemption to the VPW model

‘Private wires’ are defined in the Electricity Act (Class Exemptions from the Requirement for a Licence) Order 2001 (the ‘**Class Exemptions Order**’):

*“private wires” means electric lines owned by—*

- a) the supplier in question;*
- b) consumer who receives a supply from the supplier in question from the generating station;*
- c) the owner, lessor or lessee of the generating station or of one of the premises to which a supply is made by the supplier in question; or*
- d) any of the persons described above jointly with any other of the persons described above, provided that the owner of those wires is not a licensed distributor.*

However, under the VPW model, use is made of distribution network assets owned by a licensed distributor. Therefore, it is the ownership of the network that is fatal to making use of the ‘private wires’ limb under the Class C supply licence exemption.

Under the VPW model being considered, the generator and consumer are not on the ‘same site’ so the ‘same site’ limb of the Class C supply licence exemption cannot be used either.

The Class C supply licence exemption is not available to the generator-supplier.

Regulatory changes needed to enable VPW model to work under the Class C supply exemption

The VPW model could be brought within the Class C supply licence exemption:

- through a change in law, having the effect of amending the Class C supply licence exemption; but only
- if the amendment, in one way or another, provided that the use proposed of distribution network assets would be permissible under Class C (notwithstanding ownership by a licensed distributor) if the generator-supplier only used spare capacity made available under a permitted leasing arrangement.

Furthermore, since the distribution network assets in question would be considered part of the licensed distributor’s regulated asset base, covered by price control to protect consumers, disposal of an interest in such assets would require Ofgem approval too. Granting a lease or other interest over

spare capacity would trigger this requirement to obtain consent. Change might also be required to the Electricity Act and/or standard distribution licence conditions (or a derogation from them) to permit the grant of the lease or other interest by the licensed distributor.

In terms of consent (and as a guide to approach generally), Ofgem would be concerned to see that:

- a fair price was paid for the interest granted in these network assets (so that consumers generally would not be paying for it); and
- any such disposal of spare capacity did not otherwise worsen the costs borne by (or otherwise prejudice) customers connected to the regulated distribution network.

If the primary driver for making use of the Class C supply licence exemption is to avoid the types of standard charges applicable to electricity supplies made by licensed suppliers, then it is hard to imagine that Ofgem would look favourably upon any application for consent to the requisite disposal or that they would be at all supportive of any necessary legislative change.

#### The Class A small supplier exemption

One other supply licence exemption should be mentioned.

Under the Class A small supplier exemption, suppliers who only supply electricity which they generate themselves and who never supply more than 5MW of electricity (of which not more than 2.5MW is supplied to domestic consumers) may be exempted. Supplies made by members of the same group are added together for the purposes of these limits.

This exemption is not dependent upon ownership of the network assets or upon 'same site' proximity between generator and supplier so, in theory, could be used for supply over a licensed network, whether or not over spare network capacity.

However:

- grant of a lease of or other interest over spare network capacity would still require Ofgem consent and, potentially, amendment of the Electricity Act and standard licence conditions (or a derogation from them), as described above;
- the 5MW total (and 2.5MW domestic) limit (which is applied across a corporate group) would significantly limit the scalability of a VPW model using Class A exemption as opposed to Class C (if the Class C exemption could be made available); and
- the generator-supplier must only supply electricity they have generated themselves. At the very least, this would appear to limit what can be supplied to the generating capacity of the



generator-supplier's generating facilities, which may not be sufficient to meet customer demands and may not permit supplies during generator down-time;<sup>1</sup>

- the alternative way in which use could be made of the licensed distribution network operator's network and the limitations overcome on back-up and top-up referred to above, and which is still consistent with the exemption, would involve entering agreements with other license-holders who are subject to, and would wish to pass through to the Class A supplier, the very charges that the Class A supplier is trying to avoid (and see further below).

### Settlement metering

Whether seeking to take advantage of the Class C or the Class A supply licence exemption, there is the question of how to address settlement metering (generator export and customer import). Under the supplier hub principle, a single licensed supplier is responsible for a settlement meter. Yet here, the licence-exempt supplier would not be a party to the Master Registration Agreement and other relevant industry agreements. This flags the need to involve a licensed supplier to undertake tasks on behalf of the licence-exempt supplier although that would most likely have a significantly adverse commercial impact.

**Lux Nova Partners**

**26 October 2017**

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<sup>1</sup> Article 2(2)(d) of the Class Exemption Order contains a provision which appears to deem a generator-supplier to be generating electricity themselves at any time they were capable of generating electricity. However, there is debate over the proper meaning and application of this provision.

