



Prime Energy Limited
49 York Place
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23rd September 2016

Frances Warburton
Partner Energy Systems The office of Gas and Electricity Markets
By email

Dear Ms Warburton,

Response to Ofgem open letter dated 29th July 2016

Prime Energy Limited is pleased to provide a response to your request for comments on the issue of Embedded Generation, as set out in your open letter dated 29th July 2016.

The letter relates to CUSC modifications CMP 264 raised by Scottish Power and CMP265 raised by EDF. We will also comment more generally on the matter of the benefit for embedded generation of the current Transmission Network Use of System Charging.

General Points

The value of Triad payments has increased significantly in recent years and it seems unlikely that the forecast levels of the payment are matched by cost savings to the National Grid. We would agree that this is an issue that needs to be addressed. However, the CUSC modifications, or any alternative modifications that may come forward do not address the real problem. Both of the modifications create further distortions and discriminate against embedded generation. Neither modification is an attempt to create a level playing field. This suggests that both modifications are attempts to increase the oligopoly power of large players at the expense of both embedded generators and consumers.

Ofgem and National Grid have reviewed embedded benefits many times and on each occasion concluded that major change is not required. The most recent review was the consultation on exporting GSPs in 2015. The resulting conclusion indicated no significant change to TNUoS charging unless GSPs were exporting. In late 2015 Ofgem should have been aware of the forecast growth in the residual transmission demand charge. Nothing has changed fundamentally since the end of 2015. The significant change indicated by the initial approach set out in your letter suggests that Ofgem is responding to political pressure created by the VW “dirty diesel” scandal rather than acting as an unbiased economic regulator. Any air pollution issues related to building new generation of any kind should be addressed by other regulators rather than by Ofgem simply targeting all embedded generation.

The alternative conclusion is that Ofgem created a false market in 2015 on the basis of which many people have invested in embedded generation, storage and demand reduction. This has had a significant direct impact upon pricing in the capacity market and has had an indirect effect in reducing the cost of flexibility services required by National Grid. If in

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2015 Ofgem had believed that more fundamental reform of transmission charging was required it should have stated so rather than accepting the conclusion of National Grid.

As your letter rightly states it is necessary to create a level playing field. Targeting embedded generation is not addressing the more fundamental problems with transmission charging and does not create a level playing field. If the current level of embedded benefits is too large, Ofgem should address the fundamental problems with transmission charging rather than creating further distortions by removing embedded benefits from some or all embedded generation. It should signal its intent to resolve these issues and then undertake the necessary work in a reasonable timescale. Lack of resource within Ofgem is no excuse for destroying the businesses of many small companies that have invested in embedded generation in good faith.

Ofgem has a duty to protect consumers, and it is difficult to see how preventing embedded generation from competing in the Capacity Market would do this. Ofgem has allowed uncertainty to prevail, which will likely push up the clearing price in the Capacity Market. The potential increase in costs to consumers will far outweigh the total value of payments being made to embedded generators through Triad payments.

All parties acknowledge that embedded generation reduces costs on the transmission system. As set out in your letter, National Grid has estimated the value of these cost savings at between £1/kW and £6/kW, but the true value is uncertain. Whatever the true value, it is not zero, and that same value applies equally to demand reduction, storage and behind the meter generation. You acknowledge this in your open letter. All of these ways of reducing TNUoS charges should be treated in the same way: if they are not treated equally a major distortion is created.

The potential for demand reduction during Triad periods includes investment in energy efficiency, investment in storage and other forms of demand shifting, and demand elasticity. The potential for demand reduction is large. National Grid estimates that some 2.5GW of demand reduction occurred last winter over peak periods. Demand reduction should be expected to increase since it is being actively promoted by government, and part of the Capacity Market is reserved for demand reduction services. With the wide-scale introduction of smart meters, commercial demand aggregation services, and the commercial availability of storage technologies at the domestic and MW scale, there is the potential for further significant increases in demand reduction or demand shifting.

If Ofgem considers that it is important to reduce the embedded benefits for distribution connected generation, then it must consider that it is much more important to reduce the impact of Triad charging on demand reduction or demand shifting.

The value of Triad Avoidance has increased in recent years and is forecast to rise sharply. There are many reasons why this is happening and it is difficult to disentangle the effects. The growth of embedded generation without commensurate reductions in the income recovered by National grid is one reason why the cost per kW imported at times of peak has increased, but this would explain only a small part of the increase in the half hourly tariff in recent years. This suggests very strongly that there are large subsidies being made

available to grid connected generation, interconnectors and offshore wind. These subsidies include:

- Interconnectors avoiding transmission charging and operating near baseload because of tax distortions;
- An artificial target of having interconnector capacity equal to 10% of total capacity, and those interconnectors having guaranteed returns within a defined range.
- Connection of remotely located renewables at costs significantly below the true deep connection costs.
- An artificial constraint on grid connected generation paying transmission charges in excess of €2.50/MWh.
- The failure of TNUoS charging to deal with exporting GSPs.

These are distortions. The scale of those subsidies will dwarf any potential over payment of embedded benefits where distributed generation is reducing the import from the transmission system.

While considering the remuneration of small generators it should also be considered that distributed generation generally cannot access the full value of its output and flexibility. A significant portion of the income created must be shared with intermediaries and aggregators.

Proposed Modifications

We will look at each amendment in turn.

CMP264

This modification, proposed by Scottish Power, would require that embedded generation coming on stream after the end of June 2017 would not be deducted from suppliers' charging volumes for the purpose of TNUoS, thereby ensuring that "new" embedded generation would not receive any benefits for reducing peak GSP demand.

The modification does not attempt to create level playing field. Instead it treats "new" embedded generation differently from existing embedded generation, demand reduction, generation behind the meter and storage.

Since all parties acknowledge that embedded generation reduces costs on the transmission system, and since all parties acknowledge that the effect of 1kW of embedded generation is the same as 1kW of demand reduction, removing all benefits from one class of embedded generation cannot be consistent with the CUSC objectives.

Ofgem should reject this modification and all alternative modifications that seek to treat one class of generation differently from demand reduction and other embedded generation, whether or not behind the meter.

CMP265



This modification proposed by EdF would require that embedded generation with Capacity Market contracts would not be deducted from suppliers' charging volumes for the purpose of TNUoS, thereby ensuring that embedded generation with Capacity Market contracts would not receive any benefits for reducing peak GSP demand.

There is no logic to this modification or potential alternative modifications that can be consistent with the CUSC objectives.

Capacity Market payments are not a subsidy, but a method of dealing with the missing money problem in the wholesale market. Since these payments are not a subsidy, there can be no reason why receipt of these payments should lead to a reduction of the benefits available by offsetting GSP peak demand.

Further, the Capacity Market payments are available to grid connected generation and also to demand reduction. If there were any reason to remove embedded benefits from those with CM contracts it would apply equally to demand reduction in receipt of capacity market contracts.

There is no logic to suggest that offsetting the value of Capacity Market contracts and the Triad payments would lead to a result that is more cost reflective. If such logic were to exist it would probably also require that grid connected generation paid an additional charge of equivalent value.

The modification does not attempt to create a level playing field. Instead it treats embedded generation with Capacity Market contracts differently from other embedded generation, demand reduction, generation behind the meter and storage.

Since all parties acknowledge that embedded generation reduces costs on the transmission system, and further since all parties acknowledge that the effect of 1kW of embedded generation is the same as 1kW of demand reduction, removing all benefits from one class of embedded generation cannot be consistent with the CUSC objectives.

Ofgem should reject this modification and all alternatives modifications that seek to treat one class of generation differently from demand reduction and other embedded generation, whether or not behind the meter.

I trust these comments are helpful in determining a path forward in what is clearly a very complex time. With wide ranging implications, that should not be swiftly determined without due consideration from the appropriate bodies.

Yours sincerely,

A handwritten signature in blue ink, appearing to read "D. Lewis".

David Lewis
Managing Director
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