

RWE view of potential impact of a safeguard tariff on wholesale market liquidity

Executive Summary

A process whereby a regulatory body implements a specific regulatory tariff based on a bottom up calculation of costs, will, to complete that calculation, require an assessment of commodity costs. Such an assessment of commodity costs would necessarily be derived from some form of wholesale market assessment. Indeed, when a bottom-up calculation of costs is used for the purpose of setting regulated prices, regulators would need to rely on a methodology which sets out a defined hedging path (a “defined hedging approach”) from which a theoretical hedge cost would be calculated.

Under such a bottom up cost regulated tariff regime, supply businesses face the choice of either following such a defined hedging approach, to ensure that their costs reflect those allowed by the regulatory body, or of employing some other hedging approach, where their commodity costs may outturn higher or lower than that allowed by the regulatory body.

RWE’s view is that supply businesses would follow a risk minimising strategy of matching the cost base of a regulatory tariff, so would attempt to follow the defined hedging approach. Each supplier would have such an incentive and so it is likely to result in convergence in hedging approaches between suppliers for customers on a safeguard tariff as suppliers look to minimise their risk of having an excessively high cost base.

RWE believes that a safeguard tariff which requires a defined hedging approach is detrimental to the consumer and risks resulting in higher costs on average for the consumer as it reduces competitive pressure on the hedging costs between supply businesses.

Additionally, RWE submitted in its response to the CMA’s Remedies Notice (see response to Remedy 11, page 98, paragraph 6.29) that a safeguard tariff that necessitates defining a hedging approach for suppliers may risk changing the functioning of the wholesale market by concentrating suppliers’ purchasing activities at particular times in order to align with the price setting mechanism of that tariff.

RWE urges the CMA to consider the impact a safeguard tariff which defines a specific hedging approach would have on consumers and on participants in the wholesale market.

The potential impact of a Safeguard Tariff which necessitates a "Defined Hedging Approach"

A process whereby a regulatory body implements a specific regulatory tariff will lead to a defined hedging path (a "defined hedging approach"). This is likely to result in convergence in hedging approaches between suppliers for customers on that tariff and all suppliers will hedge in the same way.

This is because a divergence of hedging from the defined hedging approach creates significant cost base risk for suppliers; namely that their individual ultimate commodity cost is more expensive than that allowed under a safeguard tariff regime. As suppliers are likely to be highly averse to being forced to set prices for their customers on a safeguard tariff at a loss, there is a very strong incentive for them to follow a defined hedging approach, as a least risk option. Significant deviations from the defined hedging path would carry significant risk for a supply business.

If a supplier believes (for the reasons set out above) that every other firm will follow the 'defined hedging approach' in response to the safeguard tariff then that supplier will have an incentive to follow that identical approach. Expressing the same idea slightly differently - each energy supplier would have no incentive to move away from a defined hedging approach where that strategy is adopted by its rivals.¹

To understand why no firm would have an incentive to change its behaviour when others follow the defined hedging approach:

- First, recall that any firm who follows a defined hedging approach will benefit from a cost structure - and since there would be regulated prices - a margin - that is not subject to wholesale energy cost risk; regulated retail prices themselves are the perfect hedge (in practice perhaps a near perfect hedge) for wholesale costs incurred according to the defined hedging approach.
- Second, suppose that a single energy supplier considered choosing an alternative hedging strategy. Since wholesale market efficiency means that no firm should be able to make money in expectation - such an alternative hedging strategy could not possibly result in a lower expected wholesale energy cost. It would however be an approach that would re-introduce wholesale energy cost risk into retail margins under the regulated price.

Now since no rational firm would choose a strategy which had the same expected return but a higher risk, no firm would find it optimal to change its strategy.²

An alternative way to consider this issue is [CONFIDENTIAL].

RWE believes that a convergence in supplier purchasing behaviour will have an impact both on customer bills and the wholesale markets. RWE considers it vital that the CMA considers the full raft of impacts of a safeguard tariff regime which defines a specific hedging approach. These impacts can be defined under three broad categories.

¹In economist terminology, such strategies could be described as constituting a Nash equilibrium; since no player has a unilateral incentive to change its hedging strategy given the strategies of others.

² In economist jargon, there is no profitable unilateral deviation compared to the zero risk hedging strategy available from the defined hedging strategy.

1. Impact on customer bills through reducing competition on wholesale costs

In the current market, different hedging tenors result in different realised wholesale costs, dependent on market scenarios. In some scenarios, shorter hedging tenors might end up with low relative commodity costs, while in other market scenarios, longer hedging tenors may be lower cost. For examples of this, please refer to Appendix A.

Lower wholesale costs lead to retail lower prices, from which customers can benefit. Suppliers are therefore forced to compete to ensure their wholesale costs are competitive so as to retain customers.

Suppliers may adopt a range of different hedging strategies, and at any given time one or other strategy might result in the lowest commodity costs. The lower commodity costs are, the lower prices available to customers in the supply market will be. Other suppliers will have to try to compete with the prices of the lowest cost supplier(s) in order to retain existing customers or acquire new ones.

In such a market, suppliers bear the commodity cost risk within their portfolio, and are incentivised to ensure they have a competitive commodity cost position.

By contrast, in a market with a defined hedging approach, which will result in hedging performance which may or may not be the best potential outcome for the consumer, the commodity cost risk is passed from the supplier to the consumer. There are two specific reasons for this.

First, consumers have the ability to choose the cheapest supplier at any given time, and thereby minimise their own commodity cost. Moreover, the consumer can minimise their own costs over time by choosing to move to the most competitive supplier's offering. In contrast, when a regulator controls pricing and in doing so sets up strong incentives for all suppliers have the same commodity cost base, then it is not possible for consumers to benefit from lower commodity costs over time by switching suppliers.

Secondly, a market with regulated prices that are set by considering a combination of allowable costs (including in particular commodity costs) and a reasonable economic return, is in effect operating under a regulatory regime akin to rate-of-return regulation. As the CMA will be well aware, past experience has been documented extensively in the economics literature and has indicated that such regulatory regimes introduce insufficient incentives to manage costs effectively and, as a result, over time energy may become more costly for consumers. Such dynamic inefficiencies associated with regulatory solutions typically take a considerable time to become evident and therefore introduce considerable risk.

To reiterate: with a regulated tariff, suppliers will be compensated through higher tariffs by the regulator for costs so long as they are in line with the defined hedging approach. That means suppliers using the defined hedging approach do not bear commodity cost risk. In contrast, consumers' regulated but still variable tariffs do move with hedging costs so that consumers' face commodity risk. For these reasons, under a safeguard tariff the commodity cost risk is being moved from the supply businesses to the consumer.

RWE considers it very important for the CMA to understand the impact on customer bills of passing this risk to the customer.

2. Impact of changing tenor of trading in the wholesale market for SVT customers

Currently, there is a variety of hedging timeframes used by different supply businesses within the UK energy market. As a specific example, [CONFIDENTIAL].

Based on observations of typical wholesale market liquidity, trading typically takes place between one and three years ahead of delivery. As such, it is reasonable to expect supply businesses' Standard Variable Tariff (SVT) commodity hedging activity to take place across these timescales.

The implications of a defined hedging approach will result in supply businesses changing their hedging tenors to align to that set by the regulated tariff. While a timescale hasn't yet been defined, hedging which currently takes place outside a defined tenor will move to within that defined tenor. Further details of the nature of the expected impact on RWE's hedging activity and on RWEs hedging approach, and the resultant impact on tenor of trades undertaken by RWE's supply business in the wholesale market, can be seen in Appendix B.

If a safeguard tariff is implemented that leads to shortening the tenor of trading that currently takes place for hedging SVT volumes (i.e. it reduces hedging tenor from around three years to some shorter tenor), these volumes will be removed from the market when other market participants may be seeking to trade.

Defining tenor for one section of hedging activity in the wholesale market, particularly to shorten tenor against current timescales used in the market, could therefore result in reducing wholesale market trading activity outside of this section of the market. RWE is of the view that liquidity becomes a self-reinforcing activity whereby reduced liquidity caused by a reduced trading tenor for one group of market participants will impact the possible trading tenor for all other participants also. This could affect significant groups of traders that otherwise are not affected by the Safeguard Tariff, such as Generators and large Industrial and Commercial businesses. It may be that enforced hedge products/tenor for a major part of the market will focus liquidity in that area (i.e. Generators will naturally also move their hedging to match demand activity) - this may be suboptimal for the generation businesses.

It is not possible for RWE to assess the cost and likely impact of reduced market liquidity in some tenors, but RWE considers that it is important that the CMA gives any likely impact serious consideration.

3. Impact on traded volume in wholesale market of a defined hedging approach

[CONFIDENTIAL]

By contrast, in a market with a safeguard tariff in which costs are benchmarked according to a defined hedging strategy, [CONFIDENTIAL].

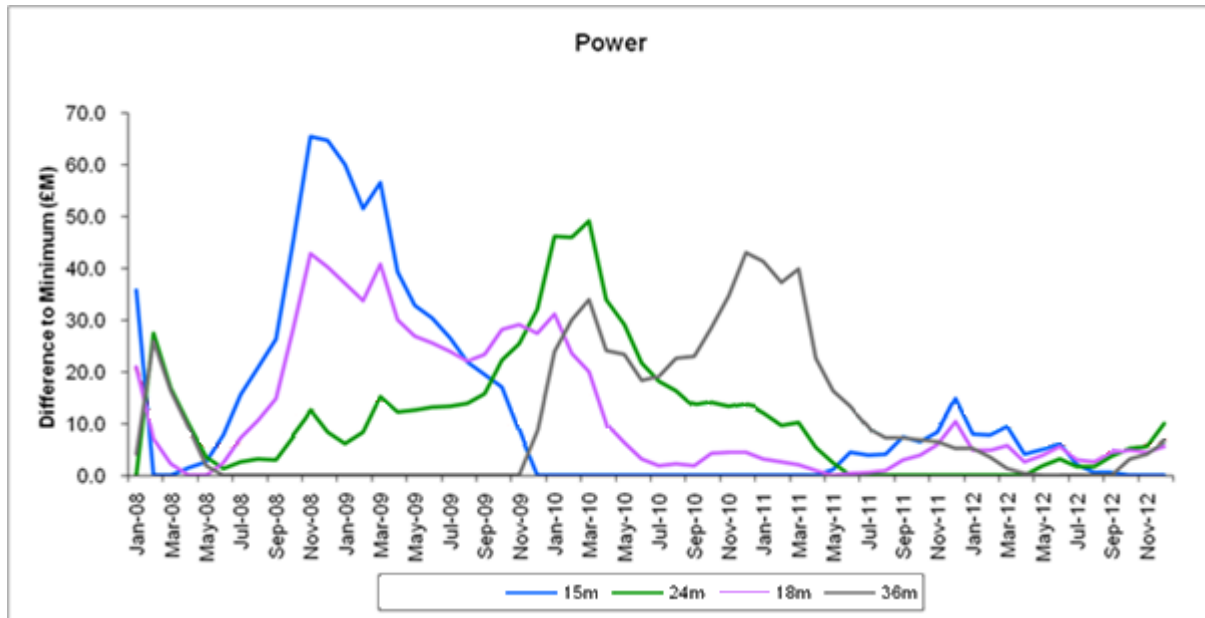
[CONFIDENTIAL]

RWE considers that high volumes traded in wholesale markets are a positive factor for ensuring competitive and representative pricing, and which enable all market participants to make informed decisions around their commodity trading activity. A defined hedging approach, by contrast, would be expected to reduce the volumes traded in wholesale markets. As such, RWE urges the CMA to consider the impact a safeguard tariff would have ultimately by the reduction of wholesale traded liquidity.

Appendix A

Figure One shows some analysis RWE has completed looking at the outturn costs of different hedging profiles (15, 18, 24 and 36 month example hedging profiles), in comparison to [CONFIDENTIAL].

Figure One [partially redacted]



The y-axis shows the difference in total commodity cost for a supply business the size of RWE between the outturn for that hedging profile, and the cheapest profile.

As can be seen in the graph, different hedging profiles result in lowest costs at different times, which will be resultant from different commodity costs in the wholesale market. Typically, in a period of sustained rising wholesale prices, longer hedge profiles will result in lowest average costs, while during periods of falling wholesale prices, shorter hedge profiles will result in lower costs.

As consumer costs are directly related to input wholesale costs, it is possible to utilise the above analysis to recognise that any particular hedging profile at any point in time may be the lowest cost outcome or not.

By selecting a specific hedging profile for implementation under a safeguard tariff, the CMA would be subjecting customers to the volatility in commodity cost visible for any of the above illustrated hedge paths.

By continuing to let suppliers compete on commodity costs, the CMA would continue to allow consumers to benefit from the competitive pressures on commodity costs.

Appendix B

Under a cost-plus safeguard tariff regime, a regulatory body would be required to assess an appropriate cost base. This in turn would require a methodology for assessing wholesale commodity cost. To make an assessment of this cost RWE believes that commodity cost would be derived from an index of wholesale market prices, built up over time. This indexing process becomes the “defined hedging approach” for volumes supplied under the safeguard tariff. The defined hedging approach assumes that suppliers purchase Standard Variable Tariff (SVT) wholesale energy requirements over a defined timescale and according to a fixed hedging profile.

RWE believes that retail businesses will take a risk minimising approach to a safeguard tariff, whereby suppliers would try to minimise any potential negative variance in cost against such an index.

To follow such a risk minimising strategy for wholesale commodity cost, suppliers will try to keep their commodity cost base as close as possible to that used by the regulator in the setting of the safeguard tariff. To do this, supply businesses will mimic the hedging of a safeguard tariff “defined hedging approach”.

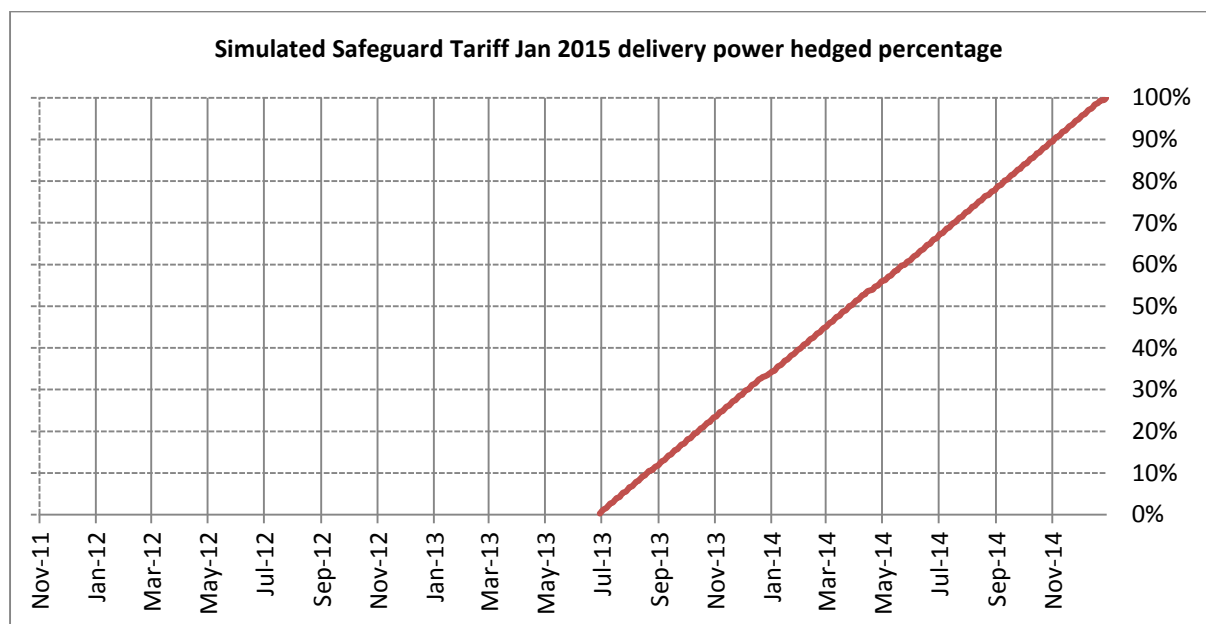
As such, a “defined hedging approach” as part of a safeguard tariff will result in all supplier hedging for the applicable customer volumes being completed over the same defined timeframe as that used by the regulator in setting the safeguard tariff. As a result, rather than volume being traded in the wholesale market over a variety of different timeframes, all volumes covered by the safeguard tariff will be traded over the same timeframe.

To illustrate the impact of the above approach, RWE presents the following illustration, based on RWE’s own purchasing strategy for, as an example month, January 2015. Each supplier will have their own hedging strategy that will reflect this view of risk and other factors.

[CONFIDENTIAL]

Figure Three shows an example hedge profile that may be defined by a safeguard tariff “defined hedging approach”. In this example, RWE uses 18 months, as this replicates the Supply Market Indicator approach used by Ofgem in the past. (The regulator could of course use another timeframe in setting the safeguard tariff. 18 months is used as an illustration only, to show what happens if the market moves from a range of different hedging strategies to a defined hedging approach.)

Figure Three



In Figure Three, the total percentage hedged increases linearly over time, starting in July 2013 and reaching 100% of the required volume in December 2014.

Figure Four shows the comparison of the above example safeguard tariff defined hedging approach and the hedging strategy employed by RWE's Supply business.

Appendix C

The analysis contained in Appendix A can be used to illustrate the resultant hedging activity (both buying and selling) under, firstly, RWE's current hedging approach, and under that of a safeguard tariff's defined hedging approach. By doing so, it is possible to examine the impact of a defined hedging approach on wholesale market traded volume, as well as tenor. [CONFIDENTIAL]

[CONFIDENTIAL]

This further illustrates another concern RWE has with the imposition of a hedging profile through a safeguard tariff – the reduced volume traded by supply businesses under such a regime in the wholesale market, and the resultant potential impact on market liquidity. [CONFIDENTIAL]

The CMA estimates that 70% of customers of the Six Large Energy Firms are on an SVT, therefore any safeguard tariff aimed at these customers that incorporates a defined hedging approach and therefore converges supplier purchasing behaviour as illustrated above can be expected to have a significant impact on volume available in the wholesale markets.