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Dear Jemma,

WORKING PAPER #3: APPROACH TO HEADROOM

Thank you for the opportunity to respond to the third working paper on the approach to setting the level of headroom in the default tariff cap and to updating it over time. Whilst we remain of the view that the default tariff cap will not be in consumers' interests, we are committed to working with Ofgem on its implementation, aiming to preserve effective competition so far as possible.

Our comments on the working paper in are in Annex 1 attached. In particular:

- We think the proposed legislative framework provides a clear rationale for Ofgem to include headroom in the cap – indeed we cannot see how Ofgem could have regard to the matters relating to switching and competition without including a reasonable allowance for headroom. Headroom is necessary for both consumers and suppliers to have the incentives which the proposed provisions seek.
- We have provided details of an agent-based model developed by Oxera in connection with the CMA investigation which we believe provides important insights into the likely impact of a tariff cap on switching levels and other distributional effects and could be valuable for Ofgem's analysis.
- We have also provided details of experiences in New South Wales Australia which illustrate how a modest relaxation of a price cap (by means of increased headroom) can deliver significantly increased switching and better consumer outcomes.
- We think Ofgem's proposed approach to analysing bill and revenue impacts of the cap risks under-stating these impacts because it overlooks the indirect impact of the cap on fixed term tariffs which may currently be above the level at which the cap might be set.

Ofgem says that due to the legislative requirement to introduce the cap as soon as practicable after the Act has passed, it needs to consider 'what is proportionate within the current timeframe'. In our view, the "as soon as practicable" provision in section 1(1) of the Bill cannot over-ride Ofgem's duty to take its decisions on setting the cap in a proper manner, taking account of all relevant evidence and properly assessing the information provided in response to consultations. The proposed duty to deliver the cap as soon as

practicable is in our view a requirement to move quickly but properly, with a thoroughness commensurate with the issue.

In the context of this working paper, it would be helpful to understand Ofgem's expected timeline for the analysis and what, if any, opportunities there will be for stakeholders to review the results of the work before Ofgem makes a decision based on its findings.

Should you have any questions on this response, please do not hesitate to contact me.

Yours sincerely,

A handwritten signature in blue ink that reads "Rupert Steele". The signature is written in a cursive style and is positioned above a horizontal line.

Rupert Steele
Director of Regulation

**WORKING PAPER #3: APPROACH TO HEADROOM
– SCOTTISHPOWER RESPONSE**

1. Introduction

We offer comments on Ofgem's working paper under three main headings:

- a) the role of headroom and the rationale for including it;
- b) case studies and modelling relevant to Ofgem's consideration of the level of headroom;
- c) Ofgem's proposed approach to assessing the impact on consumer bills, revenues and profitability.

2. Role of headroom and rationale

Case for headroom

Ofgem says (para 3.4) that it is considering whether headroom is necessary to support the legislative framework, noting that there are other regulated markets and sectors that do not include an allowance for headroom (for example the Northern Ireland retail price controls or any explicit reference in the payday lending price cap). It says concerns have been raised that headroom could reduce protection for disengaged consumers, because suppliers could set their default tariffs at the level of the cap to maximise their margin, as there would be little risk of them losing customers by doing so.

We think the proposed legislative framework provides a clear rationale for Ofgem to include headroom in the cap – indeed we cannot see how Ofgem could have regard to the 'matters' relating to switching and competition without including a reasonable allowance for headroom. The risk that a price cap will depress switching levels and reduce competition has long been recognised by economists:

*"... a price cap which protects consumers from bad deals may be a mixed blessing. The direct effect of the regulation is positive for consumers because high pricing is prevented. But the policy reduces price dispersion and blunts incentives to become informed about the available prices, which in turn weakens the competitive pressure on firms to offer low prices. This indirect effect of regulation weakening competitive market forces goes against its direct effect in curbing high prices."*¹

Neither of the precedents mentioned by Ofgem where headroom has not been allowed is directly comparable to this context.

- a) The market for energy supply in Northern Ireland is more concentrated than in GB, with a single dominant electricity supplier (Power NI) and a handful of small competitors. Although there is no explicit headroom allowance, the price control makes up for this by being less stringent in other respects: Power NI faces lower risks than GB suppliers as energy costs are treated as a pass-through with

¹ Armstrong, A., Vickers, J. and Zhou, J. (2009), "Consumer protection and the incentive to become informed", Journal of the European Economic Association, 7:2–3, pp. 399–410, <http://else.econ.ucl.ac.uk/papers/uploaded/314.pdf>.

adjustment for under or over-recovery in the previous year²; it is allowed a higher EBIT margin than the CMA allowed for the prepayment cap (2.2% vs 1.25%) and it is allowed to benefit from 50:50 share of efficiency savings realised in the previous period³ – savings which would be likely to be competed away in the GB market.

- b) Under the payday lending price cap there is no obligation on payday lenders to offer terms to any consumers asking for a loan or indeed to serve them. The main impact of the payday lending cap was therefore to curtail the supply of loans to the 'riskiest' customers⁴. Lenders were therefore able to achieve their targeted profitability by selecting a lower cost customer base – effectively re-creating 'headroom' based on serving some customers and leaving others unserved.

Ofgem is correct that allowing headroom could reduce protection for disengaged consumers because suppliers could set their default tariffs at the level of the cap. However, this would only affect current consumers, and the proposed obligation on Ofgem is to design the cap in a way that protects existing *and future* domestic consumers on default tariffs. There is an explicit trade-off between reducing bills for disengaged consumers and allowing sufficient headroom for competition and switching, which are in longer term interests of all consumers, including those on default tariffs. Although some competition and switching could in theory survive in the absence of headroom (Ofgem para 3.5), there is strong evidence, such as from the Oxera switching model described below, that switching rates will be very sensitive to the level of the cap. This is recognised in the Bill, which would require Ofgem to have regard to competition and switching, and was explicitly acknowledged by the CMA in designing its prepayment price cap:

“Even with a price cap design that accurately tracks costs we consider it is appropriate to include a headroom allowance so that suppliers are able to compete to offer a range of profitable tariffs at different levels. To the extent that there are also small deviations between the costs facing suppliers and those reflected in the price cap, the headroom allows some margin for error such that these costs to be recovered while still remaining compliant with the price cap.”⁵

Case for more headroom than CMA PPM

We think there is a strong case for Ofgem to include a somewhat larger headroom allowance than in the CMA's prepayment cap (nominally £30 for medium consumption customers). As noted above, the optimum amount of headroom reflects a balance between competition and consumer protection. In the case of the prepayment price cap, the opportunities for competition are limited by technical constraints, which are not present for credit meters. Other things being equal, this suggests that the impact on competition should be given a greater weight for credit meters and the optimum level of headroom should be higher.

Furthermore, as pointed out by the CMA (see above) the presence of headroom provides a degree of contingency for deviations between the costs facing efficient suppliers and those reflected in the price cap, such that these costs to be recovered while still remaining compliant with the price cap. This is all the more important for the default tariff cap given that it covers more than 50% of the market (with implications for much of the rest of it) compared to the ~16% covered by the prepayment cap.

² www.uregni.gov.uk/sites/uregni/files/media-files/Power%20NI%20SPC17%20Decision%20paper%20Final.pdf, para 2.5

³ Ibid, page 4

⁴ www.standard.co.uk/business/the-fca-killed-payday-loans-what-followed-could-be-worse-a3489376.html

⁵ CMA Final Report, para 14.118

3. Alternative sources of evidence or analysis

New South Wales

The case for more generous price headroom is supported by the experience of New South Wales (NSW) in Australia, which illustrated how price controls can reduce price dispersion and weaken competition – and conversely, how relaxing the price control can allow competition to flourish.⁶ A detailed summary of the New South Wales experience is provided in Annex 2 and summarised below.

Retail price controls in New South Wales

	<i>2007 Determination Period</i>			<i>2010 Determination Period</i>			
	2007/08	2008/09	2009/10	2010/11	2011/12	2012/13	2013/14
Incentives in regulated prices⁷ (\$/MWh)	5.1	5.1	5.1	29.0	25.3	24.3	22.0
<i>Incentive as % of total costs⁸</i>		2.8%			10.3%		7.0%
Market offers (% discount on regulated price)	4-5%	4-5%	4-5%	5-10%	5-12%	5-15%	
Switching rates	9%	10%	12%	13%	16%	19%	
% of customers on regulated prices	64%	68%	65%	59%	50%	40%	

In the 2007-10 price control period, the level of ‘incentive’ (a measure of headroom in the price cap) was relatively low and the number of customers opting for regulated as opposed to ‘market’ prices increased modestly over the period. In the next price control period 2010-2013, the incentive was increased four-fold (to approximately 10% of total costs), resulting in a much looser price control. This caused price dispersion to widen from 4-5% (in 2009/10) to 5-15% (in 2012/13), the switching rate to increase from 12% to 19% and the number of customers on regulated tariffs to fall from 65% to 40%, leading the regulator, IPART, to conclude that the price control could be removed altogether.

In IPART’s latest review of the electricity market in December 2017, its third since the deregulation of the markets in 2013-14, competition in the NSW market had continued to increase, with the regulator’s key indicators of competition all improving: the number of suppliers had risen from 15 to 26; the market share of smaller suppliers had doubled from 7% to 14%; the number of consumers on default tariffs had dropped from 37% to 23% and the proportion of customers switching in the last 12 months had risen from 23% to 31%.⁹

⁶ Independent Pricing and Regulatory Tribunal of New South Wales (IPART) (2013): “*Review of Regulated Retail Prices and Charges for Electricity*”, p. 114 (table 9.2).

⁷ Regulated prices \$x/MWh above the efficient cost of supply. This incentive was mainly introduced through the CARC, but refers to the total level above the competitive price allowed in regulated tariffs.

⁸ ScottishPower estimates (total cost to serve includes total N and R values). This estimate is calculated based on the incentive level and the variable R values for each determination period (the R values are extracted from each determination period, ie using information from the three corresponding IPART reports). The incentive level is calculated as a percentage of the variable R values. Then, based on the information in p 55 of IPART (2013), which states that variable R costs (total energy cost allowance) make up around 40% of total costs, the incentive level as a percentage of total costs is estimated.

⁹ “[Retail Energy Market Monitoring 2017](#)”, IPART (2017)

Oxera switching model

In the course of the CMA market investigation ScottishPower commissioned Oxera to develop a detailed model of consumer switching to help understand the likely impact of remedies being considered by the CMA. These included 'Remedy 11', a market-wide cap on SVTs, which was ultimately rejected by the CMA but which was broadly similar in concept as the default tariff cap. We are providing with this submission a copy of Oxera's report on their modelling which we submitted to the CMA in December 2015.

Oxera's model looked at decision making on an individual household level, taking into account a range of rational and behavioural factors that affect consumers' searching and switching behaviours. This captures the wide variations that exist within the base of consumers and overcomes the weakness of traditional aggregate modelling approaches which rely on average responses and struggle to give meaningful insights into the net effect of market interventions. The agent-based approach also provides insights into the likely distributional impacts of market interventions.

To investigate the impact of a cap on SVTs, Oxera assumed the cap was set at the level of the lowest 'Big 6' SVT in each region, and that all suppliers adjusted their SVT to the level of the cap. This had the impact of reducing the bill of a typical SVT consumer by 4% for electricity and 3% for gas. In addition, Oxera assumed that suppliers increased their fixed-term tariff prices by 1% in response to the cap, as predicted by a separate analytical model.

The results are summarised in the table below.

Results from switching model

Metric	Outcome: baseline	Outcome: remedy
Total switches	19.1%	11.0%
External switches, from external search	11.4%	5.5%
External switches, from direct marketing	2.4%	0.8%
Internal switches	5.3%	4.8%
External searches	21.7%	18.4%
Outbound contact	8.4%	7.4%
Mean savings	£155.18	£103.60
Mean savings (of those who can save)	£165.21	£121.52
Median savings (of those who can save)	£151.16	£111.35
Mean discounted savings	£127.40	£84.97

Source: Oxera.

As a result of the cap on SVTs, engagement in the market falls (as measured by both searching and switching rates) and the share of consumers on the SVT increases. Total external switching (from external search plus direct marketing) falls by more than 50%, from 13.8% to 6.3%. This is a consequence of the reduced price differential between fixed-term tariffs and SVTs, which reduces the incentive for households to search and switch. Ultimately, this weakens competitive pressure in the market relative to a scenario without tariff regulation.

The agent-based nature of the model makes it possible to analyse how the SVT tariff cap will differentially affect different demographic groups. The percentage reduction in external

switching is broadly similar across income and age groups, but is greatest for the lowest income households (<£19,000: -59%) and for the oldest consumers (61 and over: -63%).

Switching results by demographic

Household income	Outcome: baseline		Outcome: remedy	
	External	Internal	External	Internal
<£19,000	11.1%	7.4%	4.5%	7.5%
£19,000–£32,000	12.0%	8.2%	5.1%	6.6%
£32,000–£52,000	16.1%	8.7%	8.1%	7.7%
>£52,000	15.8%	9.3%	7.3%	8.0%
Age				
30 and under	11.0%	8.1%	6.2%	6.4%
31–40	14.1%	9.9%	7.5%	7.1%
41–50	15.4%	7.8%	7.4%	7.9%
51–60	14.3%	9.6%	6.4%	7.7%
61 and over	12.7%	7.4%	4.7%	6.8%

Source: Oxera.

A more significant distributional effect is the increase in the number of consumers on SVT as a result of reduced switching. Although consumers who are on the SVT in both scenarios are better off, consumers who are on fixed-term tariffs in both scenarios and consumers who end up on SVT due to a fall in the switching rate are worse off. The overall effect on supplier revenues is a small reduction in the region of 1%.

The modelling did not account for potential ‘endorsement bias’¹⁰ which could be associated with a ‘safeguard’ regulated tariff and which could reduce consumer engagement by a greater extent than that shown above.

Oxera noted that the reduction in competitive pressure seen in the results suggests that once a tariff cap has been imposed, it may be difficult to make the transition to a competitive retail energy market in the future. Specifically, if a tariff cap is lifted, default tariff prices might be expected to rise above levels that would have occurred if the cap had not been imposed in the first place, at least until consumer behaviour adjusts to the new market conditions.

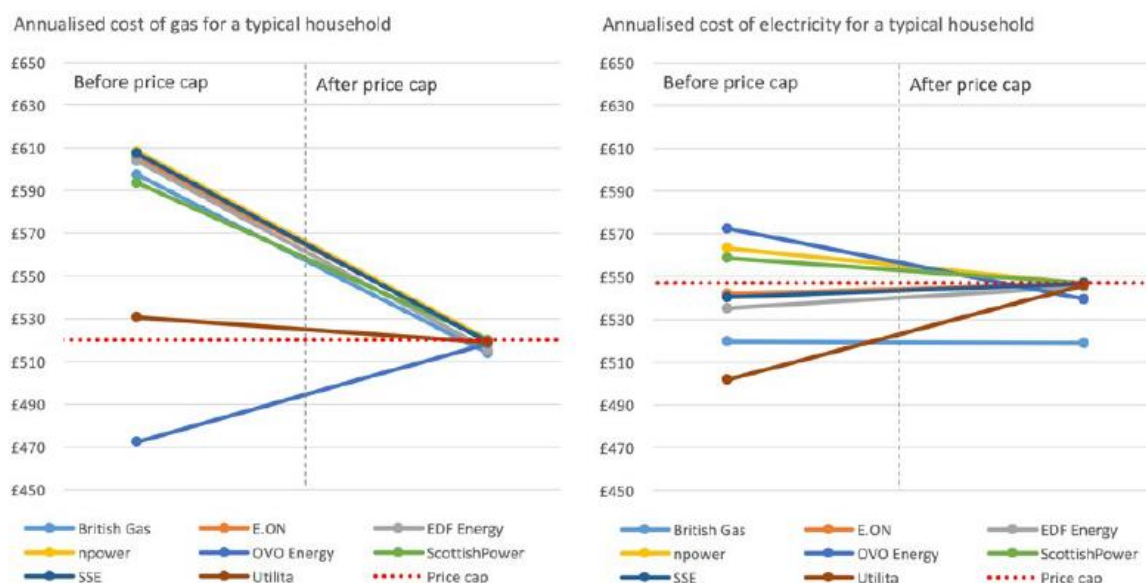
In summary, the Oxera model shows that even with a relatively modest reduction in SVT levels (3-4%) and without taking any account of ‘endorsement bias’ effects, external switching rates could fall by more than 50%. Given that the Bill requires Ofgem to have regard to the need to maintain incentives for consumers to switch, these results will be highly relevant to the setting of the cap and the amount of headroom allowed. In our view, a reduction in switching of the magnitude modelled by Oxera would not be consistent with *maintaining* switching incentives.

¹⁰ ‘Endorsement bias’ may result from some consumers believing that the regulated tariff, due to being regulated or ‘endorsed’ by an authoritative body, must offer good value and hence obviates the need to search the market for a better deal.

Prepayment price cap

Experience with the CMA's prepayment price cap provides useful pointers to the possible impact of a market-wide default tariff cap. There are technical reasons which limit the number of different tariffs that can be offered to non-smart prepayment meter customers, and price dispersion has always been less than for credit meters. Nevertheless, what price dispersion there was for prepayment meter customers was dramatically reduced by the introduction of the price cap, as shown in the charts below taken from Ofgem's 2017 State of the Energy Market report.

Figure 2.13 Prepayment tariffs before and after the price cap



Note:

The chart shows each supplier's standard variable prepayment tariff only. These suppliers serve 90% of consumers using prepayment meters.

Source:

Ofgem's analysis of Energylinx data

With reduced price dispersion the savings available from switching are reduced and switching rates would be expected to fall. This was indeed the case for ScottishPower, where we have seen our overall level of customer losses (and the percentage of losses that are prepayment customers) fall significantly. Between April 2017 when the cap came into effect and December 2017, prepayment losses reduced by [X]% compared with an increase of [X]% for other payment methods.

USwitch also analysed the impact of the cap on prepayment switching.¹¹ They found that although the absolute numbers of prepayment switches had stayed level since the price cap was introduced, the proportion of prepayment switches (as a percentage of total switches) had reduced since the prepayment cap. They also found that the 'prepayment conversion to switch rate' had dropped, which may suggest that more customers are deciding it is not worth the hassle of switching when they see the size of the savings on offer.

Ofgem notes (para 4.14) that early analysis of suppliers who supply primarily PPM customers show that they are continuing to grow at a similar rate to prior to the PPM cap, and argues that this indicates there is still a reasonable amount of switching going on in the PPM market. We have not had sight of the evidence to which Ofgem is referring, but we

¹¹ "Has the Prepayment Price Cap Impacted on Switching Levels at uSwitch?- October 2017"

suspect that one of the main reasons for the continued growth of suppliers specialising in PPM is that they are able to offer superior functionality, even if they cannot offer a significant bill saving. For example, if a supplier can offer more convenient top-up arrangements via use of smart meters, this could be sufficient to incentivise continued switching by prepayment customers. However, this opportunity would not be available for credit meters.

4. Approach to assessing impact on consumer bills and on revenues and profitability especially for smaller suppliers

Impact on consumer bills and revenue/profitability

Ofgem says it intends to estimate the bill impact of the default tariff cap using the approach outlined in Annex B of its October 2017 technical document¹², making appropriate adjustments such as updating customer account information and supplier specific average annual consumption per customer. In essence, the Annex B approach involved:

- a) collecting information on suppliers' tariffs (unit rates, standing charges and online/dual fuel discounts) for all default tariffs (electricity, gas and economy 7) as of a particular date;
- b) for each supplier, estimating the total number of customers in scope of the default tariff cap and then allocating these customers between the various default tariff types on a pro-rata basis;
- c) calculating the total annual bill for each tariff based on current Typical Domestic Consumption Values (TDCVs)¹³, comparing this with the bill value at the level of the default tariff cap and, where the default tariff cap results in a reduction, multiplying this by the number of customers on that tariff;
- d) estimating the impact on supplier revenue and profit on the assumption that it will be equal to the overall reduction in bills calculated above.

Our main concern with this approach is that it could significantly under-estimate the extent of bill reductions and revenue/profit reductions by ignoring the potential impact of the tariff cap on fixed term tariffs. In the current market there are a wide range of fixed term tariffs, some extremely competitive and some less so. If fixed term tariffs are above the level of the cap when it comes into effect, consumers may not see an immediate bill reduction, but the effect of the tariff cap over time will be to oblige suppliers to reduce the levels of these fixed term tariffs (since they are unlikely to be able to justify pricing them above the level of the cap). It is important that Ofgem takes this into account in its analysis.

At a more detailed level we would also note that this approach involves a number of limitations/ approximations:

- It takes no account of non-E7 restricted electricity meters. (We assume they are allocated pro-rata to standard and E7 meters for the purpose of the analysis).
- It assumes there is no correlation between the three categories used in the allocation (account type, administration type and meter type). In practice we think that such

¹² Financial protections for vulnerable consumers, Ofgem, 11 October 2017, Annex B

¹³ For the purpose of assessing the impact of the DTC, we understand Ofgem intends to use supplier-specific mean consumption rather than TDCV, which we agree is appropriate.

correlations will be present – for example, customers with paperless billing are more likely than customers with paper billing to be paying by direct debit.

Impact on consumer engagement

Ofgem says it plans to review how much customers say they need to switch and their perceptions of a price cap, and also look at the general relationship between price dispersion and switching.

We welcome Ofgem's intention to draw on a wide variety of evidence, from surveys to observed behaviour, but we feel strongly that the best way of reconciling the apparent inconsistencies in the evidence is through a robust analytical framework such as the switching model developed by Oxera (see section 3 above). By drawing on insights from behavioural economics, Oxera was able to reconcile survey data (such as stated willingness to switch for a given saving) with observed rates of switching in the market.

Impact on supplier incentives

We agree that it will be important for Ofgem to consider dynamic effect, ie how suppliers may adjust their pricing behaviour in response to the tariff cap. As Ofgem's State of the Energy Market report observed, pricing strategies for fixed term tariffs may well be dependent on the levels of default tariffs. The analytical model developed by Oxera (see accompanying report Appendix A2) may provide some useful insights in this respect.

Ofgem may also wish to consider the impact of reduced profitability (or increased losses) on supplier operational incentives - and the risk of unintended consequences. Although Ofgem will clearly be hoping that reduced profits will incentivise suppliers to cut costs, it may also disincentivise suppliers from making additional investments. In other words, if the effect of the price cap is to reduce consumer incentives to switch, this may also reduce the incentive on suppliers to offer the levels of service that may currently be required to retain customers.

ScottishPower
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