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Gas Emergency Cash Out Significant Code Review: Final Position

Dear Tom,

Thank you for the opportunity to provide views on Ofgem's documents published on 12 February 2014 that included the draft business rules for a demand side response (DSR) mechanism, a partially updated Impact Assessment as well as draft amendments for the gas transporter's, shipper's and supplier's standard licences.

We understand that DSR aside, Ofgem's final position is one that has been approved by GEMA and that the licence amendments are drafted to reflect that decision.

We remain concerned that the full SCR Impact Assessment was not updated, and are unclear whether any of the new measures make any material difference to the level of security of supply. We believe that Ofgem's decision to not update the previous Impact Assessment following the policy decision leaves it open to challenge on its use of its s.23 powers given the lack of evidence on how the revised SCR measures will reduce the likelihood, duration or severity of an emergency.

In our 2012 response we raised many concerns about the Impact Assessment including impacts on the gas market ahead of a GDE, and interactions with the electricity market. While Ofgem's final decisions have mitigated some of the market price issues, we still have issues with the calculation of the NDM customer VOLL – and specifically the potential interaction between the DSR mechanism and the Capacity Mechanism - the impact on credit requirements, and the ability of shippers to fully mitigate the risks at low cost.

Further, it appears disingenuous to describe the costs as a small amount per customer per year when the impacts will be volatile, have significant credit implications and may still lead to

shipper defaults. Shippers are unlikely to be able to mitigate the risks anywhere near the identified costs which, as outlined in our previous responses, we consider will be materially larger than those Ofgem assume.

We have also noted in the Ofgem workshops that with the development of a DSR mechanism taking place after the implementation of the wider gas SCR measures, it difficult to assess the additional risks that are being imposed on shippers and suppliers. This is particularly the case as we have very little certainty on the metrics of price and scale that could be approved by Ofgem. As an industry, shippers and indeed Ofgem have always been extremely careful to avoid developing contingent changes – i.e. implementing a change which requires a further change – due to the difficulty this approach causes in assessing the likely overall impact.

Given this, we would like an assurance that any 'failure' of the DSR trial as assessed in the National Grid Gas and Ofgem review, will not be a trigger to re-open other parts of the SCR proposals. That is, the contingent rules would become the enduring rules, with changes only to DSR rules where this continues to meet the agreed principles

In this response we provide comments on the Final Decision Impact Assessment, the NGG Draft Licence Obligation, the Draft Business Rules for no DSR, and the Gas Shipper Licence.

Final Decision Impact Assessment

As noted above, it is still not clear to us whether Ofgem has quantified how the Gas Emergency SCR measures will benefit the likelihood, duration or severity of a gas emergency. Rather the measures seek to change some of the risks, by introducing compensation mechanisms for some consumers at an administered price for NDM customers, and DM load outside of a DSR offer.

The impact assessment notes some scenarios where a GDE may result in direct costs to the economy of £50 billion, but does not demonstrate how much of this cost is avoided or reduced by any of the policy measures. Ofgem should address this before reaching its final decision.

Cost of Gas - Impact on Prices- spot and forward

As stated in our 2012 response, we consider that the potential for high cash out prices during an emergency will have wider implications for the gas market. Even with a reduction in NDM VOLL to £14/therm, - somewhat lower than Ofgem originally proposed and at odds with the lower value we calculated - this may still operate as a target price based on the probability of isolation. This impacts the cost of gas through:

- Influencing prices on the whole of *the NBP prompt market during a GDE* – and not just the price of a relatively small volume of incremental gas supplies attracted into the GB market by that exceptional high price level.

- FM (physical supply failure) risk would be re-priced by the market if the emergency cash-out price were £14/therm. In turn, the higher cost of losing a physical source would be passed through into the general level of *NBP forward contract prices*.

- The impact of a £14/therm emergency cash-out prices on the *NBP prompt market at times outside a GDE*, but sufficiently close to it that the risk of a GDE and network isolation is perceived to be materially greater than zero.

We welcome Ofgem trying to assess the 'boundary' impacts on the spot gas price but we remain convinced that the pricing impacts will be felt ahead of, during and after a GDE. The impact of the Electricity Capacity Mechanism (CM) penalties will have made the assessment more difficult given the uncertainties on the levels, and crucially whether these offers would get taken. As we have previously outlined, we also have significant concerns about how any DSR price or CM penalty will feed through into gas pricing, especially as either of these could produce prices that are well in excess of any price experienced in the market. This would alter the materiality of any future GDE significantly, with potentially extreme implications for the viability of retail suppliers.

Credit

Significant market events will have an impact on the credit and cash flow management within a business; however, Ofgem's proposal will add costs to these. Credit and cash implications may flow both ways depending on the net position of the shipper but would include:

- Collateral movements against margin counterparties;
- Funding of additional gas costs;
- Costs of additional capital to manage changes in hedging strategies; and
- A potential increase in the cost of credit instruments should the overall risk of default rise

If a shipper is not able to arrange timely additional credit cover, it will be forced to cease trading with a consequential impact on the remaining shippers – and potential for a domino effect, as it will be unclear to other shippers and traders where the various losses will fall (being (i) smearing of the emergency cash-out owed by the defaulting shipper (ii) credit losses relating to contracts between the defaulting shipper and the rest of the market and (iii) indirect losses falling on those shippers who were net purchasers from the defaulting shipper and who are thus exposed to further emergency cash-out and/or imbalance charges).

Again, the CM impacts could dwarf those from the NDM isolation risk, and we cannot accept the Ofgem position that its reforms could reduce credit impacts. In isolation of the CM penalties, Ofgem's proposals will more than likely increase credit requirements as shippers will be faced with risks of prices related to VOLL and DSR that are well beyond those ever experienced in the gas market. We would recommend that Ofgem re-examines the advice from the Energy Balancing Credit Committee and accept that this issue will increase shipper costs. The existence of the CM penalties coinciding with a GDE is a failure of policy, only adding to wider business and credit risk.

Market liquidity

In day to day operations, market liquidity is unlikely to be affected by a low probability gas deficit emergency. However, during times of market stress, liquidity could be expected to fall as market participants become risk adverse, attempt to assimilate new information and start to consider the credit position of counterparties.

Ofgem should recognise that introducing additional pricing risk beyond previous stressed market levels will reduce market liquidity and force earlier counterparty trading decisions especially where these introduce unmanageable risk or trading costs. Lower market liquidity will increase the bid-offer spread and reduce competition as the cost of managing additional risks will rise. While unfreezing cash out is a useful innovation, we have noted our other concerns about electricity market interactions and the NDM VOLL calculation.

Liabilities

We agree that shipper liabilities will increase under the reform package, and our remaining concern is the impact of smeared charges arising from shipper defaults and increased neutrality charges from post emergency claims. Smeared charges are a blunt instrument for shifting risks from consumers to shippers that have met supply obligations.

Competition, barriers to entry and risks of financial distress

Ofgem's final proposals will have reduced some of the potential financial distress relative to the Proposed Final Proposals, but as noted above, the additional liabilities and credit costs will still be an additional impost relative to the current arrangements. The issue of 'proportionality' in the further transfer of risk from consumers to suppliers is very subjective, particularly given that shippers and suppliers already face significant business risks in day to day operations, many of which cannot be simply passed through to customers.

Shipper Responses

Although the risk of a GDE is low, the scale of impacts were it to occur are so large as to force suppliers to take action now in order to mitigate the risk. We are concerned that Ofgem have under estimated the cost of the potential mitigation actions, despite us setting them out in detail within our 2012 response. For clarity, we have provided them again below.

Following the introduction of any framework, we expect suppliers to consider a number of mitigations. Some costs of those actions (estimates of which are given below) will be passed through to consumers immediately, and not deferred until a GDE actually occurs. It is therefore crucial that Ofgem's impact assessment fully considers the costs and benefits both to consumers now and in the future

Financial Mitigations

- Accounting Provision: Given the challenges to source effective mitigations the exposure could be managed by "accruing" a cash provision to be released should a GDE and resulting financial impacts occur. This would not be effective at mitigating the risk of a GDE but would relieve consumers of the full financial impact of the GDE costs in one year.

- If a provision of only £1.2bn was made across all suppliers then assuming a corporate cost of capital of ~10% the cost for consumers would be £120m/yr or ~£5.21/household.

- Disaster Insurance: Our research indicates that some reinsurers might be willing to offer insurance that would provide compensation to suppliers in the event of a GDE. Such a product would need to be tied to clear criteria of physical events[1]. This would necessarily not protect against all possible occurrences of a GDE as the possible causes are wide ranging. An indicative view from an insurance professional suggested that such risks could be insured for ~5%yr; as such the cost for consumers would be £60m/yr or ~£2.60/household.

- Commodity Options: Financial institutions are the primary sellers of options related to gas prices. These options could theoretically be used to mitigate price risk. However there are material constraints on liquidity and cost. The cost of call options "close to the money" is high relative to options that are further "out of the money" – by this we mean that the cost of the option is closely tied to the option exercise price and its proximity to the market price at the time the option is written. In practice options that are out of the money by a significant margin (>30p/therm) are not materially different in price to options that are £1/therm or £10/therms out of-the-money – this is because traders cannot effectively hedge such deeply out of the money products to manage the risks associated with selling them. In addition the market for options has very limited liquidity. Options with a daily, rather than monthly, exercise would be required to provide effective risk mitigation against a GDE as you can't know when it will occur. At the time of our 2012 response, only 12 daily exercise gas options have been transacted in the brokered market in the last year and all on a horizon of less than 12 months prior to delivery. For these reason we do not consider such options a viable mitigation strategy.

Physical Mitigations

- Gas storage Capacity: Ofgem suggest that their reform does little or nothing to support the economics of new short range storage which could be effective at mitigating the risks Ofgem's proposal will generate[2]. However there is existing Third Party Access (TPA) storage in the UK - the Rough and Hornsea facilities.

    - Centrica Storage offers ~455m Standard Bundled Units (SBUs) of Storage Capacity each year for sale on a bilateral basis with market based pricing - this equates to daily gas supply of ~15.5m therms. In order to secure 50% of this capacity the Centrica Storage website is indicating an indicative price for 2013/14 of 25.9p/SBU or £59m/yr with prices in future years being 5 – 10% higher. Of course, the effect of the Rough Undertakings on the Centrica Group means that British Gas cannot secure this amount as primary capacity in any event.

[1] E.g. failure of specific Norwegian gas transportation infrastructure coinciding with UK temperatures at [x] below SNT

[2] Ofgem, Proposed Final Decision IA P.15, section 3.14

- SSE Hornsea is able to deliver ~6.6m therms/day (18MCM/day)[3] with space that would allow delivery for about 18 days. We understand that Hornsea capacity is typically offered via auction with SBUs space typically selling at a premium to the differential between January and summer forward prices. Costing Hornsea on this conservative basis[4] securing 50% of Hornsea capacity would cost ~£6.5m/yr.

- If such a material proportion of both facilitates were effectively "reserved" to be used solely in a GDE it is very likely that NBP prices would be significantly higher in winter because of reduced system flexibility; these higher prices could adversely impact consumers. Additionally such a reservation of flexible supply could result in a GDE occurring where storage supply would otherwise have prevented it happening would provide 11m therms/day of gas supply in a GDE; the cost of this for consumers would be ~£65M/yr or £2.80/household.

- "Going long": It is possible for suppliers to contract on a forward basis for their peak rather than Seasonal Normal Temperature (SNT) demand level. Between 2006 and 2011 the average winter difference between the forward month-ahead price and the day-ahead price (by day-ahead the actual level of demand and likelihood of a GDE would be known with a high level of confidence) was 3p/th. Where suppliers were to follow a pattern of "over procuring" and selling gas back day ahead to balance then this day ahead differential is likely to increase. However on this conservative basis for an SNT day the cost of this strategy would be ~£0.5m/day or £83m/yr for the peak winter months of November-March. The resulting cost for consumers would be £83m/yr or ~£3.60/household.

None of the measures outlined here are fully effective at mitigating the risks created by Ofgem's proposals but these are the most realistic tools for residential suppliers. The individual options broadly amount to a cost of £3-4/household per year and are without any clear benefit to security of UK gas supply. In practice some combination of mitigating strategies might be required to provide effective risk management – this would of course materially increase the mitigation costs. Even in isolation each of these options demonstrates that Ofgem's judgment that the cost to consumers will be 1p/yr/account is incorrect by a significant factor.

These impacts are exacerbated by the fact that shippers who had behaved perfectly properly could well face the "smeared" liabilities of those who have not, but have gone out of business.

Gas Fired Generation and Electricity Prices

We still consider that Ofgem has not properly addressed the impacts on electricity pricing. We noted in our previous response that higher gas prices, during a GDE will feed through into the entire wholesale gas market at the NBP. In turn, this will have a significant knock-on effect on wholesale and retail electricity prices.

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[3] http://www.sse.com/uploadedFiles/Controls/Lists/Reports_and_Results/SSE_AnnualReport2012.pdf

[4] Using ICE closing prices for Jan-14 and Summer 13 for 23rd Oct, 2012

Given this, there is a need for a full debate on the issues of gas fired generation participation in the DSR. The dismissal of this part of the market because there is already a route to market is odd, as other large DSR loads have a route to market. It is not clear why Ofgem does not properly confront the distortions of the CM penalty being used to form a gas price when assessing the impacts on the wider gas market. The CM penalties are a deliberate policy decision in generation that seem to have been developed without any consideration of the gas market and this indicates a lack of joined up thinking.

Ofgem accepts that gas fired generation will seek to monetise its risks by using the OCM should the risk of an emergency be significant, but this is only effective to the extent that National Grid considers buying gas at potential prices of greater than £100/therm economic and efficient. The risk of extreme cash out prices will create target prices, remove market liquidity, increase credit costs and create significant revenue flows that may add to default risk.

During an emergency, (and assuming offers were not accepted previously) a gas fired generator's ability to mitigate the CM penalty risks would be subject to a Generator utilising interruptible contracts and relying on the Post Emergency Claims (PEC) process- a process that Ofgem considered insufficient to deliver gas to the market under the existing frozen cash out approach.

Using the PEC rather than the DSR may keep some extreme prices out of the market during a GDE, but the costs will still have to be met by shippers through neutrality charges.

The most efficient resolution to this is a change in the CM penalty rules to allow relief from obligations if a generator is directed to turn down or off by National Grid rather than subjecting the wider market to a Generator 'VOLL' that is artificially derived from the CM regime.

We are surprised that Ofgem have not considered these interactions more thoroughly by highlighting the risks with DECC, rather than simply leaving significant uncertainty on how any CM based pricing would be treated in a GDE and beyond. While CM design resides with DECC, Ofgem needs to consider that impacts on the efficient operation of the gas market.

NGG Draft Licence Obligation to proceed with a DSR mechanism

The draft business rules are framed around the guiding principles from Ofgem on what would be acceptable in any DSR mechanism. We have outlined below our views on each of these principles and raised issues where we think the rules are unclear or deficient.

Ensure that any party making a Demand Side Response Offer is a party to the Uniform Network Code

- As noted in our comments on Licence drafting, we would like more clarity on how shipper will be required to facilitate the transactions, and whether a specific contractual relationship needs to be put in place between the user and shipper as well as some clarity on how these contracts should be reported under existing Regulatory requirements.

Set out the criteria for determining in respect of which 'DMC' Supply Point Components a party may not make Demand Side Response Offers

- We agree with this Principle.

Allow the Licensee to accept Demand Side Response Offers only where a Gas Deficit Warning is in place

- We agree with this Principle. It may be worth considering how any accepted offers are presented on the OCM.

Be compatible with existing market arrangements setting out how any Demand Side Response offers accepted by the Licensee are to be treated as Eligible Balancing Actions, included in the System Clearing Contract, System marginal Buy Price and System Marginal Sell Price

- We agree with this Principle.

Promote, and further facilitate, parties making Demand Side Response Offers to the Licensee through open and transparent market-based arrangements

- This is a sensible Principle, and it is important to make sure that any costs incurred are properly attributed, and that there is a reasonable assessment of the costs of any arrangements against the expected value.

Not unduly preclude the emergence of commercial interruption arrangements

- We agree with this Principle.

Minimise distortions and unintended consequences on existing market arrangements and the principle of parties balancing their own positions in the wholesale gas market

- Gas fired generation exclusion is a clear distortion and cannot be excused on the basis of an 'unintended consequence' of the CM design.
- We have noted the risks of setting target prices with DSR.

Ensure that Demand Side Response is procured in a manner consistent with the Licensee's duties under the Act and its obligations under this licence (and in particular the obligation to operate pipe-line systems in an efficient economical and co-ordinated manner)

- This will be tested by high price generation offers that may have significant gas volumes at defensible prices that are many times what would have been envisaged with the generalised obligations of being efficient and economical.

We believe that the reports on the outcomes of the trial should be published as industry participants may have different views on DSR viability given the evidence presented.

Draft Business Rules with No DSR Mechanism

We raised a number of issues at the recent Workshop asking for clarity on the terminology and events. For example, whether the revised arrangements kick in at GDE Stage 2, or first firm disconnection; or whether market resumption would coincide with cessation of the GDE (i.e. exiting Stage 4) or whether these could be different points in time.

There may also be a defect in the fall-back arrangements for setting SAP in the event of market illiquidity. As proposed, if there are no trades, then SAP would be half of the last relevant value.

We also consider that there is an inconsistency on the use of neutrality depending on whether there is a 'short shipper' shortfall for NDM compensation or if there is a default causing the shortage and would have preferred short shipper defaults to have the same impact as a shortfall.

Gas Shipper Licence

It is not clear in the draft amendments whether a gas shipper will be required to facilitate the DSR mechanism.

The amendments are focussed on passing through information and a payment in a reasonable timeframe, which may be superfluous if the UNC mod introduces specific rules for information flows and billing.

Conclusions

We recognise that Ofgem have amended some of the extreme policy positions that were presented in the Proposed Final Decision document and there are elements of the current package that are sensible reforms (such as keeping the market price unfrozen subject to liquidity rules). However we still have concerns on:

- Whether the measures will reduce the likelihood, duration or severity of an emergency or are mostly acting as a compensation mechanism;
- The lack of consistency in electricity and gas market policy, which does not bode well for future trading arrangements that will bring these two markets even closer together; and
- The underlying economic analysis which surmises that the measures are low cost and can be mitigated, which we have refuted by our own analysis.

If you have any questions about this response, I can be contacted at Adam.Cooper1@centrica.com or by phone on 07557614458.

Yours sincerely

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