



Antonio Ciavolella

European Regulatory Affairs
Gas Trading Europe and LNG



European Regulatory Affairs
BP Gas Marketing
20 Canada Square
Canary Wharf
London
E14 5NJ

Tom Farmer
Anjali Mehta
Tom Corcut

GB Markets
Ofgem
9 Millbank
London, SW1P 3GE

Direct: +44 (0)20 7948 5147
Main: +44 (0)20 7948 4000
Mobile: +44 (0)78 2528 3854
Fax: +44 (0)20 7948 7844
Email: antonio.ciavolella@bp.com

Subject: Comments to the Gas Security of Supply Significant Code Review (SCR) - Demand-Side Response Tender Consultation

Dear Tom, Anjali and Tom,

BP is pleased to share its comments about the proposed SCR DSR Tender, which can be summarized in the following key points:

Summary of key BP comments

- It is likely that a strong degree of complexity and compromise will apply to any envisaged solution, as limited direct evidence is present about the DSR scheme. The need to improve learning and understanding will require strong monitoring and data collection in order to incrementally improve the mechanism at regular intervals.
- Some more work could be needed to fully align the compensation between successful bidders, unsuccessful bidders and non-participants. The area which BP is most doubtful about is the payment to unsuccessful bidders, which in our view should be reduced to avoid any case in which people are better off from non entering in the bid stack
- The pay-as-clear mechanism looks a weaker tool to incentivize efficient bidding. We consider that pay-as-bid is a more appropriate approach for single sealed bid tender
- A pre-set volume supported by appropriated incentives looks the decision criteria with the highest probability to elicit efficient DSR bids.
- Option fees should require more thinking, in order to assess their effectiveness against their upfront costs. We think Ofgem could consider different ways to use option in order to incentivize more competitive bidding. We suggests that a descending pre-set option price, in order to benefit more those customers who are interrupted first, could deserve further thoughts

Chapter 2

BP Gas Marketing Ltd
Registered in England and Wales No. 908982
Registered Office:
Chertsey Road
Sunbury on Thames
Middlesex
TW16 7BP

Question 1: What are your views on a SO-run DSR tender? Do you think it is an appropriate addition to the Gas SCR?

BP considers the DSR a useful addition to the SCR. The DSR tender could allow a better visibility on the value of supply continuity, in comparison to the current cash-out freeze, and in comparison to a predetermined VOLL. We expect that this approach could improve the prevention of a GDE and help to manage it more efficiently.

The key advantage of the DSR tender resides on its market based mechanism and on its appropriateness to deal with Security of Supply risks. A well designed scheme could lead to efficient bids of supply interruption from eligible customers, signalling the value of supply continuity and with time allowing implicit comparison with alternative flexibility tools. Also, a centrally driven scheme is in our view more appropriate to address low probability/ high magnitude systemic risks like Security Of supply, because such rare events can lead to inaction. Finally, DSR could allow a better management of a GDE, through a progressive disconnection of customers according to their VOLL, as well as adequately compensation to customers whose DSR bid was accepted into the NGG bid stack.

Question 2: What do you think the purpose of the tender should be?

The essential purpose of the tender is to create a market allowing NGG to develop a portfolio of efficiently priced DSR options to interrupt gas supply to eligible customers and pay the exercise price presented.

Indirectly, the presence of a DSR tender could trigger a more fundamental analysis on the value of additional flexibility. However, as we outline in Ch. 2, Q. 5, no explicit investment decision or other security of supply output should deliberately arise from any tender result.

Question 3: What benefits do you see a DSR tender providing?

The list of potential benefits which Ofgem lists is certainly comprehensive. The list represents a clear matrix against which comparing the detailed impact of each tender design, as well as a good basis to monitor the effective results of the DSR tender.

We consider that the essential contribution of a well-designed DSR tender is a clearer signalling of how monetary value of gas supply continuity varies for additional volumes of interruption and across customers. We expect many other benefits could emerge from the dynamic price discovery, because the presence of a reference value could likely improve the comparison with other solutions. With time, with the improved understanding about the real costs of interrupting supplies customers could modify DSR bids that customer present, while shippers could develop more tailored products to optimize the financial and physical consequences of a gas supply disruption.

In any case, regardless of the quality and the intensity of debate, BP considers difficult that the chosen design will be able to achieve optimal results in terms of efficient DSR bids. There is a limited body of evidence regarding the effective DSR management and therefore, BP auspicates that in addition to a transparent development of the scheme, there will be a systematic monitoring and control of the results the tender will achieve.

Question 4: What costs do you see arising from a DSR tender?

Ofgem well describe the range of costs of the DSR. BP also expects that the learning process inherently associated to a DSR tender could incur potential costs. These costs could emerge as a higher gap between actual DSR bids and potentially efficient ones. Similarly these costs could emerge also from a more expensive monitoring and review procedure from Ofgem and the industry.

However, in relative terms similar inefficiencies could have been obtained with a solution based on bilateral commercial contracts, with the added uncertainty and risks regarding the actual signing of such contracts.

Question 5: Do you think a DSR tender should have a role subsidising investment in back-up facilities? If so, why?

In line with Ofgem view, BP excludes any usage of DSR tender as an incentive tool to finance investment in back up facilities. The tender should not pre-empt the range of solutions emerging from the clearer price discovering the real costs of supply continuity regarding supply continuity across the portion of gas demand thought to have the lowest VOLL.

Chapter 3

Question 1: What do you see as the key design issues for the high level design of a DSR tender? Are there any we have not included here?

BP considers that Ofgem account of tender design is comprehensive.

BP considers that the compatibility between the constituting elements of the DSR tender is a key issue determining the success of the scheme, because the effectiveness of a single element is likely to depend significantly by the design of other aspects.

In this sense, four design elements particularly stand out in terms of enabling a successful DSR tender: the decision criteria, the payment regime, the pricing regime and the payment/compensation to customers – especially those eligible to participate. Specific comments with regards to their mutual interaction are discussed in several points of this document.

Question 2: What are your views on having variable option fees in the tender? Do you have any concerns about the costs that these could impose irrespective of a GDE actually occurring? How should these be funded?

BP shares Ofgem doubts on option fees, and especially on variable option fees. The major obvious risk associated with options fees is the upfront cost on consumers, whose benefit in the case of the DSR tender is backed by limited evidence, although based on a sound rationale. For this reason, should options be explored further, BP would support only small amounts.

More specifically, BP considers that variable option fees are the least desirable arrangement. If customers would present both a variable option and an exercise element there could be greater administrative complexity. Complex rules could be required, in order to compare situations where ranking of bids is not obvious, e.g. an bid with an option more competitive than another, but the associated exercise price is higher. These rules could be hard to understand. Other things being equal, we expect the confusion could push away participants or incentivize them to propose higher bids to account for the lack of clarity and the perceived risk.

Options with pre-set values could bypass the administrative complexity of variable options, and provide an incentive to place efficient DSR bids. However such costs would fall one way or another on consumers, and more evidence is needed to demonstrate that option payments would be more than offset by gains, through achieving more competitive bids. In addition, assuming a budget or a volume cap is present, with experience customers could second guess the exercise price which puts them right at the brink of the successful volume/budget bids. Such circumstances could reduce the competitive effect on bids. Also, Ofgem could create a similar incentive to submit efficient bids by creating harsher penalties for unsuccessful bids, in the form of more limited compensation than what currently envisaged.

As an alternative, BP considers that a pre-set decreasing option price could deserve further thoughts. We discuss such option in more detail on Ch. 4, Q. 6.

Question 3: What are your views on the eligibility of gas-fired power stations? How should the interactions with the electricity market be managed?

Question 4: Could participation of gas-fired power stations have a negative impact on the tender, or on the gas market as whole? If so, can you suggest any steps that could be taken, or an alternative mechanism that could be created, that would help mitigate these concerns?

BP is inclined to analyse all possible means to include gas powered plants into the DSR. There are several risks embedded in allowing them to place bids into the DSR tender, but the likely material benefit of including gas powered plants in our view overcomes the risks, because of the larger volume under NGG control during a GDE and because of the high flexibility and speed at which in most cases gas power plants can stop gas consumption.

More specifically, like Ofgem, BP expects gas power plants have reduced incentive to place low bids, as they can indeed access traded markets in case they want to reduce consumption by reselling excess gas during tight markets situations. On the other hand, with a well-designed volume or budget based decision criteria most gas power plants bids could sit outside the acceptable range of exercise prices. A way forward could be to analyse special arrangements to ring-fence the inflating effect that the gas-electricity markets interaction has on the efficiency and affordability of DSR tender bids.

A solution could be to treat gas power plants differently from other DSR eligible customers. One solution we envisage is a possibility to exclude from the electricity delivery charge the successful gas power plants bids. This solution could give room to some competitive bidding, considering an environment where power plants operate with different strategies, and where some power plants expect to be cut out from the electricity merit order. The effectiveness of this proposal could be improved by devising some kind of option fee which incentivize bidding towards the very beginning of the bidding stack.

Another solution could be to rank power plants differently in the DSR bids, interrupting them only after all other DM and NTS connected load are interrupted, regardless of their exercise price. In this way power plants could have their own ranking of interruption, possibly supplemented with a partial shielding from the electricity delivery charge.

A third solution could be to limit the way in which the exercise price that gas power plants bids feed into the cash-out. In this sense only NTS connected and DM bids would be considered, while gas powered plants bids could determine only an interruption order.

Question 5: Do you have any views on what consumers whose bids were unsuccessful should be paid if they are firm-load shed?

The payment of unsuccessful participants should be between zero and the payment ensured to successful DSR bidders. While we understand the rationale of the volume weighted average price of accepted bids which Ofgem proposes, BP is concerned that customers attaching very low value to supply continuity, could inflate their bids, under a scenario where they could be better off with a weighted average price of accepted bids than with their true value of supply continuity.

From this observation we expect that a percentage of the lowest accepted exercise price should better incentivize true revelation of VOLL. For instance, compensation to unsuccessful DSR bidders could be 50% of the exercise price of the most competitive successful bid.

Question 6: What are your views on the response type the tender should contract for?

In our view bidding for a pre-set volume of reduction in gas consumption volume seems clearer to understand and to enforce. However BP is aware that both an overall

consumption level and a pre-set volume reduction of gas consumption present challenges and pitfalls and are potentially subject to strategic bidding.

As we explain in more detail below in Ch. 3, Q. 8, DSR tender products should be as standardized as possible, in order to deliver a clear output in terms of daily volume reduction. Such standardized products are in our view less compatible with a customer bidding for an overall consumption level in exchange for an exercise price.

BP preference for presenting a pre-set volume of reduction in gas consumption is based also on the expectation that submitting a bid for an overall consumption level has a higher risk to incur strategic bids in the form of inflated consumption levels.

A pre-set volume of reduction in gas consumption also has risks, but we consider them more manageable. Specifically, a customer with a successful DSR bid could be called off when consuming a relatively low (and core) part of its load. In this case a further curtailment could generate a significant disruption, far greater than the assumption under which the customer presented the DSR bid. In the long term, this risk could elicit higher DSR bids. However this issue could be possibly addressed allowing each DSR customer to “index” its DSR bids to its peak demand.

Another risk we envisage with relying on bids for pre-set volumes of reductions in gas consumption is that, depending on the advance with which interruption notice is given, a DSR customer could inflate nomination, in order for NGG to apply the volume reduction on such basis. A solution to such risk could be that volume reductions are calculated on the average nominations in the last 30 days, or an alternative basis not-easily modifiable.

Question 7: What are your views on a minimum volume threshold? Do you have any ideas on how this could be set? Should there be a limit on the number or size of tranches that consumers can bid?

BP supports the presence of a minimum threshold. As explained in more detail in the next question, BP considers beneficial that eligible DSR customers bid for pre-set volumes of gas demand interruption x day.

We consider doable that the maximum volume reduction each customer could bid for is its daily off take, possibly capped on the basis of 30 days with highest volume consumption in the last year.

Question 8: What is your preferred length of time and/or frequency with which NGG may exercise a DSR contract? Do you have a preferred minimum response time if a DSR contract were to include one?

BP considers that DSR contracts should be as standardized as possible. A DSR bid could be an exercise price for a given reduction of MWh/d. For instance each unit could be (say) 1,000 therm x day. Every day and volume unit could be like an option for NGG to reduce consumption for that given volume, by paying the exercise price that the customer bid.

Ideally, a customer bid form could look like a matrix, populated with bids for each “volume-block” of DSR interruption for a duration of one day (the option would last one year). Each user would have a possibility to bid additional “volume-blocks” of interruption for a given day, as well as to offer a single/multiple blocks of reduction for additional days.

NGG could build its bid stack by boiling down all the best bids of DSR volume reduction x day. NGG could rely on a DSR bid along different days. For instance, the most competitive unexercised bids for day 1 of interruption of a customer could be used on day 1 or be left for the following day. For a given day, the limit of DSR interruption would be the total volume of successful DSR bids across all customers categories.

BP considers that an option should be exercisable when NGG considers it appropriate. However, such possibility to interrupt without notice could elicit higher bids and hence impact all customers more heavily. In such case, a medium ground could be to rely on immediate interruption only in justified circumstances, for instance where a certain amount

of forecasted load was not provided. For other cases, NGG could be obliged to send a warning of some hours. This view is based on the fact that NGG can produce reasonably accurate demand forecasts on a day-ahead basis, which lead to the issuance of a GDW. Such communication could help impacted DSR customers to prepare in advance, in order to reduce the costs of disruption, and possibly reduce the DSR bids.

Question 9: Do you have any views on any other tender design issues?

No.

Chapter 4

Question 1: What are your views on the three straw men?

The key criteria to evaluate alternative straw men DSR designs is the expected capacity to elicit DSR bids reflecting as much as possible the actual value of reducing their supply by a given volume. A key second criteria is the simplicity of the rules and the clarity in terms of awarding successful bidders and penalizing unsuccessful ones.

On this basis straw man two and three are those that BP considers most likely to incentivize an efficient bidding behaviour. Straw man two could have an advantage in terms of not having option prices. Straw man three has the advantage of operating through a pay as bid mechanism.

In our view, some improvements could be introduced with relatively limited effort. One area of improvement, discussed in Ch.3, Q. 5, is the compensation given to unsuccessful bidders. An area where further analysis and alternative design could also be beneficial, is the type of option fees applied, discussed below in Ch. 4, Q. 6.

Question 2: Do you think a price cap is necessary to limit shipper liabilities?

The presence of a price cap is the element we are most doubtful about. As widely discussed in previous contributions, prices known ex ante could easily generate targets or distort the price discovery about supply continuity. We expect the clustering of bids around the £14/tWh cap could be much larger than what Ofgem expects. Ofgem could possibly reduce this issue by structuring a multiple rounds descending auction looking for a preset volume. However we expect that the complexity of such approach could push away customers, or require stronger penalties for unsuccessful bidders.

On the basis of the above expectation, BP considers that straw man 1 could more limited room for manoeuvre to NGG, in terms of a less progressive bid stack of DSR bids. As a result, the build-up of a GDE could be bumpier and more volatile.

Question 3: Do you have any suggestions for how the volume cap in straw man 2 or 3 should be set?

Question 4: Do you think the volume cap in straw man 2 or 3 is sufficient to prevent inefficiently high DSR bids from being accepted?

The volume cap could suffer from the lack of sufficient incentives to bid efficiently, given by the possibly high weighed average price compensation for unsuccessful DSR bids. The reduced compensation discussed in Ch. 3, Q. 5 could manage such risk. Similarly, accepting only an undisclosed % of bids or volume cap could reduce part of the distortion. However BP suspects about the long term sustainability of such arrangement, because with experience customers could learn to bid more closely around the limit of the undisclosed volume.

A volume cap can certainly help reducing the number of bids with too high an exercise price. However there is a risk to have all bids being inflated, due to the certainty of a possibly good compensation even when outside the successful bidding stack, and due to an insufficient ex ante incentive to be on the early rankings of the bidding stack.

As we discuss in more detail in Ch. 3, Q 5, both the introduction of a stronger penalty regime for unsuccessful bidders, and a structuring of the option price around a decreasing premium, could increase the odds of achieving efficient pricing through a volume cap.

Question 5: Do you have any views on whether or not straw man 2 should be paid-as-bid?

As already outlined, under a single sealed bid BP envisages that pay-as-bid is the arrangement most likely to achieve sustainable bidding along time. BP understands Ofgem intention to use pay-as-clear as a lever to incentivize efficient bidding. However, as already stated BP considers more effective tools such as a very poor compensation of unsuccessful bidders.

Question 6: Do you have any ideas for how a fixed budget for straw man 3 could be set?

For BP, given the design of the DSR tender around a sealed single bid, a pre-set budget could be used most appropriately and transparently to finance an upfront payment like an option fee. Such budget should be funded from an additional fee on exit charges, as we consider that consumers would likely be the largest beneficiaries of the DSR measure.

A budget could be calculated on the basis of the volume of gas interruption set to form the DSR bid stack. The pitfalls of such approach have been discussed in more detail in Ch. 3, Q. 2. A variation around the pre-set option fee structure underpinning straw man three could be a decreasing option price payment. With a decreasing option price BP expects customers would have a greater incentive to bid lower exercise prices.

The decreasing option price could be calculated on the basis of a decreasing formula. Volumes of DSR bids which rank lower in the bid stack would receive lower option fees. Ideally, an option price could be attached to every single successful “ volume-block” unit of DSR bid. However we see this scheme being successful mainly if the volume receiving an option price is the most competitive subset of the whole volume NGG is contracting for. For instance, the most competitive 2000 bids would receive the option price, with a decreasing premium for each subsequent offer. In this way, we expect a reduced incentive to second guess the max acceptable exercise price. Conversely, the remainder of successful DSR bids would receive only the exercise price in case of interruption. Unsuccessful bidders and nonparticipants payment regime would stay unchanged.

Question 7: Should any volume cap or fixed budget be known to the market ex ante?

We support a scheme where volume caps are not included in the information given openly. Such view is based on limiting the information available to bidders, in order to reduce the opportunity to present strategic bids. We have a more mixed view regarding the budget, but are opened to discuss it in more detail.

Question 8: What do you think of the rationale for having fixed option fees in straw man 3? Why might they be necessary to ensure sufficient participation and competitive bidding?

Question 9: How could the fixed option fees could be determined?

Please refer to Ch. 4, Q. 6. And Ch. 3, Q 2.

Question 10: Do you have an alternative design package that you think better meets the aims of the DSR tender than the three set out here?

The benefits of our incrementally improved DSR tender are described along all answers to questions. In sum, in BP view a better design package relies on 1) single sealed bid 2) pay-as-bid, 3) cap volume, 4) strong penalties for unsuccessful bidders 5) possibly an upfront budget with decreasing options prices paid to a given volume of most competitive bids

Please feel free to contact us should you wish to discuss in more detail our concerns and views on the current Ofgem proposed decision.

Kind Regards,

Antonio Ciavolella

Regulatory Specialist