

Anjli Mehta Wholesale Markets Ofgem 9 Millbank London SW1P 3GE

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Dear Anjli

Gas Security of Supply Significant Code Review – Demand-Side Response Tender Consultation

EDF Energy is one of the UK's largest energy companies with activities throughout the energy chain. Our interests include nuclear, coal and gas-fired electricity generation, renewables, and energy supply to end users. We have over five million electricity and gas customer accounts in the UK, including residential and business users.

We welcome Ofgem's work to develop a Demand-side Response (DSR) tender as part of the Gas SCR. We have participated in the workgroup meetings and believe that such a mechanism will help achieve the objectives of reducing the likelihood, duration and severity of a Gas Deficit Emergency (GDE). However, we believe it still needs further development to ensure it works well in practice, doesn't create unintended consequences and is good value for GB consumers.

Below we have highlighted the key points we have made from our response to Ofgem's individual questions in the appendix.

- A new DSR tender should be trialled and tested before it is fully implemented.
- CCGTs should be allowed to participate as they could have, or wish to install. back-up facilities enabling them to provide DSR which would be beneficial to consumers.
- However, due to the influence of the proposed VoLL in the electricity market it may be worth considering separating prices submitted by CCGT operators from the cash-out price if there are concerns that this may introduce undue risks into the mechanism.
- We believe a cap should be put in place to protect shippers and consumers from extreme DSR bids feeding into cash-out prices:
 - o In this respect we believe Straw man 1 has merit in that prices are capped at consumer's VoLL. However, there is a question whether NG can take actions above £14/th if this is consumer's willingness to pay.
- Unsuccessful bidders we would expect those bidders who were unsuccessful but who were interrupted to receive their bid price to encourage participation and bidding at their true cost of demand interruption.

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- Ineligible bidders we agree with Ofgem they should receive the volume weighted price as an incentive to participate.
- Bid thresholds these should be sufficiently large to ensure they can be accessed and make a difference on the day.
- We believe incentives on NG and assessment criteria may be needed to ensure efficient exercising of bids on the day.
- We do not believe that publishing tender information after the event, such as volumes, number of bids and average prices will have a distorting effect as stated in Ofgem's consultation. Indeed, we believe it should provide more competitive bidding in future.
- While Ofgem has covered the key high-level designs, the detail has not yet been developed. This will involve considerably more work and we believe the OM tender framework could provide a useful benchmark for developing these products further.
- Infrastructure failures could lead to a rapid emergency by creating a Critical Transportation Constraint (CTC) which could turn into a GDE. We would welcome Ofgem's views if these DSR tender proposals would apply in such an event.
- Finally, further workshops will be needed to develop these issues further and the other two outstanding issues of credit requirements and the socialisation of imbalance charges using new VoLL prices.

Our detailed responses are set out in the attachment to this letter. Should you wish to discuss any of the issues raised in our response or have any queries, please contact Mark Cox on 01452 658415, or myself.

I confirm that this letter and its attachment may be published on Ofgem's website.

Yours sincerely,

Hall

Angela Piearce Corporate Policy and Regulation Director



Attachment

Gas Security of Supply Significant Code Review – Demand-Side Response Tender Consultation

EDF Energy's response to your questions

CHAPTER: Two

Q1. What are your views on a SO-run DSR tender? Do you think it is an appropriate addition to the Gas SCR?

We believe the creation of a DSR tender is a useful addition to the Gas SCR. However, careful consideration of the potential risks is needed to fully understand how it will work in practice to avoid unintended consequences and inefficient costs being generated and passed onto consumers. In this respect any tender should be trialled and tested first to protect the market and consumers.

Q2. What do you think the purpose of the tender should be?

The tender should be designed to provide an idea of the real demand-side volume potential and the true value of lost load (VoLL) of those consumers who could be interrupted prior to an emergency. However, the accuracy of this will depend on consumers understanding of when, how long and how frequently they will be interrupted.

We agree that the tender should not be designed to incentivise large consumers to invest in back-up plant. This is because there are quite a number of large consumers with backup plant already (where the costs of disconnection are great) and the aim of the tender is to discover what these costs are rather than what is needed for new investments.

Q3. What benefits do you see a DSR tender providing?

We would expect a well designed and proven tender to ultimately provide an efficient and less costly solution to network isolation.

Q4. What costs do you see arising from a DSR tender?

There are costs in setting up a tender; however, the real level of costs will depend on three things: how competitive the bidding process will be, how often NG needs to call the tender and how much volume NG needs to take.

Q5. Do you think a DSR tender should have a role subsidising investment in back-up facilities? If so, why?

No, see answer to Q2



CHAPTER: Three

Q1. 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?

We believe Ofgem has covered, at a high-level, the key design features of a DSR tender. However, consideration should be given to using or extending any existing mechanisms that exist that could produce a similar outcome. Operating Margins is an example of a level of response that is reserved each year by NG through a competitive tender. This has been trialled and tested and could be used either as a test platform for this DSR tender by extending it to include extra volumes. This could be more efficient and effective than introducing a new tender from scratch.

Q2. 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?

We do not believe that variable fees should be introduced at this stage. This would add extra costs to consumers each year when the probability of an emergency ever happening is quite low. It would also add more complexity to the tender which is not needed at this stage.

The aim should be to get a feel for the true cost of demand interruption which does not require variable option fees.

Q3. What are your views on the eligibility of gas-fired power stations? How should the interactions with the electricity market be managed?

We believe that CCGTs should not be excluded from participating in such a tender. Apart from the fact that it may be discriminatory to do so, they could provide a major source of demand-side response especially those which have distillate back-up installed. NG has said that CCGTs would be the first plant they would interrupt as their procedure is to switch the largest loads off first to avert an emergency. As such CCGTs would want to bid in to reflect their cost of being disconnected - a primary objective of this DSR tender.

However, because of the proposed VoLL levels in electricity under the Capacity Mechanism and draft policy decision of Ofgem's Electricity Balancing SCR (EBSCR) CCGTs will be incentivised to generate up to their contracted level or maximum potential output on the day due to the extremely high penalties they may face. Apart from placing extra stress on the gas market at a time when both systems may be tight, this may significantly reduce the number of CCGTs willing to participate; especially those already contract into the Capacity Mechanism, unless they have some form of back-up installed, of which there are not many. CCGTs who are likely to participate will bid in at high prices to reflect the exposure to the penalties under these mechanisms from 2018. This may influence the bidding strategies of other demand-side response plant in the DSR tender.

For these reasons we believe it would be sensible to cap VoLL at the £14/th mark as in Straw man 1. CCGT bids above this VoLL could be dealt with separately as stated above; the costs of which could be recovered through a different mechanism.



Q4. 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?

Yes, but it does not mean CCGTs should be excluded - see answer to Q3 above. A simple solution would be that the prices from the bids exercised in a tender should not feed into cash-out prices. Ofgem has already stated that VoLL of £14/th will kick in at stage 3 of an emergency and this should suffice in terms of sharpening cash-out prices. Furthermore, £14/th is the price at which Ofgem proposes that compensation is paid to firm NDM and DM consumers and so there is no need to go above this level.

Q5. Do you have any views on what consumers whose bids were unsuccessful should be paid if they are firm-load shed?

We agree that consumers who bid and are not successful should be paid in the event they are interrupted to incentivise them to bid in the first place. We believe that, given the objective of this DSR tender is to have price discovery of a user's value of disconnection then they should be paid their bid price. This should incentivise them to bid in and their true cost of disconnection. If this is over and above the £14/th cap then the costs of which would need to be recovered through a different mechanism as they would not feed into cashout under straw man 1.

Q6. What are your views on the response type the tender should contract for?

The tender should allow for partial or full response but with a minimum threshold set. This minimum volume should reflect a sensibly high level to make a difference on the day. However, smaller volumes should not be discouraged and thought should be given to how these smaller players could participate through the use of aggregators for example.

Q7. 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?

See answer to Q6 above. However, the key principle is that smaller DMs should not be discourage from participating. Consideration needs to be given as to how this tender will be communicated to these consumers and that they would not receive payments in the event of interruption if they did not participate.

Q8. 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?

This level of detail should be developed in the further workshops; however, in terms of lead time needed to exercise a contract we would suggest 4 hours which is similar to that proposed in the Capacity Mechanism.



Q9. Do you have any views on any other tender design issues?

Not at this stage.

CHAPTER: Four

Q1. What are your views on the three straw men?

We believe they represent a good balance of the criteria and options needed to facilitate an auction.

Q2. Do you think a price cap is necessary to limit shipper liabilities?

Yes, especially if the decision is to link the DSR auction to cashout prices.

Q3. Do you have any suggestions for how the volume cap in straw man 2 or 3 should be set?

It is always going to be difficult to set an efficient volume target ex-ante to match stress events; it will either be too high or too low. For these reasons we do not believe these options are economic or efficient.

However, it is not so much the amount of volume in the summer tender run that is important but how much is exercised on the day, especially in the case if there are no option fees to pay (Straw men 1 & 2). In this respect it is better to accept as much volume in the tender a) to incentivise as much price discovery as possible and b) to have as much volume and prices to chose from on the day if needed.

The volume cap would therefore kick in on the day but as stated would be difficult to set efficient ex-ante. Therefore, we believe incentives on NG will be need ex-ante along with an ex-post assessment to ensure an efficient level of volume and bids are taken. NG would have to justify its actions similarly as it would under any other balancing action.

We do not believe that publishing tender information after the event, such as volumes, number of bids and average prices will have a distorting effect as stated in the document. Indeed, we believe it would provide more competitive bidding in future

Q4. Do you think the volume cap in straw man 2 or 3 is sufficient to prevent inefficiently high DSR bids from being accepted?

See answer to Q3 above. There is no initial cost in accepting a high amount of volume in the summer tender run, especially in the case of exercise fee only tenders. It will be the amount of volume taken on the day that will be the critical element in deciding whether NG's actions were economic and efficient in terms of preventing an emergency. This, we believe, can be assessed ex-post the event based on a set of incentives on NG set ex-ante to exercise an effective and efficient level of bids on the day.



Q5. Do you have any views on whether or not straw man 2 should be paid-asbid?

No, we believe pay-as-clear is a better option as this should incentivise bidders to price in at their true cost. There is no benefit to bidding higher as every bidder receives the clearing price.

Q6. Do you have any ideas for how a fixed budget for straw man 3 could be set?

See answer to Q3. We do not believe a fixed budget is efficient compared to a volume cap.

Q7. Should any volume cap or fixed budget be known to the market ex ante?

No, we agree it would not be inefficient and could have the unintended effect of creating the potential for gaming.

Q8. 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?

We agree that were option fees to be used, fixed options fees could incentivise more bidders and cost reflective bidding as an added benefit to participate in the tender.

Q9. How could the fixed option fees could be determined?

They could be determined from market research on the cost of providing alternative backup facilities for large demand-side customers. A question worth answering is whether the \pm 14/th would incentivise investment in distillate back-up at CCGTs?

Q10. Do you have an alternative design package that you think better meets the aims of the DSR tender than the three set out here?

Yes. We believe Option 1 could be developed further to allow the participation of CCGTs. However, consideration of how these bids would be treated if they were above £14/th (as per Straw man 1) is needed. The costs of these bids, if exercised may have to be recovered through a different mechanism.

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