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11 February 2011

**Dear Lewis** 

#### Update Consultation on National Transmission System (NTS) flexibility capacity

Thank you for the opportunity to respond to your most recent consultation on NTS flexibility capacity. I can confirm that this response is not confidential and can be published on the Ofgem website.

The key points of our response are as follows:

- The definition of flexibility capacity has progressed, such that it now incorporates both the ability to vary flow rates within day and the ability to support a changing supply pattern.
- It would be beneficial to differentiate between within day and intra-day flexibility requirements as the drivers for the two can be quite different.
- At this stage we have not been provided with any evidence that would warrant National Grid investing in flexibility capacity at this time.
- There are clear interactions between the issue of flexibility capacity, the outcome of the Energy Market Reform (EMR) and the operation of CCGTs and wind turbines. We believe it would be beneficial to allow the EMR to conclude and its impacts be identified before any significant investment is undertaken.
- There is a value in continuing to monitor demand for flexibility capacity through the information that NG publishes. We must recognise that this information should be considered holistically rather than in isolation.
- Further work is required to ascertain how a CCGT is operated and the demand for flexibility that might be associated with this. The analysis conducted by NG appears to overstate the flexibility of CCGT plants compared to operational experience.

It would also be useful if Ofgem could identify how this issue might be taken forward as part of the RIIO-T1 framework which is being progressed separately from this consultation. The issue of NTS flexibility and funding has a clear interaction with the RIIO-T1 process and framework. Therefore, it would be appropriate to consult on this issue as part of the RIIO-T1 process.





I hope you find these comments useful. Please contact my colleague Stefan Leedham (<u>Stefan.leedham@edfenergy.com</u>, 020 3126 2312) if you wish to discuss this response further.

Yours sincerely

Rob Rome

Head of Transmission and Trading Arrangements

Corporate Policy and Regulation



#### **Attachment**

Update Consultation on National Transmission System (NTS) flexibility capacity

**EDF Energy's response to your questions** 

**CHAPTER:** One

#### Question 1: Do you agree with our definition of system flexibility?

Discussions appear to have developed since exit reform regarding system flexibility. Today there are two types of flexibility. There is the ability to vary flows within day, either to reflect a varying demand profile within day, or to mitigate the risk against a technical failure for contracts that are delivered at the NBP. In addition, NG now refers to the ability to support a changing supply pattern. We believe that this relates to intra-day flexibility, and further analysis is required to identify whether NG has already been funded for the provision of this service through revenue drivers and baselines.

# Question 2: Do you agree with our view that the ability to vary gas flows on entry and exit is valued by Gas Distribution Networks (GDNs), Transmission Connected Customers (TCCs), Aggregated System Entry Point (ASEP) operators and gas shippers?

We agree that gas customers value this service. In particular, we note that by using the flexibility within the system and allowing pressures to ramp up the ability to provide gas throughout the day is increased, as supply shocks and failures can be mitigated. In 2009 within day Gas Balancing Alerts (GBAs) were issued as a result of a supply failure. To compensate for this, flows were ramped up at other entry points and a supply demand balance was maintained. Without this ability the system would have been short and gas supply threatened. It would therefore appear that system flexibility is beneficial to security of supply and this is certainly valued by consumers.

**CHAPTER: Two** 

### Question 1: Do you agree with the system flexibility indicators developed by NGG?

As a package the indicators developed by NG appear appropriate; however, they are most valuable as a package and should not be considered individually. These indicators should also be accompanied by an evidence based commentary. In particular, we note that an increase in residual balancing costs could be driven by an increase in wholesale prices or a deterioration in balancing; neither of which would have an impact on inter or intra-day flows. We would also note that changes in wind output could benefit system flexibility if it was inversely correlated with gas demand; however, it is only the ability to forecast wind that is being considered. We therefore believe that they are useful, but as with all statistics can not be considered in isolation or without supporting analysis and commentary.

### Question 2: Do you consider that the system flexibility indicators are capable of identifying future system flexibility investment needs?

We are not convinced that these indicators are capable of identifying future investment needs. As previously noted these indicators should be considered as a tool available to the



industry and Ofgem to help shape discussions rather than being relied upon as a definitive information source.

## Question 3: Do you agree with our high-level analysis of the factors likely to affect future gas flows on the NTS? Are there important trends which we have not considered?

As Ofgem has identified in their different scenarios and outcomes there is large uncertainty on the role of gas in the future. There is even more uncertainty over the role that CCGTs will play in the electricity mix going forward. Key to this is the Energy Market Reform that the Government is currently consulting upon. Given this level of uncertainty we are not convinced that all if any of the drivers identified by Ofgem for flexibility demand will materialise. We also note that in the long term the Renewable Heat Incentive and Feed In Tariffs may also have a significant impact on flexibility demand. From our perspective we believe that if the Government targets are to be met then in the long term domestic heating needs to be decarbonised. This would reduce the demand for gas and system flexibility. The roll out of domestic CHPs could also impact on flexibility as these units are most efficient when operated under a baseload pattern, further supporting a reduction in flexibility requirements.

At this stage we believe that there is too much uncertainty regarding the drivers for system flexibility (and the impact that they may have) to derive any firm conclusions.

#### **CHAPTER: Three**

Question 1: Do you agree with Ofgem's representation of how shippers and TCCs manage their NTS exit flow variation requirements?
Yes.

Question 2: Do you have any views on the effectiveness of the existing UNC Offtake Capacity Statement (OCS) process applying to GDNs" NTS exit (flex) capacity bookings and do you consider that the UNC adequately supports shippers flexibility capacity needs?

We do not have any evidence that the current UNC arrangements do not support both Shipper and Transporter requirements, including NG's ability to manage within day flows.

### Question 3: Would it be appropriate for NGG to consider investment to provide GDNs with incremental exit flexibility capacity?

We would require further information to be able to answer this question fully. In particular, we believe information would be required on the relevant costs to ensure that the most cost effective investment (either on the NTS or GDN) was being undertaken. We would require further information on the driver for increased flexibility requirements and would need to understand the scale of investment required.



#### **CHAPTER:** Four

## Question 1: Do you agree with our view of the principles and objectives which should apply to the further development of the system flexibility capacity arrangements on the NTS?

We do not agree that these principles and objectives could be applied to the intra-day system flexibility that has been discussed recently. We note that for the inter-day product NG has already been funded through revenue drivers and allowed revenue to support a diverse supply mix.

With regards to the inter-day flexibility product we agree with Ofgem's principles and objectives to a degree. In particular, we would note that any release of system flexibility should be on the recognition and understanding that it can not be hoarded and so effective use it or lose it arrangements are required to ensure that it is available to those that require it. We further believe that these principles can only be applied to flexibility where it has been demonstrated that it is, or is very near to being constrained.

### Question 2: Do you agree that it would be appropriate to introduce an obligation on NGG to report on system flexibility indicators under the RIIO-T1 framework?

It would be beneficial for all discussions on flexibility to take place under the RIIO-T1 framework to ensure that the correct emphasis is placed on output measures. We are concerned that setting output measures outside of the RIIO-T1 framework may detract from the overall package of outputs and result in too great an emphasis being placed on the flexibility indicators. At this stage, given that NG has reported on a voluntary basis, then we do not see any value in linking revenue to this. We therefore believe that these indicators should sit outside of the RIIO-T1 framework.

## Question 3: Do you agree that it would be appropriate for NGG to justify any system flexibility investment proposals under RIIO-T1 with reference to flexibility capacity system indicators and specific RIIO-T1 output measures?

We agree it would be appropriate for NG to justify any system flexibility investment under the RIIO-T1 framework and for this to be clearly linked to one of the primary output measures. This is a key aspect of the RIIO framework. However, we do not believe that the indicators should be part of the framework as they are merely a tool to assist in identifying investment requirements. As previously noted these should not be used in isolation.

## Question 4: Do you agree that the commercial and use of system charging arrangements should reflect any costs imposed on the system by NTS users" needs to vary entry and exit flows?

We believe that were NG to demonstrate that they were exposed to additional costs as a result of variable entry and exit flows, and they could clearly identify who was causing these flows; then NG's licence would in fact oblige them to develop charges for this. The key element of NG's licence regarding charging methodologies is to develop charges so that they reflect the costs imposed on the system.

EDF Energy February 2011