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Dear Giuseppina

System Operator incentive schemes from 2013: principles and policy

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, combined heat and power plants, 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 the opportunity to respond to this consultation the key points of our response are:

- As recognised in the consultation paper the role of the electricity and gas SO is likely to go through significant changes in the next eight years in response to changes to the operation of the market caused by EMR as well as the impact of increasing penetration of intermittent generation combined with the closure of ageing thermal plant.
- The impact of these changes on the SOs are unknown at this stage as some of these developments, such as EMR are still undergoing development; and others will depend on how the market responds to these. This level of uncertainty may cause issues when setting the SO incentives for an eight year period.
- Any SO regime should therefore ensure that there are mechanisms in place to ensure that the SOs are set a challenging target and that costs to consumers are minimised. This may support the use of a ratcheting mechanism for the targets, based on historic performance.
- There is also a need to ensure that National Grid's new role as administrator of the CfD FIT and capacity mechanism does not interfere, or subtract from its existing role of electricity system balancer. Any incentive mechanism should therefore recognise these conflicting interests and set up arrangements so that the funding for these services is kept separate.
- We support Ofgem's objective to encourage greater interaction between the TOs and SOs through this process. In particular we note that the connection of new plant, alongside planned infrastructure investment will require the co-ordinated management of outages between the TO, SO and generator.
- There may also be a benefit from encouraging greater cooperation between the electricity and gas SO in the medium term when planning the operation of the system to reduce overall costs to consumers. In particular we note that the electricity SO can forecast constraints and is improving in its ability to forecast

output from intermittent sources, these could be fed through to the gas SO to inform its system planning process where appropriate.

As recognised in the consultation paper the role of the electricity and gas SO is likely to go through significant changes in the next eight years in response to changes to the operation of the market caused by EMR as well as the impact of increasing penetration of intermittent generation combined with the closure of ageing thermal plant. This will have a direct impact on how the electricity SO manages the system, as well as having indirect impacts on the gas SO who may be faced with more variable gas demand. In addition the roll out of smart meters may provide further opportunities for accessing demand side response from consumers increasing the tools that are available to the SOs to manage the system. The impact of these changes on the SOs are unknown at this stage as some of these developments, such as EMR are still undergoing development; and others will depend on how the market responds to these. This level of uncertainty may cause issues when setting the SO incentives for an eight year period.

It will also be necessary when designing the incentive mechanisms that when National Grid procures ancillary services, such as STOR that this is kept separate from any capacity payments to secure the long-term availability of that plant. This will help to ensure that the value of the capacity mechanism is maintained and avoid any cross subsidy between the capacity mechanism and ancillary service provision.

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 my colleague Stefan Leedham on 020 3126 2312, or myself.

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

Yours sincerely,

Denis Linford
Corporate Policy and Regulation Director

Attachment

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EDF Energy's response to your questions

CHAPTER: Two

Question 1: Do you consider that we have captured the full role of the SOs going forward?

Ofgem appears to have covered all of the main roles for the SOs going forward. We note that there may be opportunities going forward for greater facilitation between the electricity and gas SO in the medium term. In particular we are aware that the increasing penetration of intermittent generation will have an impact on the operation of both the gas and electricity markets. NGET in its role as electricity SO is improving its accuracy of its forecasts for intermittent generation, and there may be value in sharing these with NG in its gas SO role to help inform planning of the operation of the gas system. We recognise that this could create conflicts of interests, and so it would appear appropriate that the sharing of information is limited to the day ahead stage. This will help to inform NG's planning of the gas system; and also ensure that NG's real time role of system balancer is kept separate.

We also support NGET reviewing the current SQSS arrangements, and note the potential benefits that can be realised from employing dynamic line ratings when managing the system. However; we note that reform of the SQSS can have numerous impacts including on constraint costs, losses, security of supply and safety that should be considered in any review.

Question 2: Do you consider that our minded to position on the length of the regulatory framework is appropriate?

We support the introduction of a longer regulatory period for setting the SO Incentive framework. We believe that this will encourage the SOs to take longer term views and decisions in their role as SO which should result in lower costs to consumers. In particular we note that the historic problems with a one or two year incentive scheme is that the SO is limited to looking at investment decisions and frameworks that have a two year pay back period, and so over look options that may have a longer term benefit to consumers. An eight year scheme would address this issue.

At the same time there is a need to ensure that any scheme is designed in such a way so as to set a challenging, but realistic target for the SO. This will help to ensure that costs to consumers are minimised and also ensure that NG is faced with an appropriate level of risk. We therefore support Ofgem's proposal to have different scheme lengths set within an eight year framework.

Question 3: Do you consider that our proposals regarding SO-TO interactions provide the SOs with sufficient incentive to consider interactions with the TO in a longer term context?

At a high level the proposals regarding the SO-TO interactions appears appropriate and will become increasingly important when managing the connection of new generation sources as well as supporting the significant investment requirements identified through the RIIO-T1 process. In particular we would welcome increased interactions with the TOs when planning system outages. NGET in its role as GBSO already facilitates these discussions; which we believe will become increasingly important as the levels of system outages increases.

Given the interactions with generators, we believe it is also worth considering whether these requirements are extended to cover SO-TO and generator interactions to ensure all interested parties are covered by these requirements.

CHAPTER: Three

Question 4: Do you agree with our minded to position on SO outputs and the interactions with SO and TO outputs?

Overall the SO outputs and incentive mechanisms appear appropriate and accurately reflect the interactions with the SO and TO outputs. In addition it would also be appropriate to place a reporting requirement on the SOs when they are subject to a reputational incentive. This will ensure that their performance against these incentives is visible to the market and available for further scrutiny. This should also help to enforce the value of the reputational incentive by holding the SOs to account for their actions.

Question 5: Do you agree with our minded to position on the period for which the various outputs and associated incentives will be fixed?

Ofgem's minded to positions appear appropriate; although we note that some of the financial incentives will be set for eight or a four + four year period. When developing these it will be necessary to ensure that the targets are set so that they set a challenging but realistic targets for the SOs to minimise costs to consumers. This could prove problematic when setting targets for eight or four years, especially given the uncertainty facing the energy markets creating the risk that the SOs benefit from higher revenues than required (due to low targets) or excessive risk (due to too high targets). Consideration should therefore be given as to whether these targets are ratcheted to take account of performance during the RIIO period.

Question 6: Do you agree with our views on incentivising SO outputs?

The views expressed by Ofgem on incentivising SO outputs appears reasonable at a high level, although the precise detail of how these will work in practice and the associated behaviours will be important in determining their final suitability. On the electricity reliability and unavailability output we support Ofgem's intention to require the SO and TO to work more closely to facilitate coordinated outages to support investments and new connections. This is a key issue for us and we welcome further work and coordination with the SO and all of the TOs going forward.

Question 7: What areas, in addition to DSR, should a broad environmental output cover? What is your view on having a financial (rather than a reputational) incentive on NGET and/or NGG as SOs to encourage them to deliver against a broad environmental output?

When considering a broad environmental output it is important to recognise that National Grid, along with most companies, has made corporate commitments to reduce its environmental impact which shareholders have signed on to. Therefore any SO incentive scheme should only seek to cover those actions that are in addition to those which National Grid will undertake anyway. It is also equally important to recognise that National Grid cannot be seen to favour one generating technology over another it its role as either SO or TO without falling fowl of its undue discrimination requirements.

Further any actions taken by National grid to favour one form of generating technology over another due to its environmental impacts could have a detrimental impact on the operation of the market. In particular we note that Government policies and legislation, such as EU ETS will impact on the merit order of plant in the market and so naturally encourage the dispatch of plant that has a lower environmental impact. Any further actions by the SO to influence plant dispatch could further interfere and undermine the existing market.

It is therefore unclear what additional outputs a broad environmental incentive should cover, other than those identified by Ofgem. This would further lend itself to the use of a reputational rather than a financial incentive as it is unclear what actions the output is trying to incentivise.

Question 8: What is your view on having a financial output incentive on the accuracy of NGET"s forecast of wind generation and the timeliness and availability of that information on its website?

With the increasing penetration of wind capacity on the system the accuracy of the SO's forecasts will become increasingly important to help ensure security of supply and minimise costs to consumers. In particular we note that accurate forecasts at the day ahead and within day stage will help the market to self dispatch plant to ensure that demand is met. It is widely recognised that the competitive market and self dispatch should reduce costs to consumers and help to reduce the short term balancing actions

that NGET has to take which are generally more expensive. In addition accurate forecasts will help NGET in its role to balance the system by ensuring adequate reserve is available to meet changes in wind output.

As previously noted there may also be a value in sharing the day ahead wind forecasts with NGG in its role as gas SO to help inform its daily planning and management of the gas system. We therefore support a financial incentive in this area.

Question 9: What is your view on introducing an incentive based on the total cost of NGG"s balancing actions? Should such a total cost incentive replace or be in addition to current incentives for NGG to minimise the impact of its balancing actions?

At a high level it appears appropriate to incentivise NGG to minimise its total system balancing costs, provided that this does not require the introduction of new or additional products that the industry may not want or require. In particular we note that the gas system currently has a reasonable amount of flexibility in its ability to accommodate daily system imbalances at certain times of the year; however, the existing linepack and balancing costs incentives reduces NGG's ability to utilise this to minimise costs to consumers. A total cost minimisation incentive may therefore help to address this concern.

CHAPTER: Four

Question 10: Do you agree that the cost incentives we are minded to apply are appropriate? Please explain your reasoning.

The costs incentives that Ofgem has identified for the gas and electricity SOs appears reasonable at this time; although further work will be required to develop the detailed mechanisms which may identify unintended consequences from these incentives. There may therefore be a need to unbundle these cost incentives at a later date.

In terms of the electricity SO incentives we agree with Ofgem's views that bundling these incentives into a single balancing cost incentive remains appropriate. Ultimately the different services and requirements that NGET procures are there to ensure that the system remains balanced even in the face of unexpected changes to supply and demand requirements, supporting the bundling of these incentives. However, as previously noted any incentive to minimise these costs needs to ensure that the interaction with any capacity mechanism and CfD FIT is limited. In particular we believe that any incentive for short term balancing requirements should be kept separate from any longer term capacity arrangements to ensure that security of supply is maintained and there are no cross subsidies between the two mechanisms.

Question 11: Do you agree that the parameters (scheme length, sharing factors etc.) we have proposed for the cost incentives are appropriate? Please explain your reasoning.

As noted in response to previous questions we support longer term SO incentive schemes as this will encourage longer term planning and potentially realise further cost savings to consumers than is currently recognised through the existing shorter term schemes. At the same time we are aware that the energy markets are undergoing fundamental change as the UK moves to a low carbon economy which will make long term target setting difficult. We therefore believe that if longer term schemes are being set it will be important to ensure that appropriate uncertainty mechanisms are incorporated to cover unexpected decreases or increases in the costs the SOs face. This will protect customers against setting long term targets that are too low and easily achievable and also protect the SOs against having targets set that are too high.

Question 12: Do you agree with our proposals to introduce a payment mechanism to encourage efficient SO-TO interactions?

From our perspective it is important to ensure that appropriate behaviours and cooperation between the SO and TO be incentivised. As previously noted the high level of investment in the transmission system combined with the connection of new generators will increase the number of outages that can be expected on the system and so it will become increasingly important to ensure that these are coordinated to ensure costs to consumers are minimised. We therefore support the introduction of a payment mechanism to encourage efficient SO-TO interactions provided that this is solely being driven by an SO requirement and not a legal or regulatory consideration.

CHAPTER: Five

Question 13: Do you agree with the factors we propose to consider when deciding on the role of uncertainty mechanisms?

We agree that price, political/regulatory and operating environment are sources of risk that are beyond the control of the SO and so should be mitigated against; however, we would question whether the volume risk identified by option is outside of the control of the SOs. In particular we recognise that there is a near to real time uncertainty regarding the volume and location of supply on demand on the network; however, it would appear that the SO is well placed to mitigate against this. For example this could be mitigated through improved demand and supply forecasting, or through increased use of real time data, or through regulatory change such as information provision requirements. Further the role out of smart meters could help to address these issues by potentially providing the SOs with access to more real time data.

At this stage we are therefore not convinced that volume should be a factor that is considered when constructing any uncertainty mechanism.

Question 14: Do you agree with our initial view that the caps and floors on SO incentive payments could undermine the SO taking long term decisions and could undermine alignment of incentives between the SO and TO?

We agree with Ofgem that caps and floors on the SO incentive mechanisms could undermine some of the objectives that Ofgem is seeking to achieve through aligning the SO mechanisms with the RIIO-T1 arrangements. We also agree that removing the caps and floors carry risks. Therefore removing the caps and floors and covering these with uncertainty mechanisms and a review for exceptional events appears appropriate; provided that these are developed to minimise costs and risks to consumers.

Question 15: Are there any areas where you think specific uncertainty mechanisms should be introduced into the regulatory framework?

We have no additional uncertainty mechanisms in addition to those already identified by Ofgem

EDF Energy
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