Department of Energy & Climate Change

ofgem

Synergies and Conflicts of Interest arising from the Great Britain System Operator delivering Electricity Market Reform

Consultation Document

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The consultation can be found on DECC's and Ofgem's websites:
http://www.ofgem.gov.uk/Markets/WhlMkts/EffSystemOps/Pages/effSystemOps.aspx

http://www.decc.gov.uk/en/content/cms/consultations/coi_emr/coi_emr.aspx

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General information

Purpose of this consultation

The purpose of this consultation is to seek views on potential conflicts of interest and synergies arising between the new role for the System Operator in delivering EMR and National Grid's existing roles and interests.

Issued: 29th November 2012

Respond by: 29th January 2012

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Territorial extent:
This consultation applies to the gas and electricity markets in The UK.

How to respond:
Your response will most useful it is framed in direct response to the questions posed, though further comments and evidence are also welcome. Please send your responses (clearly marked) to: europeanwholesale@ofgem.gov.uk and emi@decc.gsi.gov.uk. Responses should be received by 29 January 2013. Unless marked confidential, all responses will be published by placing them in Ofgem's library and on its website and on DECC's website

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Executive Summary

1. In the December 2011 Technical Update to the Electricity Market Reform (EMR) White Paper[1], the Government announced that it intended to confer the EMR delivery functions onto the Great Britain System Operator, National Grid Electricity Transmission plc (NGET). The Technical Update acknowledged that as well as there being strong synergies between EMR delivery functions and the System Operator's current role, there are also potential conflicts of interest that could arise.

2. The purpose of this consultation is to seek views on these potential conflicts of interest and synergies. It also seeks views on potential mitigating measures, should these prove necessary.

3. Simply because a conflict of interest exists, it does not follow that National Grid would act on it. The purpose of this project is to identify conflicts that require mitigation and recommend appropriate measures that would ensure confidence in the System Operator's ability to deliver EMR. These measures will build upon the strong regulatory framework already in place which constrains National Grid's behaviour in respect to its current role.

4. This consultation sets out the analytical approach taken in assessing potential conflicts of interest and synergies. It then assesses the ability of, and incentive on, National Grid to act on potential conflicts.

5. It also sets out in detail the EMR delivery functions in order to help stakeholders identify potential conflicts of interest and synergies. This role can be divided into three main areas:

    - Analysis – Collecting evidence and conducting analysis to underpin the delivery plan and inform Ministerial decisions on EMR implementation;

    - Administration of the CfDs allocation process – Assessing applications for CfDs and allocating them accordingly;

    - Administration of the Capacity Market – If auctions are implemented, carrying out a pre-qualification process for participation in the Capacity Market and running auctions.

6. Following this, it examines the mitigations in existing legislation and licences or proposed in the design of EMR. The final step in the analytical process sets out some potential further mitigation measures, including:

    - Information restrictions and ring-fencing. By controlling who within National Grid can access certain information, the flow of information to different parts of National Grid can be restricted;

    - Transparency and scrutiny. The System Operator's analysis and decisions can be made transparent and open to scrutiny and challenge;

    - Limiting discretion through design. Designing EMR so that the processes undertaken by the SO are mechanistic, with limited scope for discretion;

[1] http://www.decc.gov.uk/en/content/cms/legislation/white_papers/emr_wp_2011/tech_update/tech_update.aspx

- Business separation. This could involve physical, employee or legal separation of functions.

7. Government and Ofgem will consider the responses to this consultation, undertake further analysis, and then decide whether the existing regulatory framework and EMR governance adequately manage the conflicts, or whether additional interventions are necessary. Any measures undertaken will need to be both effective in addressing the conflicts and proportionate. In taking the decision Government and Ofgem will also consider the synergies and how best to maintain these.

Chapter 1. Introduction

1.1 Background to EMR and choice of System Operator as delivery body

1. Electricity Market Reform (EMR) aims to meet the significant long-term challenges of delivering our renewable energy targets and decarbonising our energy infrastructure, whilst maintaining secure and affordable electricity supplies.

2. EMR introduces two key mechanisms into the electricity market[2]:

   - Contracts for Difference (CfDs) - long-term instruments that provide stable and predictable revenues to incentivise companies to invest in low carbon generation;

   - A Capacity Market (CM) that will, if required, provide security of electricity supply by incentivising sufficient capacity to be delivered when needed.

3. In December 2011, DECC announced that the GB System Operator (SO) would be the delivery body for EMR. The basis for that decision was:

   - there are strong **synergies** between the current role of the System Operator and delivery of both the CfDs and the Capacity Market;

   - the System Operator is in a **unique position** at the heart of the electricity system: this makes it ideally suited to undertake analysis to inform Government's decisions on EMR implementation, and to deliver the Capacity Market if implemented. Its **current work balancing the electricity system** gives it an understanding of the balancing requirements of different technologies, and the impacts these may have on network reinforcements. It has extensive experience of running tenders and auctions both on the electricity side (STOR etc) and on the gas side of its businesses. Finally, it follows the example of CM implementation in **many other countries;**

   - delivery of these two mechanisms by a single organisation will ensure a joined up approach to the CfDs and Capacity Market and, combined with the System Operator's current roles, will provide **value for money**; and

   - the System Operator already has much of the relevant **technical expertise**, **commercial and financial skills** necessary to deliver the CfD in the UK and Capacity Market in GB, as well as to provide evidence and analysis to Government to inform its decisions on key rules and parameters. In particular, the SO already has systems and information for accurately assessing generator availability and operation, and carrying out analysis on how much generation will come on line in different technologies and scenarios.

4. The role and functions of the SO in delivering EMR are set out in chapter 4 and in detail in Annex D but they can be summarised as:

[2] Other mechanisms introduced by EMR include an Emissions Performance Standard. This consultation covers only those areas of EMR where the System Operator is the delivery body. More details on other EMR policy mechanisms can be found at: http://www.decc.gov.uk/en/content/cms/meeting_energy/markets/electricity/electricity.aspx

- Providing **analysis** to inform Ministers in making key EMR decisions, primarily on the level of support for low-carbon technologies in the case of CfDs and how much capacity to contract for in the case of the Capacity Market;

- **Administering** the two mechanisms: establishing whether projects meet Government-set eligibility criteria to receive CfDs and running auctions for capacity if needed. For the Capacity Market there is likely to be a continued role for the SO in monitoring whether capacity agreement conditions are being met.

5. The Government has introduced an Energy Bill (the Bill) which will legislate for EMR. Subject to the Bill's passage through Parliament, we expect EMR to be operational in 2014. Further details on EMR and how it will operate can be found on DECC's website[3] in the documentation accompanying the Bill.

1.2 Background to the Conflicts of Interest Project

6. In the Technical Update to the EMR White Paper published in December 2011, DECC acknowledged that there were potential conflicts of interest arising from the SO taking on the EMR delivery functions due to National Grid's existing role and interests in the energy market.

7. DECC and Ofgem established a joint project to assess the extent to which the SO delivering EMR would create new conflicts of interest and/or new synergies for National Grid. The project would consider conflicts of interest and synergies from when the SO would formally take on the delivery role, currently anticipated to be in 2014.

8. In January 2012, ten pieces of written evidence were submitted to the Energy and Climate Change Select Committee, reflecting some diversity of opinion about where conflicts lay, and how best they should be mitigated. Significant concern was expressed over potential conflicts of interest.

9. In March, DECC and Ofgem published an open letter[4] to stakeholders seeking their views on potential conflicts of interest and how they might be mitigated, and potential synergies and how they might be maximised. We received 25 responses from a range of stakeholders, including generators, suppliers, consumer groups and Devolved Administrations. These are available on Ofgem's and on DECC's websites[5].

10. The interim report that we published in May drew two main conclusions:

- At that stage of the EMR programme, when the detail of the EMR delivery role was yet to be fully defined, it was not possible to identify fully the synergies and conflicts, or appropriate mitigations;

[3] http://www.decc.gov.uk/en/content/cms/meeting_energy/markets/electricity/electricity.aspx
[4] http://www.decc.gov.uk/en/content/cms/consultations/emr_coi/emr_coi.aspx
[5] http://www.ofgem.gov.uk/MARKETS/WHLMKTS/EFFSYSTEMOPS/Pages/effSystemOps.aspx & http://www.decc.gov.uk/en/content/cms/consultations/emr_coi/emr_coi.aspx

- It was, however, already clear that mitigation measures would need to include requirements for the SO to be transparent in its delivery role, and restrictions on the EMR-related information it obtains flowing to its other businesses.

11. In July 2012, the Energy and Climate Change Select Committee issued its report on pre-legislative scrutiny of the Energy Bill[6], expressing concern regarding the appropriateness of a private company acting as the EMR delivery body. The Committee expressed the view that the SO taking on this role would result in considerable conflicts of interest for National Grid and could result in unnecessary additional costs to consumers. It recommended that this role should not be conferred on National Grid and that it should be conferred on a new, independent, not for profit company.

12. Since the interim report, we are now in a position to consult fully on potential conflicts of interest and synergies. To address feedback from stakeholders that there needs to be more detail on the EMR delivery role, we have set out in this consultation (Chapter 4 and Annex D) a description of this role. This is to provide respondents with a firmer basis on which to identify conflicts, synergies and mitigations.

13. To consider what further mitigations may be necessary in addition to those identified in the second conclusion of the interim report, we have also analysed and identified potential conflicts and mitigations in much greater detail since the first consultation. The analysis built broadly on a framework used by competition authorities to assess the likely impact on consumers of a proposed merger. Our approach to this is set out in chapter 3.

14. The framework presented in Chapter 3 underpinned two analytical workshops. The first was conducted in-house with DECC and Ofgem experts. A second workshop was held with the EMR Institutions Expert Group, composed of stakeholders including members with experience from generation and supply companies and consumer issues. This supported work to identify where conflicts and synergies may lie and assess how they may be addressed. Key points from the Expert Group were:

    - more certainty and detail on the role of the EMR delivery body was needed in order to ensure consultation is properly informed;

    - the appearance or suspicion of conflicts was so serious that stakeholders wanted significant mitigations to be put in place;

    - the default should be for an information ring-fence separating National Grid's EMR team from other National Grid activity unless it could be shown that there were very good reasons for doing otherwise; and

    - transparency and scrutiny wherever possible would help address conflicts arising as a result of the SO being able to influence Government decisions, while the ability to exercise discretion in making decisions may be addressed by limits on discretion and setting clear and transparent rules.

15. The later chapters on conflicts and synergies (chapter 5) and mitigations (chapter 6) draw in particular on evidence gathered at the in-house and Expert Group workshops.

[6] http://www.publications.parliament.uk/pa/cm201213/cmselect/cmenergy/275/27502.htm

16. This consultation will close on 29th January 2013 with the final report on conflicts, synergies and mitigations due to be published in Spring 2013. If further mitigation is shown to be necessary there will then be a period of implementation. Should any mitigating measures be put in place via secondary legislation or by Ofgem, these will be consulted upon at that stage. We aim to have all mitigation measures in place by the time EMR is operational. There will be ongoing engagement with stakeholders on these issues. This will continue after any measures have been put in place.

During the set-up phase of EMR before this project has reported, potential conflicts of interest have been addressed by putting in place:

- A Memorandum of Understanding between DECC and National Grid setting out ways of working, including managing potential conflicts of interest.

- A legally binding agreement between DECC and National Grid dealing with the management of information. This places an obligation on National Grid's EMR team to keep information related to the EMR Programme confidential and sets out the safeguards that National Grid needs to establish to protect information. It stops EMR related information being shared within National Grid. Those staff with access to the information must sign an undertaking to protect the information and not share it outside of the EMR team. A person in breach of this agreement faces disciplinary action and possible dismissal.

See http://www.decc.gov.uk/assets/decc/11/meeting-energy-demand/energy-markets/6383-national-grid-decc-memorandum-of-understanding.pdf

Chapter 2. The System Operator, National Grid and the existing regulatory regime

Summary

This chapter outlines the System Operator's (SO) current core role balancing the electricity system as well as its wider and evolving role. It gives an overview of National Grid, and concludes with an outline of the existing regulatory regime under which the SO & NG operate.

2.1 Overview of System Operator's existing role

17. The main duty of the transmission licensee is to develop and maintain an efficient, co-ordinated and economical system of electricity transmission. The core role of National Grid when performing the SO function is energy and system balancing. The wider role of the SO is to play a full role in delivering an efficient, co-ordinated and economical system of electricity transmission. This is outlined in greater detail below.

18. **Core role**: energy and system balancing

- Energy balancing: residual purchasing and selling of electricity to keep the transmission system in energy balance in real time
- System balancing: ensuring that the system remains within safe and secure operating limits and that the pattern of generation and demand is consistent with any transmission system related constraints. The system balancing role comprises two elements:
    - System management: the SO maintains system stability by using a range of balancing services, such as reactive power and frequency response;
    - Constraint management: the SO takes actions to resolve constraints on the transmission system. These occur when there is insufficient transmission capacity to transmit electricity from where it is being generated to where it is being consumed, and may arise even if the system is otherwise in energy balance

19. Under the terms of the transmission licence, the SO is required to consider the most efficient mechanism by which to deliver its obligations. The services that the SO has available to it to balance the transmission system (balancing services) include ancillary services, offers and bids made into the balancing mechanism and other services to assist co-ordinating and directing the flow of electricity on to and over the National Transmission System. Where competition exists and it is efficient to do so, the SO will procure these services competitively

and through a transparent process. The SO may also agree non-discriminatory, bilateral contracts with service providers, the terms of which should be compliant with its licence obligations. In such circumstances the SO will contact those service providers whom it believes are capable of providing the required service and who have expressed an interest in providing the service. The SO is incentivised to ensure that the actions it takes deliver value for money for consumers and that outputs are delivered.

20. **Wider role**: to play a full role in delivering a sustainable energy system. This entails:

- facilitating network connections and investment
- calculating network charges
- providing information to the market
- development of commercial and regulatory frameworks in Great Britain and Europe

21. The role also requires the SO to work with all market participants to achieve the required outputs. For instance in delivering an outcome, the SO may need to assume joint responsibility with the transmission owners (TOs), or to take into account interactions with the activities of the TOs.

Continuing evolution of role

22. In the coming years and decades, the SO is likely to face a number of challenges and opportunities which could significantly change the way it needs to operate the system. These challenges and opportunities can be categorised into three main areas:

    - Decarbonisation of the energy supply, including implementation of policies designed to facilitate this;
    - Increased interconnection capability and implementation of policies affecting the use of interconnectors to increase market integration at a European level; and
    - Maintaining a stable and balanced electricity system, in the face of changes to the generation mix and declining domestic oil and gas reserves.

National Grid

23. National Grid PLC the parent company of the Great Britain (and offshore) electricity System Operator is a FTSE 100 shareholder-owned company. It has an a range of business activities across North East America and Great Britain. National Grid Electricity Transmission plc (NGET) holds a transmission licence granted under s.6(1)(b) of the Electricity Act 1989, which covers its activities as System Operator in Great Britain (on the mainland and in offshore waters). More detail is set out in Annex A.

Existing regulatory regime

24. The existing regulatory regime is covered in Annex B including Table 6 that summarises the potentially relevant legal and licence obligations. The regulated entities within National Grid are electricity transmission, gas transmission, gas distribution, electricity interconnection, gas storage and Liquefied Natural Gas (LNG) facilities. The regulatory regime consists of legislation and licences, imposing obligations on the regulated entities giving powers and duties to the Gas and Electricity Market Authority (GEMA) in relation to licensed entities (and storage and LNG facility operators). The Authority's powers and duties are set out in statute as well as arising directly from European Union legislation.

25. An example of an obligation imposed through licences is Special Condition C1 of National Grid Electricity Transmission plc's (NGET) transmission licence (which is discussed in detail in Annex B) which requires that NGET conducts its transmission business in a way that does not confer an unfair commercial advantage on itself or any affiliate or related undertaking. Determining whether unfair commercial advantage has arisen requires a case by case assessment. The provisions of this licence condition do not therefore constitute a blanket prohibition on any activities which may potentially give rise to unfair commercial advantage.

26. Special Condition C2 of NGET's transmission licence (also discussed in detail in Annex B) requires that NGET puts in place systems of control and governance arrangements to ensure compliance with Special Condition C1 and to have in place a compliance statement. For offshore transmission, special condition C2 specifies what systems of control and governance need to be set out in that statement, in order to maintain the appropriate managerial and operational independence of NGET from any relevant offshore transmission interest.

Chapter 3. The analytical framework

Summary

This chapter outlines the analytical framework used to assess potential conflicts of interest to provide the context for the later chapters which will look at specific conflicts of interest and mitigations, as well as synergies.

It outlines the underlying principles of each stage of the analytical process. It also provides an overview of the potential materiality of some conflicts based on the size of National Grid's businesses, and outlines the broad range of mitigations available.

3.1 Introduction to the analytical framework

34. The analytical framework for this project is broadly based on the approach used by competition authorities when considering the likely impact of mergers. We have used this framework to facilitate and guide our analysis. The analytical framework is outlined in Figure 1.

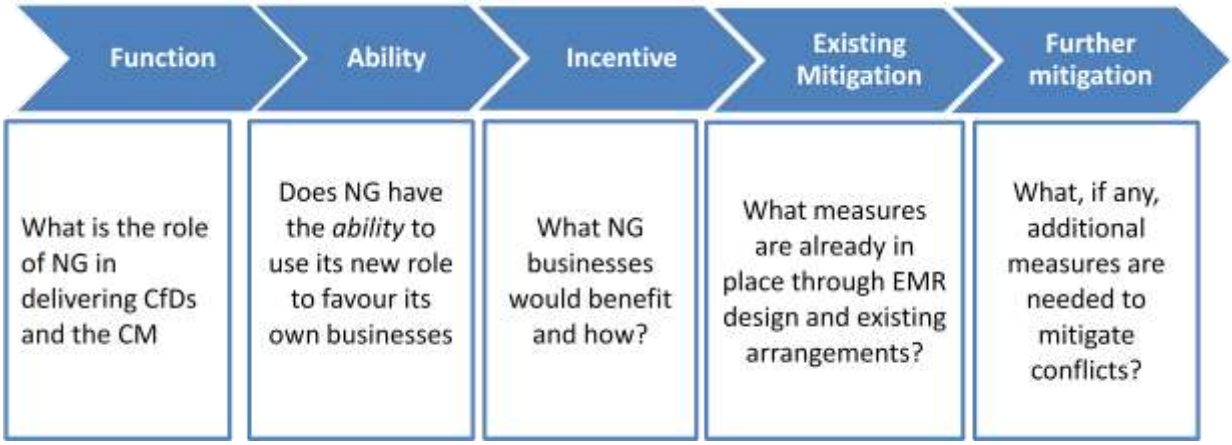
35. The first step has been to identify, as set out above and in Annex D, the System Operator's (SO) delivery role under EMR.

36. The second step looks at whether the new role will increase the SO's *ability* to favour businesses within the National Grid group to the detriment of consumers and/or where applicable competitors. The third step looks at the SO's *incentive* to act on a conflict, by considering which other areas of National Grid's business could benefit from the new EMR role and how they could benefit. The greater the ability and the incentive, the greater the likelihood of the conflict and its materiality.

37. Where a conflict might arise, mitigation measures are considered in the fourth and fifth steps. The fourth step identifies where mitigations currently exist. Existing mitigation measures include both existing regulatory arrangements (such as separation measures between National Grid's businesses) and mitigation measures that DECC is designing through the EMR governance framework (such as scrutiny of SO's analysis by the Panel of Technical Experts, and limits to the SO's discretion). This last step considers the sufficiency of existing arrangements and the EMR governance framework as well as the merits of potential further mitigation measures.

38. Steps four and five should be informed by a conflict materiality analysis, recognising that where the impact on profitability from acting on a conflict is low, the incentive for National Grid to act on the conflict is low. This may shed light on proportionality of mitigation measures – for instance indicating where less intrusive mitigation measures would be sufficient. A better understanding of the materiality of the conflicts may require additional detail on the design of EMR and a forward looking analysis and assessment of the impact of conflicts. Some element of judgement will be necessary in any such analysis as this is about potential future scenarios and hard evidence will be limited.

Figure 1: Analytical framework



The function and the conflicting interest

39. The conflict of interest that may arise from giving National Grid the role of the EMR delivery body arises from the tension between:

    - The efficient delivery of the main objectives of the EMR programme – security of electricity supply, decarbonisation and affordable energy.

    - The main objective of National Grid's horizontally-integrated undertakings – to maximise profit of its combined business interests subject to the duties which the relevant entities have[7] under legislation and under licences.

40. As a result there is potential for National Grid's delivery of the EMR role to be influenced by the objective of promoting its business interests (the 'conflicting interest') with sub-optimal implications for the efficient delivery of security of supply, competition, and efficiency[8]. Balanced against this are synergies which should be protected.

Ability

41. Chapter 5 considers how the conferral of the EMR delivery role on National Grid may create 'abilities' to act on a conflicting interest. Outlined here are three abilities to act on the conflicting interest, also called 'conflict types' in this document:

    - An ability to use **information** that it has access to through the EMR delivery role to the advantage of other National Grid businesses. For example, this could relate to confidential information it has access to within applications for CfDs;

    - An ability to exert **influence** over decisions made by others to favour National Grid businesses. For example, National Grid can influence Government decisions on the amount of capacity to procure through the analysis that it provides;

[7] For example, under section 9 of the EA 1989 NGET has the statutory duty "to develop and maintain an efficient, co-ordinated and economical system of electricity transmission and to facilitate competition in the supply and generation of electricity."

[8] Note that under section 9 of the Electricity Act 1989 NGET has the obligation to facilitate competition in the supply (and generation) of electricity.

- An ability to **exercise discretion** in the operation of EMR in such a way as to favour or advantage National Grid businesses. For example, it will determine whether projects meet eligibility criteria for CfDs or whether participants have pre-qualified for the Capacity Market auction.

42. Table 1 presents specific examples of how abilities to act upon the conflicting interest may arise.

Table 1: Examples of how National Grid could act upon the conflicting interest, by conflict type (ability)

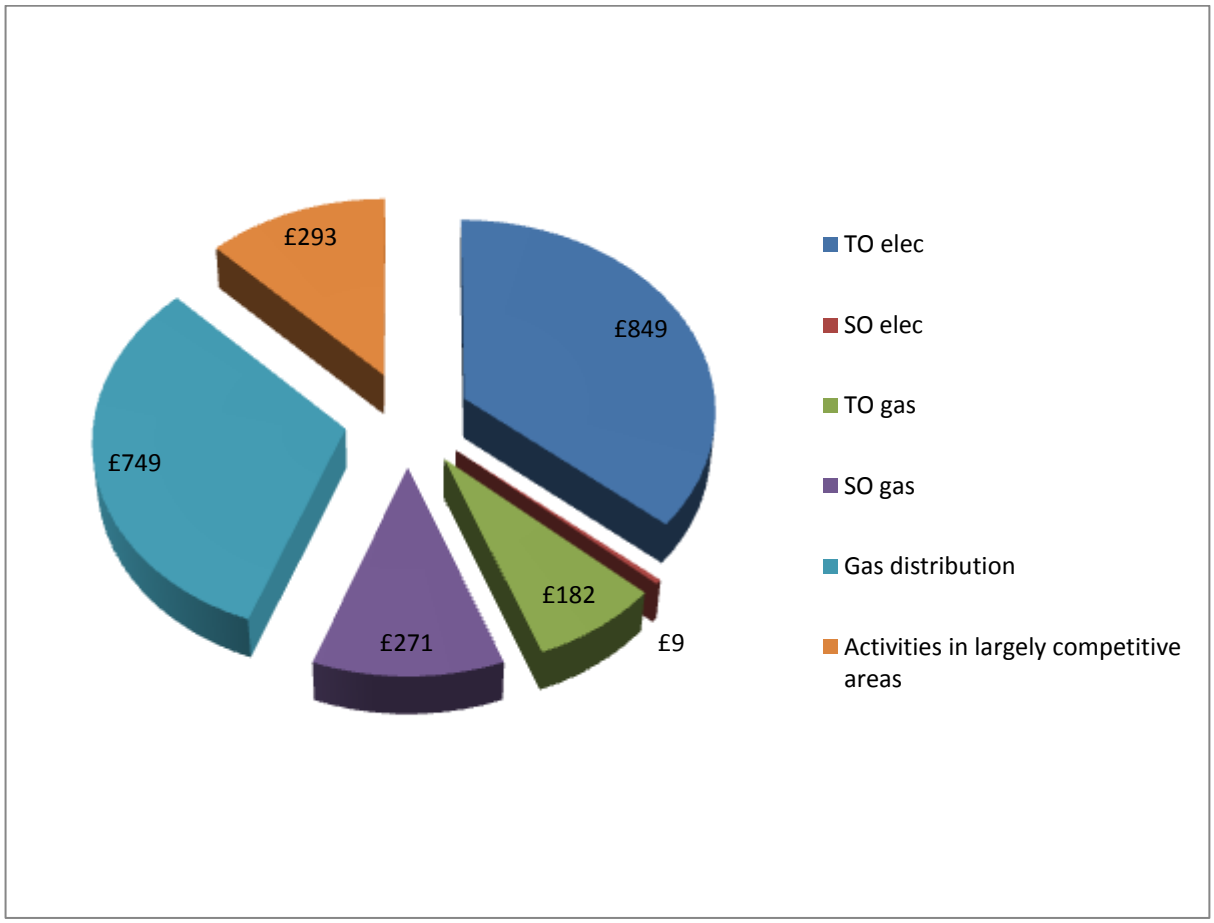
Conflict type (ability)	Examples of how National Grid could use this to act upon the conflicting interest
To access information	• Sharing sensitive information and analysis with other businesses, advantaging them by giving them: ○ Foresight of Government decisions and assumptions ○ Detailed information submitted by industry, qualification assessments and applications ○ Knowledge of the outcome of these processes • Monitoring information on progress of winning bids
To exert influence	• Tailoring the evidence collection process • Altering underlying data • Tailoring the analysis and modelling • Tailoring the presentation of the data and analysis
To exercise discretion	• Making decisions that benefit its own businesses or preferred technologies • Deciding if supporting evidence is sufficient • Designing technical rules or processes in favour of preferred bidders • Interpreting rules to the benefit of preferred participants

43. This section considers the incentives on the SO as EMR delivery body to act upon the conflicting interest arising from an ability to access information, exercise discretion, and exert influence. It identifies how National Grid may benefit from the conflict.

44. This consultation does not assess how great that benefit may be. We will seek to carry out further analysis on the materiality of these conflicts ahead of the final report.

45. Nevertheless, a preliminary assessment is conducted here, noting that consideration of National Grid's absolute operating profit – broken down by business activity – can inform the analysis by giving some indication of potential materiality. Figure 2 breaks down National Grid's UK operating profit of £2.3bn by business activity. It provides a snap-shot of profits in 2011/12.

Figure 2: National Grid UK operating profit 2011/2012 (£m)



Source: National Grid

46. Table 2 shows:

- Electricity Transmission Owner (TO) profit represented a sizeable chunk of operating profit – over one third of total UK profits;

- SO electricity activities generated £9m operating profit;

- Gas distribution profit of £749m accounted for slightly less than a third of profit; gas TO and SO activities accounted for around £450m, or about one fifth of UK profit;

- Other activities (those in the mainly competitive areas) accounted for almost £300m of UK profit.

47. In terms of materiality, holding other considerations constant, and to the extent that conflicts can be identified that relate to these business activities, Figure 2 therefore suggests that:

- Conflicts that pertain to the TO electricity business have the potential to be particularly financially material.

- Conflicts that pertain to gas transmission, system operation and in particular distribution have the potential for substantial financial materiality.

- Conflicts relating to activities in largely competitive areas may appear to be relatively less financially material, but other factors such as the potential market size may also need to be taken into account. For example whilst the Carbon Capture and Storage (CCS) business is small now, it could be a substantial source of revenue in the future if it becomes a major technology in the energy sector. Any conflicts arising in competitive markets will likely impact the wider market and other stakeholders in that market, and so need to be considered carefully.

- Conflicts that relate to electricity system operation may be of relatively low financial materiality.

48. We also note that, in relation to National Grid's activities in largely competitive areas:

- Other characteristics of LNG may diminish the potential for conflicts to arise. For example, knowing in advance of the market that there will be more gas generation may not be particularly useful. This is because the long term nature of LNG contracts means they may be unable to take advantage of increased demand, and increased demand for gas may not directly translate to increased demand for input or storage.

- Known interconnector projects that are being developed by various companies with some prospect of coming online cannot be 'won' by National Grid. However National Grid could make decisions about its participation in future interconnector projects based on information it has through EMR that is not available to the market.

- Although NG's offshore transmission business is currently dormant there may be significant opportunity to generate profits in this sector in the future in light of the envisaged £8bn

transmission build over the next 20 years[9]. CCS is also likely to be a growth area in the forthcoming period.

49. Conflict materiality may not be limited to the direct benefit accruing to National Grid from acting upon a conflicting interest. It may also be influenced by the extent to which National Grid can through its actions impede benefit or value from being realised by competitor businesses, for instance offshore competitor businesses.

50. In sum, this initial scoping suggests that conflicts with the electricity SO do not have the potential to be significant, but that other National Grid businesses may potentially be exposed to conflicts that are material, including the electricity TO business and National Grid's competitive businesses where there is potential to gain advantages over competitors.

Mitigations

51. This section identifies in principle how mitigations may address certain types of conflicts of interest. It does not identify where existing regulatory requirements may already be in place to mitigate conflicts – this is considered later in the consultation.

52. Measures which could mitigate conflicts arising from information flows include information separation measures and transparency. Information separation may be reinforced by other business separation measures to the extent they address the ability or incentive to act upon the conflicting interest. Note in some cases these separation measures might address other types of conflict as well. Transparency may help mitigate the conflict by making non confidential information (and information that is not policy sensitive) available to all.

53. Mitigations to address the ability to influence Government decisions include transparency of the analysis through publication and consultation, and scrutiny of the analysis by Government, the Panel of Technical Experts, and through public consultation. These are described in more detail in chapter 6.

54. Mitigations to address conflicts arising from the SO's ability to exercise discretion in implementing EMR include limiting its discretion, providing detailed, clear and transparent rules and processes for EMR participants, and building in oversight by either Government or Ofgem and an appeals process. These are described in more detail in chapter 6.

Table 2: Examples of mitigating measures by conflict type (ability)

[9] National Audit Office report *Offshore electricity transmission: a new model for delivering infrastructure*

Conflict type (ability)	Examples of mitigating measures
To access information	• Business separation measures including information separation to ensure information cannot be shared with other National Grid businesses • Transparency: publication of EMR data, so market has access at the same time (subject to protecting confidential and commercially sensitive information provided to National Grid)
To exert influence	• Scrutiny of information, modelling and analysis provided by National Grid by Government, the Panel of Technical Experts, external auditors, Ofgem and other stakeholders (the latter for instance through consultation) • Effective performance management • Transparency: publication of EMR data so anyone can scrutinise the SO's analysis (subject to protecting confidential and commercially sensitive information provided to National Grid). • Certain business separation measures
To exert discretion	• Prescriptive rules and tight limits on discretion • Transparency around process and decisions • Oversight of SO decision making by Ofgem and Government • Appeals processes • Effective performance management • Certain business separation measures

50. Chapter 6 considers the extent to which these mitigating measures are already in place in existing regulatory measures or have the potential to be designed into EMR processes. It considers the need and potential for further mitigating measures to address both the ability and the incentive to act upon the conflicting interest.

51. Most of the mitigations have the potential to address abilities rather than the incentive to act upon a conflicting interest. Exceptions to this are business separation measures, some of which may affect incentives across a range of conflict types, as well as abilities. As business separation measures have the potential to cut across conflict types, an introduction to

business separation measures and how they may mitigate conflicts in principle is presented in Annex B. How they mitigate conflicts in practice is considered later in this document.

Synergies

52. As well as identifying conflicts of interest through this analytical framework, we have also identified synergies between the SO's current role and its new role as delivery body for EMR. Synergies may allow the SO to deliver both sets of functions more efficiently and effectively, delivering benefits to consumers. We consider these in chapter 5 as part of consideration of conflicts of interest.

Chapter 4. The Delivery Role for the System Operator and Governance framework

Summary

As chapter 3 sets out, the first step in assessing potential conflicts of interest and synergies is to identify the SO's delivery role under EMR. This chapter sets out the proposed EMR functions. Further detail is provided in Annex D.

The delivery role can be divided into three main parts:

Analysis – Collecting evidence and conducting analysis to underpin the delivery plan and inform Ministerial decisions on EMR implementation

Administration of the CfDs allocation process – Assessing applications for CfDs and allocating them accordingly

Administration of the Capacity Market – If auctions are implemented, carrying out a pre-qualification process for participation in the Capacity Market and running auctions.

53. This section sets out the functions of the System Operator (SO) in delivering EMR. The aim of this chapter and Annex D, which provides more detail, is to allow respondents to answer the questions in chapters 5 and 6 on potential conflicts and synergies and possible mitigation measures. This chapter focuses on the SO role during the operational phase of EMR from 2014 (steady-state).

54. There are a number of other organisations that are part of the EMR process. These include Government, Ofgem, the CfD counterparty and the Panel of Technical Experts as well as industry and consumer groups. Where the activities of these bodies intersect with those of the System Operator they are covered below and in Annex D. Further details on the roles of these bodies within EMR are covered in the policy update published alongside the Bill[10].

[10] http://www.decc.gov.uk/en/content/cms/meeting_energy/markets/electricity/electricity.aspx

	Capacity Market (assuming Capacity Market is initiated)	**Contracts for Difference**
Analysis	• Collecting evidence and conducting analysis and modelling to inform key Ministerial decisions on whether and how the Capacity Market will run, in particular how much capacity to contract for. This will be set out in the delivery plan and annual updates if the Capacity Market is initiated.	• Collecting evidence and conducting analysis and modelling to inform key Ministerial decisions on the level of support for technologies. This will inform the delivery plan and annual updates.
Allocation	• Carrying out the pre-qualification process to determine participation in any capacity auction. • Running a competitive auction for providers of capacity.	• Instructing CfD counterparty to sign contracts based on assessment of eligibility criteria set by Government, within budgetary limits set by Government • Running a competitive allocation process, where Government has decided to move to competitive processes. Any competitive process will be designed and set out by Government.
Operational	• Monitoring progress of capacity providers against milestones to assess if all the agreed capacity will be provided in the target year. • Monitoring delivery of plant during the delivery year e.g. providing information on whether plant is available at times of system stress • May have a role in imposing penalties according to pre-defined rules set by Government or Ofgem for non-delivery of capacity.	• Monitor take up of contracts to inform analysis provided as part of annual updates to delivery plan • Provide information or analysis to inform Ministerial decisions on the move to allocation windows (following initial first come first served stage)

Secondary trading and/or secondary auctions	• Carrying out the pre-qualification process for any new potential capacity providers and receiving information on new holders of traded capacity agreements. • Running secondary auctions if additional capacity or technology specific capacity should be required mirroring processes in primary auction.	• N/A
Changes to rules and/ or mechanism design	• Providing analysis which may result in CM rule changes by Government or Ofgem. The SO may make technical rule changes. Other changes, for example those relating to auction or penalty regime rules may be subject to approval by either Government or Ofgem.	• Providing analysis which may result in CfD rule changes by Government or Ofgem.

55. In carrying out the functions above, the SO will be operating within a governance and accountability framework set by Government and Ofgem. This framework will help ensure that the SO carries out its functions efficiently and effectively.

56. Government will set the EMR delivery functions of the System Operator (SO) in secondary legislation, which will become relevant requirements of the licence, enforceable as if contained in the SO licence. The secondary legislation will prescribe the EMR functions that the SO must carry out, in order for Government to have certainty about what will be delivered, for the SO to have certainty about what is required, and for Ofgem to have a clear basis on which to manage the performance of the SO in its delivery role. The legislation will also, where appropriate, limit the SO's level of discretion and ensure processes are scrutinised and transparent. This will help reduce the risk of potential conflicts of interest arising.

57. The SO will ultimately be accountable to Government for the functions that Government has conferred on it, and Government will have the power to amend or remove these functions.

58. As it is Government that sets EMR policy, Government must retain oversight of policy effectiveness. This means Government will need to know whether the policy is achieving what was intended, and that the SO is delivering as required. To this end, the Government will set out the information it requires from the System Operator in legislation, enforceable as relevant requirements of the licence. A summary of delivery information will be provided annually, with more frequent, detailed reporting on, for instance, the cost and number of CfDs allocated.

59. If Government came to the view that the SO was not delivering the EMR functions effectively, it could, depending on the circumstances:

- provide feedback to the SO for the SO to consider;
- provide its view to Ofgem, for Ofgem to consider in its performance management of the SO;
- change the terms of the SO's delivery role or reporting requirements, for example set shorter deadlines for delivery functions to be completed. This would be achieved through secondary legislation, needing approval from Parliament;
- as a last resort, transfer delivery functions to another body and/or put in place a new cost-recovery regime for EMR delivery functions.

60. The framework within which the SO must carry out its functions are important context for consideration of which conflicts of interest may arise and how they can best be mitigated. This is now considered in chapters 5 and 6 which follow.

Chapter 5. Conflicts of interest and synergies

Summary

This chapter considers the potential conflicts of interest and synergies that may arise from the System Operator (SO) taking on the EMR functions as set out in chapter 4.

The chapter is divided into three sections, each considering one of the sources of conflicts of interest and synergies: the ability to access information, exert influence, and exercise discretion. Each section considers what, if any, actions National Grid could take ('ability'), and how its businesses could benefit ('incentive'). The chapter highlights where these actions may also drive value for the consumer and thereby realise synergies. Mitigations for potential conflicts of interest are considered in chapter 6.

While this chapter sets out which potential conflicts of interest and synergies may arise, it does not seek to establish the likelihood of them arising. The conflicts and synergies may not materialise. In particular, this analysis does not imply that the SO would deliberately seek to exploit conflicts of interest but that the EMR role may expose them to an ability and incentive which unaddressed could lead to an actual or perceived bias in their actions.

5.1 Access to information

67. The conferral of the EMR delivery role on National Grid will allow it access to information, either new information that it does not already have, or earlier access to information that it would otherwise have at a later date. The information accessed varies by function, as summarised in Table 3 and Table 4 below.

Table 3: Capacity market - information

Stage	Information
Analysis	Evidence from generators e.g. generation capabilities, running costs, closure forecasts
	foresight of Government policy intentions
Pre-qualification	Commercially sensitive information including replanting, refurbishing, upgrades and closures, plans, design specifications, financing information
Auction	Individual bids from participants, identification of successful bids, price stack of bids, prices and contract lengths, overview of entire market
Monitoring (progress of capacity providers against milestones and availability of plant during delivery years)	Information on status of projects, including whether projects are meeting milestones and due to start providing capacity
	Information on whether providers have made capacity available at stipulated times

Table 4: Contracts for difference – information

Stage	Information
analysis	Information on technology costs, deployment potential, whole system costs, cost of capital
	Foresight of Government policy intentions
allocation	Project specific confidential data including consents and proof of planning permission
	Information on successful applicants ahead of the market

68. Broadly speaking, the two main types of information to which National Grid will have access are about Government intentions and about generation projects. It will receive information about Government intentions earlier than it otherwise would, and will likely receive more information than it otherwise would as it may receive information that is not eventually published.

69. It will receive some information about generation projects earlier than it otherwise would, as National Grid would have access to it eventually in its role as SO. It may also receive some information that is not normally shared at all – for instance hurdle rates for generation projects – and is therefore potentially highly confidential information to which National Grid would not otherwise get access.

How NG could benefit from new and earlier information – and how this may materialise as a synergy or conflict

70. Using the analytical framework set out in Chapter 3, we look at the information that National Grid may have access to under EMR and consider whether this gives rise to the possibility of conflicts or synergies arising. Where it does, we consider the incentive National Grid has to use the information to benefit its other businesses. We suggest that the benefit to National Grid of new and earlier information varies by business activity, in particular whether the business operates under largely competitive conditions or largely monopoly conditions.

71. Conflicts may arise between both CfD and Capacity Market activities and National Grid businesses operating under broadly monopoly as well as competitive conditions. With respect to monopoly activities there is also scope for synergies to arise. There is no scope however for synergies to arise with activities operating under largely competitive conditions.

Information conflicts of interest & synergies with businesses operating under largely monopoly conditions

72. In terms of the businesses operating under largely monopoly conditions (gas and electricity transmission, system operation and gas distribution), there is potential for both conflicts and synergies to arise.

73. We have not identified any likely material conflicts relating specifically to information access in relation to the **electricity SO business**.

74. We have identified synergies with the SO. These stem from the fact that the objectives of the SO and the new EMR function may be at least to some extent mutually supporting: the main objective of the SO is to ensure economic and efficient operation of the transmission system while one of the main objectives of the EMR function is to ensure long term security of supply.

75. The main benefit with the SO arises from access to information that would enable it to lower its balancing costs. Ofgem's incentive framework seeks to ensure such benefits are shared with the consumer. So if costs are lower, consumers pay less. There could therefore be a synergy for the SO being able to access EMR information that allows it to reduce its balancing costs.

76. There are two chief ways in which this synergy may arise. The first is in facilitating short term efficiency improvements by allowing for more efficient procurement of reserves (in terms of volume, level of flexibility required in the system and location) and consideration of impact on constraints. The second is in allowing better planning decisions to be made by helping the SO to identify the location and technology of generation at the planning stage and using this information to improve system efficiency and security. This builds on the fact that the value of additional generation capacity depends on the location and flexibility of that capacity.

77. The cost of operating the system (balancing the system and managing constraints) to consumers was £886m in 2011/12. This suggests that synergies that drive external cost savings for the electricity SO have the potential to be quite significant.

78. A potential conflict for the **electricity Transmission Owner (TO) business** arising from information was raised by stakeholders in our pre-consultation analysis. The suggestion was that the TO could anticipate where generators may wish to locate new generation and purchase land that it could then sell on for a profit. In practice, it seems highly unlikely that this could happen, not least as it may conflict with National Grid's existing licence obligations. Overall, it seems there is limited potential for conflicts to arise from information with the respect to National Grid's TO business.

67. Synergies with National Grid's TO role could arise from information from the EMR role that helps system planning. National Grid's recent move of the strategic network design activity from the TO to the SO creates a synergy between the EMR functions and the SO, though it removes a potential synergy with the TO (except to the degree that the TO and SO interact). Nevertheless, synergies may still arise with the TO from information – for instance on where capacity will be located – where this aids the TO's planning for new investment and allows for better coordination (such as with respect to outages). This synergy would apply only to the TO's footprint in England and Wales (except to the extent that this information feeds into SO:TO interactions with the Scottish TOs underpinned by the SO:TO Code and the Network Access Policy arrangements).

68. Information conflicts of interest may arise with **gas** transmission, distribution and gas system operator activities, in the hypothetical scenario where National Grid shares with these businesses privileged information on likely future gas generation build. We are of the view that there is no scope for this information to give them a competitive advantage as they are monopoly providers. We would however welcome the views of stakeholders on this point.

69. There may be some potential for synergies from information, in particular to the extent it facilitates better gas system planning. This could occur where improvements in electricity system planning have positive knock-on effects for the efficiency and security of gas system operation. We address the incentive to favour gas generation below.

Information – conflicts and synergies (monopoly conditions)	
1.	**a) Do you agree that there are unlikely to be material conflicts arising from the electricity System Operator having access to EMR related information? If not, please explain your reasoning.** **b) Do you agree that there is significant potential for synergies as a result of the electricity System Operator having access to EMR related information? If not, please explain your reasoning.** **c) Do you agree that the potential for conflicts and synergies arising from the electricity Transmission Owner having access to EMR related information is limited? If not, please explain your reasoning.** **d) Do you agree there are limited conflicts with gas distribution, gas transmission and gas system operation arising from access to EMR information? If not, please explain your reasoning.**

	f) Are there any other conflicts of interest or synergies associated with access to EMR related information for businesses operating in mainly monopoly conditions that we have not identified?

Information conflicts of interest & synergies with businesses operating in mainly competitive conditions

70. In terms of activities operating in mainly competitive conditions, conflicts may arise where National Grid is able to gain a commercial advantage over competitors. This is particularly the case where it has access to commercially useful information which competitors do not have. Such information may include advance notice of Government intentions (including on the technology and the amount of capacity that will be contracted for through the Capacity Market, if it is initiated). Potential examples include:

- **Offshore**: National Grid's (currently dormant) offshore transmission business (NGOL) could gain an unfair information advantage through an awareness of Government intentions to procure offshore capacity in advance of other potential bidders for offshore licences. This could afford NGOL more time than competitors in preparing its business for offshore network build. Access to information such as successful offshore generation applications ahead of the rest of the market could also allow NGOL to position itself better for future opportunities against competitors.

- **Interconnectors**: National Grid's interconnection business could be advantaged by access to information ahead of competitors in relation to Government intentions that may impact the business case for new interconnection build or the revenue of current interconnectors. For instance, National Grid may become aware ahead of competitors that EMR could favour the development of interconnectors through favouring an amount (via the Capacity Market) and mix of generation (via the CfD) that will lead to more volatile market prices and therefore more volatile price differentials with neighbouring markets, the driver of interconnector revenues. This advance information could afford them more time than competitors in preparing their interconnection business.

- **CCS**: National Grid's CCS business activities could be advantaged by information that gives it advance notice of Government intentions to procure gas generation or of the status of new generation projects. This information would allow its CCS business to be more informed and to have more time to prepare for new business than competitors. It may also have access to commercially sensitive information on its competitors if CCS takes part in a CfD allocation process that is run by the SO.

- **Gas LNG**: advance knowledge of Government policy intentions such as strike prices could give National Grid LNG business an informational advantage (albeit time-limited until details are published). This has been raised as a possible conflict, though may be limited as any advantage will be time limited until details are published.

71. Allowing information to flow to National Grid's competitive businesses does not have the potential to realise synergies (in that there are no potential upsides for consumers or the

system as a whole). For example, in the case of interconnection, in the short term early information might give National Grid an advantage that allows it to bring on interconnection in advance of rivals. However in the long term the effect of this distortion of competition may be expected negatively to impact consumers through a loss of efficiency and weakening of competitive incentives.

72. In light of the conflicts identified, their potential materiality and the absence of synergies, we do not propose looking at how these information conflicts might arise for competitive businesses in greater detail. The existence of conflicts – potentially quite material – and absence of synergies suggests a need for mitigation measures. Options for achieving this are set out in greater detail in Chapter 6, including consideration of whether sufficient mitigation is already provided by the existing regulatory framework.

Information – conflicts and synergies (competitive conditions)	
2.	**a) Do you agree that the most material potential conflicts of interest with competitive businesses as a result of National Grid's increased access to information have been identified? If not, please identify which ones are missing, explaining your reasoning and providing evidence.** **b) Do you agree, that where competitive businesses are concerned, there is a need for additional mitigation?** **c) Are there any other conflicts of interest or synergies with businesses operating in mainly competitive conditions that we have not identified?**

5.2 Ability to influence: where National Grid may be able to exert influence and how this may materialise as a synergy or conflict

73. As set out in Chapter 3, the SO will collect evidence and conduct analysis to inform the key EMR decisions that Ministers will make, for example the volume of capacity to contract for in relation to the CM and strike prices for CfDs. In addition, in the case of the Capacity Market, the SO will also present analysis on the outcome of capacity auctions, if implemented, and its monitoring of successful capacity bidders up to the delivery year, for example to determine whether a secondary auction needs to be held. For the CfD the SO will also report on the volume and cost of the allocated contracts, and how the scheme is working. While it makes no formal decisions here, the analysis it provides may influence the decisions that Government may make. This role therefore could give rise to "influence" conflicts. This is distinct from the operational decisions it will make in administering the mechanisms, which is covered in and the section on discretion below.

74. There are four main ways in which National Grid could influence Ministerial decisions through the process of drawing up analysis:

- Tailoring the evidence collection process
- Altering underlying data or tailoring assumptions
- Tailoring the analysis and modelling
- Tailoring the presentation of the data and analysis.

75. This does not imply that the SO would deliberately seek to do any of the above but that the EMR role may give an ability to exert influence on Ministerial decisions and an incentive to use this ability to favour National Grid's businesses. The likelihood of these conflicts of interest being acted on also needs to be considered in the context of the analytical process set out in chapter 3 and Annex D, whereby the analysis will be subject to scrutiny and transparency.

How NG could benefit from the ability to influence decisions – and how this may materialise as a synergy or conflict

76. As the SO role is a relatively small business for National Grid in terms of balance sheet, there may be less incentive to misuse the EMR role within the SO as the returns would be relatively unattractive. Nevertheless, there may be potential for an ability to exert influence to cause a conflict. Depending on the design of the capacity market mechanism, the SO business could benefit from over-procurement of capacity and from exerting influence to favour capacity that creates a more flexible and responsive generation mix. This could help the SO more easily comply with its licence obligations relating to balancing the transmission system. However, the design of the Capacity Market could limit the potential for such a conflict from materialising.

77. Significant synergies with the SO may arise. These are similar to those outlined in the information section – however in this case they depend on the SO using influence in order to promote a holistic consideration of the trade-offs between balancing costs and security of electricity supply.

78. This synergy may facilitate efficiency improvements by allowing for more efficient procurement of reserves (in terms of volume, level of flexibility required in the system and location), consideration of impact on constraints, and better planning decisions to be made by helping the SO to identify the location and technology of generation at the planning stage.

79. Conflicts may arise with the **Transmission Owner (TO) business**, such as potential for increased network build and thus higher capital expenditure from over-estimated capacity requirements[11]. The use of influence might also allow the cost base of their activities to be reduced in a way that could make it more difficult in the short term to assess efficiency, allowing projects to come in under the level anticipated in the RIIO (Revenue = Incentives + Innovation + Outputs) performance based model for regulation because of this change rather than as true efficiencies.

[11] Note that the incentive regime – depending on the design – and other contributing factors could in theory incentivise the TO at certain times seek to avoid transmission build in England and Wales.

80. The TO business could benefit from analysis that influences decisions in favour of onshore build in England and Wales. Certain technologies may offer better opportunities for TO profit e.g. technologies that result in larger plant connecting to the transmission network rather than the distribution network, or onshore wind over offshore wind.

81. Exerting influence to favour generation solutions generally over demand-side reduction solutions (that require less network use) might further enhance the profitability of the electricity transmission network in England and Wales. Given electricity transmission activities make a significant contribution to the overall profits of National Grid, this conflict may have the potential to be material.

82. Conflicts could materialise with the **gas** system operation, transmission and storage businesses, which for instance could benefit from over-estimation of capacity requirements. This would result in new gas generation which would mean more gas being connected to the national transmission system, and there would be higher demand for gas, increasing demand for National Grid's gas storage business. More intermittent technologies could be given undue weight in the analysis provided for CfD decisions, as this would require more gas back-up plants and greater use of the gas network. Although this might make the gas SO role more difficult, it could also allow for more gas transmission and distribution build.

83. Businesses that are subject to a revenue control could benefit from influence over assumptions made on the cost of capital within the analysis – the cost of capital is a key component in revenue control determinations. If the cost of capital used for the analysis supporting decisions in relation to the delivery plan is in any way considered as a benchmark for the cost of capital assumptions used to determine the revenue control for National Grid, it may benefit National Grid to attempt to exert influence in order to inflate, or put insufficient downward pressure on, these estimates. While this is a risk that should be appropriately mitigated, we note that generators have typically not been considered as relevant comparators for the cost of capital of network industries, although the introduction of Contracts for Difference might bring the two closer.

84. The following three examples illustrate how the same potential conflict – that National Grid gives undue weight in the analysis it provides to Government to one of the areas where National Grid has a business interest – may materialise in relation to the CCS business, interconnection and offshore wind transmission:

- The **CCS business** could benefit from analysis that gives undue weight to CCS. This may provide NG Carbon with potential future business opportunities as more emphasis is placed on CCS in technology mix.

- The **interconnector business** could benefit from analysis that promotes interconnection for instance by influencing decisions to favour non-GB generation, or offshore wind that would connect through an interconnector, or otherwise favour EMR scenarios that lead to greater price differentials with neighbouring countries. This could result in increased interconnector flows and potentially impact on interconnector congestion rents, providing signals for new interconnection which could benefit the NG interconnection business.

- The **offshore wind transmission business** could benefit from a technology mix with more offshore wind in order to have more opportunities to bid for offshore transmission licences.

Influence – conflicts and synergies	
3.	**a) Do you think that all the major potential conflicts of interest and synergies arising from an ability to exert influence have been identified? If not, please identify which ones are missing, explaining your reasoning and providing evidence where possible.** **b) Which aspects of the analysis that the SO will carry out for Government are most exposed to a potential conflict of interest? Please explain your reasoning.** **c) Do you agree with our conclusion that the main potential for synergies is between the SO and the EMR role? If not, please explain your reasoning.**

5.3 Ability to exercise discretion: where the System Operator will exercise discretion and how this may materialise as a synergy or conflict

85. There are five functions that have so far been identified as involving an element of decision making for the SO. These are:

1. Allocation of CfDs.

- In allocating CfD contracts, the System Operator will determine whether projects are eligible for CfDs. It will make these decisions according to criteria laid down by Government. This will constitute a 'tick box' exercise with no room for discretion, currently anticipated to require proof of planning permission and connection agreement.

2. The pre-qualification process for the Capacity Market.

- As chapter 4 and Annex D set out, there will be clearly defined pre-qualification requirements for providers wishing to participate in any auction. In order to bid for or trade in capacity agreements, potential providers will need to have completed this process. To conduct this process the SO will determine whether participants have met the pre-qualification criteria as set by Government or Ofgem.

3. Auction for the CM if implemented

- The CM auction is intended to be based on price alone and so will involve no discretion for National Grid.

4. Monitoring during the operational phase for the Capacity Market if implemented

- In the CM the SO will monitor progress of successful participants from the auction to the delivery year and then monitor those capacity providers during the delivery year to ensure they are providing the agreed capacity. It will do this by monitoring against milestones to assess if all agreed capacity will be available in the target year and

checking the availability of plant during delivery year(s). This may require some physical checking and audits which could involve the exercise of some discretion. However it is not currently intended that the SO will have a direct role in imposing any penalties as a result of this monitoring activity beyond the gathering and provision of information.

5. Rule setting

- This would see the SO use its technical expertise and experience of delivering EMR to either make, recommend, or provide data to inform changes to the rules of the CM. As Chapter 4 and Annex D set out, the SO may be able to set some detailed processes for participants, for example the precise timing for auction applications. Any more significant changes to rules would be made by, or require the approval of Ofgem or Government.

86. We are limiting the scope for discretion in these functions by designing mechanistic processes which will be clearly and transparently set out. Oversight of these processes will be provided by Government and Ofgem. The ability to exploit these conflicts of interest needs to be considered in that context of this. However even within these processes, there may be the potential for an element of discretion to be exercised, for example by:

- designing detailed technical rules to the benefit of certain participants
- designing processes that make it complex and confusing, acting as a barrier to participation particularly to new or smaller potential bidders.
- interpreting rules to disadvantage certain potential participants
- making onerous requirements on specific participants
- applying technical requirements so as to reject applications or determine the evidence submitted to be insufficient

How NG can benefit from the System Operator's ability to exercise discretion

87. The extent to which the **SO** may be able to benefit from exercising discretion will depend in part on the design of the CM and CfDs and the existing regulatory framework. Some of these potential benefits could entail costs for consumers – and are conflicts – while other may result in benefits for the consumer – these are synergies.

88. Depending on the design of the capacity market, the SO business could benefit from making decisions to favour capacity that creates a more flexible and responsive generation mix. This could help the SO more easily meet its licence obligations to balance the system. Depending on how the SO incentive regime is designed National Grid could benefit financially from cost efficiency incentives. However, through the design of EMR we intend to limit the potential for such a conflict.

89. This therefore suggests while conflicts of interest with the SO have the potential to arise from an ability to exercise discretion, these may be addressed by EMR process design, or are otherwise manageable, or not particularly material.

90. Synergies with the SO may arise. These are similar to those outlined in the previous two sections – however in this case they depend on the SO exercising discretion in order to allow for a holistic consideration of the trade-offs between balancing costs and security of electricity supply. This synergy may facilitate short term efficiency improvements by allowing for more efficient procurement of reserves (in terms of volume, level of flexibility required in the system and location) and consideration of impact on constraints. It may also allow for better planning decisions by helping the SO to identify the location and technology of generation earlier in the planning stage and to act upon this information to improve system efficiency and security. However we note here that DECC is planning to limit the discretion of the SO so the extent of these synergies is not yet clear.

91. Conflicts may arise with the **Transmission Owner** (TO). The TO business for instance could benefit if new generation is favoured in, or offshore of, England and Wales - resulting in more transmission business. It could benefit from awards that result in larger-generation plants connecting to the transmission network rather than the distribution network. It could benefit if it can take decisions that favour new generation over demand-side reduction solutions (that require less network use).

92. The **gas** system operation, transmission and storage businesses could benefit from technology mixes that require more use of gas. This could result from awarding CfDs to intermittent technologies that require more gas back-up plants, or favouring gas generators over other technologies. This could create additional demand for gas transmission and greater demand for gas.

93. The **CCS** and **interconnector** businesses could benefit from decisions that favour those businesses. This could be through specific decisions that award contracts and agreements to those businesses but also through favouring the sector in general and ensure a more stable future for those businesses.

94. The **Offshore Transmission** business could benefit from the award of CfDs to offshore wind in order to create more opportunities to bid for offshore transmission licences.

Discretion – conflicts and synergies	
4.	**a) Do you think that all the potential conflicts of interest and synergies arising from an ability to exercise discretion have been identified? If not, please explain your reasoning.** **b) Which potential areas of discretion present the most risk of conflicts of interest?** **c) Do you agree with our conclusion that the main potential for synergies is between the SO and the EMR role? If not, please explain your reasoning.**

SummaryThis table necessarily does not capture the nuances of the more detailed analysis set out above. It does not present any firm conclusions from our work and will be subject to further analysis ahead of the final report. As set out in the next chapter, the potential for all the conflicts set out in this chapter to arise are dependent on the design of EMR.

95. Table 5 summarises where conflicts and synergies have the potential to materialise. This table necessarily does not capture the nuances of the more detailed analysis set out above. It does not present any firm conclusions from our work and will be subject to further analysis ahead of the final report. As set out in the next chapter, the potential for all the conflicts set out in this chapter to arise are dependent on the design of EMR.

Table 5: Summary of where ability to act upon a conflicting interest has the potential to lead to conflict / synergy

Where does an ability to act upon a conflicting interest have the potential to lead to conflict / synergy?	Ability	Activities operating under largely monopoly conditions			activities operating under largely competitive conditions
		TO electricity	SO electricity	Gas distribution, transmission, system operation	CCS, LNG, storage, offshore, interconnection
Conflict	Information	x	x	x	√
	Influence	√	√ †	√	√
	Discretion	√	√ †	√	√
Synergy	Information	? *	√	√	x
	Influence	? *	√	?	x
	Discretion	? *	√	?	x

* Although National Grid's recent restructuring – removing system planning from the TO – eliminates a potential key synergy with the TO, there may however exist a potential for investment planning synergies to be realised. This possibility is

represented with a question mark in the TO column of the table.

† Potential conflicts may arise depending on the design of EMR.

All conflicts and synergies	
5.	**a) Do you agree with the assessment of the relative immateriality of the potential conflicts between the EMR role and the SO?** **b) Do you agree that any potential conflicts with other activities including the electricity TO and businesses operating under mainly competitive conditions have the potential to be material?** **c) What further analysis could be carried out to determine the materiality of the conflicts we have identified?**

Chapter 6. Mitigation measures

Summary

The previous chapter set out the potential conflicts and synergies that may arise from National Grid acting as the delivery body for Electricity Market Reform (EMR). These could arise where National Grid has the incentive to use an ability to access information, exert influence or exercise discretion in conducting its EMR role to favour its other business interests. Whether this is likely to materialise as a benefit or cost to consumers signals whether a synergy or a conflict may arise.

The next step set out in the analytical framework is to consider the existing and further mitigations necessary to address these conflicts. This is covered in this chapter. Existing mitigations include both the regulatory regime under which National Grid currently works, and aspects of EMR design such as governance and transparency.

There are four key sets of mitigations that have been identified that may mitigate potential conflicts:

- **Information restrictions and ring-fencing.** By controlling who within National Grid can access certain information, the flow of information to different parts of National Grid can be restricted.
- **Transparency and scrutiny.** The System Operator's (SO) analysis and decisions can be made transparent and open to scrutiny and challenge.
- **Limiting discretion through design.** Designing EMR so that is the process undertaken by the SO are mechanistic, with limited scope for discretion (taking into account that limiting discretion may also reduce synergies). This could also be reinforced with an appeals process to allow decisions to be challenged.
- **Business separation.** This could involve physical, employee or legal separation of functions.

This chapter sets out the range of mitigation options that are available.

177. The previous section identified how the SO's EMR delivery role may give rise to conflicts of interest where National Grid has the ability and incentive to use the information, influence or discretion that it has in conducting its role to favour it's business interests.

178. In particular, the previous section looked at three types of conflicts:

- Conflicts that arise through access to *information*. The SO's new roles will mean that it has access to more information (and information at an earlier stage) than those it does business with and more information on electricity markets (and broader energy markets) in general. It will also have information on the direction of energy market policy.

- Conflicts that arise from the ability to *influence* government decisions on EMR. The SO may be able to influence government decisions through the analysis it provides to Government in terms of the key rules and parameters for CfDs and the Capacity Market.

- Conflicts that arise from the ability to *use discretion*. The SO may have some discretion in performing its roles which may include some flexibility over how CfDs and the Capacity Market are delivered in practice, including contract allocation.

179. We used the analytical framework set out in section 3 to consider possible mitigation measures to reduce the conflicts of interest that may arise. As such, we consider what remedies may be suited to reduce the *ability* and/or reduce the *incentive* for each type of conflict. In this chapter we first consider how the proposed governance arrangements for EMR, EMR design in general, and, where relevant, the existing regulatory regime, may mitigate conflicts of interest. We then look at what additional remedies may be considered should these existing and proposed mitigations not be considered sufficient.

180. The objective is not to eliminate the conflicts entirely, but to reduce the risk of conflicts to an acceptable level and manage the risk that they could arise. EMR will be designed to reduce the scope for National Grid to act on any conflicts. We will seek to ensure that any further mitigation action is effective and proportionate.

6.1. Mitigating information conflicts

Existing framework – regulation and EMR governance

181. On an enduring basis, it is intended that the governance of the SO under EMR and the design of EMR will contribute to the mitigation of information conflicts by addressing the ability to use that information for the benefit of businesses within the NG group. In particular the design of EMR will require:

- Protection of confidential information given to National Grid in its role as the EMR delivery body. Under the current phase of EMR, National Grid has entered into a legally binding management of information agreement with DECC which requires them to put in place protections for the confidential information that it receives as part of EMR.[12]

- Transparency of non-confidential information. The SO will be required to make the non-confidential information that it receives through performing the EMR delivery role available to all stakeholders. We note that the efficacy of the measure may be limited by the fact that it is confidential information that is likely to be the main driver of the ability to benefit.

- Transparency of processes for EMR delivery. The process for how the SO will handle and manage information will be available to those supplying it.

- Governance framework: oversight of how information is used. Government and Ofgem will have clear expectations of how National Grid must perform its functions as EMR

[12]. http://www.decc.gov.uk/en/content/cms/news/nat_grid_mou/nat_grid_mou.aspx

delivery body and these functions could be set out in secondary legislation and made relevant requirements of National Grid's licence. This could include provisions to protect information which may enable Ofgem to oversee that information is protected appropriately. National Grid could be exposed to fines in case of breaches of its licence obligations.

182. The existing regulatory framework under which National Grid operates provides some controls over the flow of information around its businesses. For example:

- Special Condition C1 of National Grid Electricity Transmission plc's (NGET) transmission licence (which is discussed in detail in Annex B) which requires that NGET conducts its transmission business in a way that does not confer an unfair commercial advantage on itself or any affiliate or related undertaking. Determining whether unfair commercial advantage has arisen requires a case by case assessment. The provisions of this licence condition do not therefore constitute a blanket prohibition on any activities which may potentially give rise to unfair commercial advantage.

- Special Condition C2 of NGET's transmission licence (also discussed in detail in Annex B) requires that NGET puts in place systems of control and governance arrangements to ensure compliance with Special Condition C1 and to have in place a compliance statement. For offshore transmission, special condition C2 specifies what systems of control and governance need to be set out in that statement, in order to maintain the appropriate managerial and operational independence of NGET from any relevant offshore transmission interest.

- Section 105 of the Utilities Act 2000, requires that information obtained under specified acts (including, for example, the Electricity Act 1989) that relates to the affairs of an individual or a particular business cannot be disclosed during the lifetime of the individual or while the business is being carried on. This is subject to various exceptions, including where the disclosure is made by one licence holder to another and is required by that other licence holder for the carrying out of the activities authorised by its licence. To the extent that information obtained by NGET is not obtained by virtue of those acts, it would fall outside the scope of section 105. If the acts are amended to include the EMR delivery functions, information obtained by National Grid pursuant to those acts in the future may fall within the scope of section 105

183. The existing regulatory framework does not include broad information separation requirements, though there are certain restrictions on information flows to National Grid's offshore and gas transportation businesses. However, there are no information separation requirements with respect to interconnection, CCS, gas storage or LNG, or within NGET (with the exception of how competing connection offers are dealt with). Current requirements are set out in Annex B.

Further mitigation measures

184. In March we opened a dialogue with stakeholders on conflicts of interest within National Grid and possible mitigations, by way of an open letter and a well attended workshop on the subject. Stakeholders expressed significant concerns with respect to conflicts, including those arising from access to information, and there was broad agreement that preventing

information passing between businesses was necessary. The conclusions of that consultation are set out in the report we published in May[13]. Having heard stakeholders' views, one of our conclusions was that there will need to be specific restrictions on the information the SO obtains through performing the EMR function flowing to its other businesses (particularly those that operate in a competitive environment). This will reduce the ability of National Grid to benefit from the information it gets through performing the EMR delivery role.

185. **Management of access to and use of information** measures could be developed in some of the following ways:

- Provisions and obligations targeting the ability to share information. For example, there is currently a management of information agreement between DECC and National Grid during the set-up of EMR. Going forward management of access and use of information provisions could be developed by Ofgem in consultation with stakeholders. These provisions may become licence requirements enforceable by Ofgem. Alternatively, DECC may look to develop some form of legislative provisions targeting the ability to share information and making them relevant requirements of the licence, which will mean Ofgem will enforce them.

- Measures similar to the Rough undertakings. In this case, the Competition Commission (CC) was asked to report on the acquisition of the Rough gas storage facility (Rough) by Centrica plc (Centrica). The CC concluded that Centrica may be expected to engage in various behaviours including using to its advantage sensitive information gained from the operation of Rough and withholding information about the operation of Rough. The CC imposed various undertakings, including ensuring that Centrica could not use information to advantage the Centrica business over competitors or withhold information from the market by requiring legal, financial and physical separation of Centrica's storage business at Rough from other parts of the Centrica group, placing restrictions on the flow of commercially sensitive information between the two parts of the business and imposing requirements to disclose certain information to the market. Restrictions on the flow of information target the ability to share information, while legal, financial and physical separation buttress this and can also address the incentive to share information.

- Restrictions on the flow of information can be applied to narrowly defined entities, such as specific functions within the EMR delivery entity. For example, there could be a separate information handling team whose sole role would be to aggregate and anonymise data that is then used by the rest of the EMR entity or SO in delivering EMR.

- Business separation / ring-fencing requirements. This relates to the separation of elements of National Grid's business. While management of, access to, and use of information can address the ability to share information, it does not address the incentive to use information. The extent to which business separation measures reduce the incentive (and further reduce the ability) will depend on the degree of separation. Business separation mitigations that reduce the incentive to use information (and discretion and influence) conflicts are described in Annex C.

[13] http://www.ofgem.gov.uk/Pages/MoreInformation.aspx?docid=27&refer=Markets/WhlMkts/EffSystemOps

Information mitigations	
6.	**a) Do you think that conflicts of interest relating to access to information can be addressed through the design of EMR and EMR governance measures set out above? Please explain your reasoning** **b) Which of the additional mitigation measures set out under 'further mitigation measures' should be considered to address these conflicts of interest? Would anything else be necessary? Please explain your reasoning.**

6.2 Mitigating influence conflicts

Existing framework – regulation and EMR governance

186. As set out in chapter 5, some conflicts arise from the SO's ability to influence key EMR decisions. These may occur in instances where the SO has no formal decision making role but where, through the analysis it provides, it can affect the decisions that Ministers make.

187. It is intended that the governance of National Grid for EMR, as well as existing regulatory requirements, will contribute to the mitigation of these conflicts. In particular:

- One of the key mitigations introduced through EMR design is **scrutiny** of the analysis provided to Ministers by the SO. There will be a reputational risk for the SO if it is seen to provide analysis that it stands to gain from. The Government will review the SO's evidence and analysis prior to making any decisions, potentially asking further questions or commissioning independent analysis if required. The independent Panel of Technical Experts (the Panel) will scrutinise the SO's analysis to see if it is robust, up-to-date and impartial. The Panel will work alongside the SO as it draws up analysis and will provide a final report to Government on the quality of the analysis at the end of the analytical process. Government will also consult on the analysis and key decisions so that there will be the opportunity for a wide range of stakeholders to scrutinise the analysis and the key decisions made on the basis of that analysis.

- **Transparency** will allow third party scrutiny, including by generators or other stakeholders with interests in the analysis and resulting decisions. The draft delivery plan, including some of the key EMR decisions and underlying analysis, will be published and consulted on. For example Government will consult on the CfD strike price analysis and the Capacity Market reliability standard. Most of the data and key assumptions underlying the analysis will also be made public including:

    - Evidence on the technology costs for renewables;
    - Evidence on the deployment potential for renewables;
    - Fossil fuel price projections;
    - Wholesale electricity price projections; and
    - Electricity demand projections.

- **Governance framework & oversight of the process.** Government and Ofgem will have clear expectations of how National Grid must performs its functions as the EMR delivery body. The delivery functions could be set out in secondary legislation and made licence requirements. This would mean that Ofgem could enforce them and National Grid would be concerned to carry out its delivery functions as specified in the licence requirements in order to avoid breaches of its licence. This may also provide a reputational incentive on National Grid.

Further mitigation measures

188. We would welcome views on additional measures to increase the transparency of the analysis underlying the analysis that the SO will give to Government. For example the sorts of measures that could be considered include:

- **Transparency of analysis:** publishing detail on the SO model inputs and outputs that stakeholders could use to seek to replicate and verify the analysis using their own models. This would be subject to the constraints of intellectual property rights and commercial in confidence issues around granular data incorporated in the SO model. We would welcome the views of stakeholders on their appetite for transparency of models, data and assumptions.

- Requiring the SO to produce an **impact assessment,** showing what the effects of the different scenarios that it presents to Government would have on National Grid's businesses (e.g. the associated impact on transmission build in England and Wales).

- Requiring the SO to use certain key assumptions provided by Government (e.g. electricity demand, fossil fuel prices). This is the approach being used for the first delivery plan.

189. There may also be a role for Ofgem to scrutinise the SO's analysis and assess the impacts of the analysis on National Grid's businesses.

190. The incentive regimes (where incentives for cost efficiency and the delivery of predefined outputs could be set) could be a useful tool to oversee the SO's performance in the delivery of EMR. However, SO incentives are unlikely to be useful to mitigate information conflicts or to be an effective mitigation measure for influence and discretion conflicts. Incentives require that measurable cost or output targets can be specified ex ante. The SO will gain from over performing on the ex ante targets and lose money if they underperform. For incentive schemes to be effective in addressing potential conflicts of interest, the potential incentive payment for over performing on the cost or output target would have to outweigh the financial gain that could be realised from taking advantage of the conflict. As the potential gain for conflicts can be significant, it may not be possible to design an incentive scheme that can counter the conflict. However, we will continue to consider whether incentives can play a role in addressing conflicts of interest as part of a wider package of mitigation measures.

Influence mitigations	
7.	**a) Do you think that conflicts of interest relating to influence can be addressed through the design of EMR and EMR governance measures set out above? Please explain your reasoning.** **b) Which of the additional mitigation measures set out under 'further mitigation measures' should be considered to address these conflicts of interest? Would anything else be necessary? Please explain your reasoning.**

6.3. Mitigating discretion conflicts

Existing framework – regulation and EMR governance

191. **EMR design:** The proposed roles and responsibilities for the SO in the EMR delivery role will be carefully defined to limit discretion. The SO will not decide on the level of support for different technologies in the CfD strike prices, which will be a decision reserved for Government. The Government will also take the final decision on how much capacity is needed, in relation to the CM, to ensure security of electricity supply. (Government decisions will be based on analysis provided by National Grid; these types of conflicts are discussed in the influence section above). It is intended, where the SO's EMR delivery role entails judgement, that the discretion of the SO will be limited. For example, when deciding whether projects are eligible for CfDs, the SO will be applying strict criteria set out by Government. Similarly when deciding what projects can bid into the capacity auction, the SO will be applying a set of strict criteria set out by Government (or, potentially, by Ofgem).

192. **Transparency in decision-making.** The intention is that the process for how the SO reaches its decisions will be transparent. It will require that clear, detailed criteria are published in advance by Government or Ofgem so that stakeholders can check the decision-making process. The SO will be accountable for the decisions it makes and will be required to set out its reasons for a particular decision, subject to confidentiality requirements. There may be lessons to be learned from elsewhere in the energy sector, for example on how the decision making process can be codified and we would welcome views on how this might be done.

193. **Oversight of how discretion is exercised.** Government and Ofgem will have clear expectations of how National Grid must performs its functions as the EMR delivery body, including how discretion is exercised, which, as discussed above, is likely to be prescribed in a transparent way. The delivery functions will be set out in secondary legislation and made licence requirements. This will mean that Ofgem can enforce them and National Grid could be concerned to carry out its delivery functions as specified in the licence requirements in order to avoid breaches of its licence. This may also provide a reputational incentive on National Grid to use discretion appropriately.

Further mitigation measures

194. **Further limits on discretion**. As set out above, the SO's role will allow for limited discretion. Across the range of decisions the SO will have to make, discretion will be limited by prescribing the criteria for a decision and setting it out in licences, codes or secondary legislation. The aim would be to create a mechanistic process that effectively limits discretion. There may be limits to the overall cost effectiveness of this approach as it could also reduce the extent to which discretion can be used to realise synergies (which may lead to lower overall costs for consumers and a relatively more efficient system) - the main driver for the proposal for the SO to act as the EMR delivery body.

195. **Appeals.** In addition to transparency on the criteria for making decisions, stakeholders will be able to challenge decisions taken by the SO. The exact type of appeal and the process is yet to be finalised and we would welcome views on how this could work. We note that appeals can be seen as a last resort and can be time consuming and costly for the appellant.

The possible mitigations outlined above, that will be designed into the EMR processes and governance regime, can tackle at least to some extent the ability of NG to benefit unduly from the EMR delivery role. They can also provide, to a certain extent, a reputational incentive not to act on conflicts of interest, for example if oversight were to find the SO was obviously biasing its analysis or discretion for National Grid's own benefit. As is the case with influence conflicts, we will also continue to consider whether incentives may play a role as part of a wider package of mitigation measures. In addition to these measures, business separation measures, discussed in the next section, may further reduce the incentive for the SO to use discretion or influence to the advantage of National Grid's business interests (as well as addressing the ability and incentive to use information).

Discretion mitigations	
8.	**a) Do you think that conflicts of interest relating to discretion can be addressed through the design of EMR and EMR governance measures set out above? Please explain your reasoning.** **b) Which of the additional mitigation measures set out under 'further mitigation measures' should be considered to address these conflicts of interest? Would anything else be necessary? Please explain your reasoning.**

6.4 The scope for business separation measures to address identified conflicts

196. The previous sections set out the existing regulatory requirements and the proposals for the design of EMR and the governance arrangements. This section considers whether new business separation arrangements in addition to those mitigations set out above could further

reduce conflicts by tackling the *ability* to use information and the *incentive* to use information, influence or discretion.

197. That is not to say the incentive *and* the ability both need to be addressed to prevent conflicts of interest arising. If the measures above completely remove the ability, there may be no need to address the incentive. The objective is not to eliminate the conflicts entirely, but to reduce the risk of conflicts to an acceptable level and manage the risk that they could arise. Whether the incentive and ability need to be tackled will be considered as part of further analysis of the conflicts.

198. We will consider three specific questions in respect of business separation measures:

i. Are further business separation measures necessary?

ii. What functions / entity should be considered as appropriate to ring fence from other National Grid businesses? This will need to consider how to preserve the synergies identified in chapter 5.

iii. How 'high' should that ring fence be? As noted earlier, we consider at a minimum a ring fence will need to include restrictions on information flows.

199. These three aspects are further considered in turn below.

Are further business separation measures necessary?

200. The discussion above about the nature of the potential conflicts that could arise has highlighted the way that existing EMR design, the proposed governance framework and the existing regulatory regime could limit National Grid's ability to act on conflicts of interest.

201. However there may be a case for business separation measures beyond the information flow restrictions between various National Grid businesses that we concluded were necessary after our March consultation. This may require a better understanding of the materiality of the conflicts which may require additional detail on the design of EMR and a forward looking analysis and assessment of the impact of conflicts. Some element of judgement will be necessary in any such analysis as this is about potential future scenarios and hard evidence will be limited.

202. When considering whether to implement additional business separation measures (or indeed any mitigation measure) it is desirable to consider whether such measures are likely to be:

- Effective: would they address the potential conflict by significantly reducing the likelihood of it occurring? and

- Proportionate: is the scale of intervention appropriate to the scale of the potential problem (or the impact of the problem) that we are trying to solve?

What functions / entity should be considered as appropriate to ring fence from other NG businesses?

203. Chapter 5 discussed synergies, concluding that the main potential synergies with the EMR role would be with the SO business where strategic network design (identifying system requirements – what level of capacity is needed across which boundaries and when to meet customer needs) takes place. The detailed asset design to address the requirements identified by the SO is carried out by the TO. Chapter 5 discusses these synergies in more detail, for example, where the impact of, and on, constraints could be taken into account when assessing the volume and location of capacity required.

204. Chapter 5 also identified potential conflicts as a result of National Grid taking on the EMR delivery role. It concluded that there were some potential interactions with the SO role, for example, that the SO could through the allocation or auction process favour capacity that makes it easier to balance the system. This could reduce the transparency of the process and the confidence that stakeholders have in it and could be addressed through EMR design. Carefully defining the products that are being contracted for and the processes for this contracting, as well as limits on the discretion of the SO, could limit the incentive and ability for the SO to favour certain types of generation or locations.

205. In addition, chapter 5 suggested that the incentive for the SO to act on these conflicts was relatively limited as the SO's contribution to overall profits of National Grid was low and efficient balancing costs are passed through in charges to users of the system (and subsequently to consumers). Potentially more material conflicts were identified with:

- The TO business, which is a major driver of National Grid's overall profits. For example, conflicts in terms of favouring decisions or exerting influence that lead to more network build in England & Wales or that are biased against demand side reduction measures.

- The interconnector business, where, for example National Grid may become aware ahead of competitors that EMR could favour the development of interconnectors through favouring an amount (via the Capacity Market) and mix of generation that will lead to more volatile price differentials with neighbouring markets.

- The CCS business, for example, using the early understanding of likely policy decisions to divert resources towards projects that have characteristics that align more closely with these policy choices.

- The offshore business where, for example, it could benefit from early knowledge of government intentions or through influencing decisions that favour offshore projects, increasing the opportunities for the offshore business to bid for licences.

206. Currently, offshore transmission is subject to a relatively high degree of separation from NGET (the electricity TO and SO), including legal separation, while other business are separated to a lower degree. Within NGET there is relatively little separation under current arrangements, with the exception of Special Condition M relating to applications from one user for alternative connection to the transmission systems in England & Wales and Scotland. As noted, there is limited separation relating to the treatment of connection applications where there is scope for offers from more than one TO.

207. As part of our analysis of what entity would be most appropriate to be the subject of a ring fence so as to most effectively address conflicts arising through National Grid performing the

EMR delivery role while preserving synergies, we considered four main options and these are shown below. Due to the potential extent of conflicts and the lack of any synergies, our analysis in Chapter 3 leads us to make an assumption underlying all four options that the competitive businesses must be outside of any ring fence:

- **(A) The electricity TO and SO (including the EMR delivery function) as the ring-fenced entity.** This approach would cause the least change to current business arrangements and allows for synergies between the TO and SO, It would also allow for synergies between the EMR and SO functions, which were the basis for the decision to confer the delivery role on the SO. However, it may be that this is insufficient given the potential for conflicts of interest between the EMR delivery role and the TO business.

- **(B) The electricity SO (including the EMR function) as the ring-fenced entity.** This approach has the advantage of allowing for synergies between the EMR functions and existing SO functions, which was the basis for the decision to confer the delivery role on the SO. Potential synergies include using EMR information to facilitate strategic network design, potentially reducing the costs of EMR delivery and current system balancing responsibilities which may lead to lower overall costs for consumers and a relatively more efficient system. The combined EMR and SO role could also allow the SO to more efficiently deliver system security, for example, identifying optimal locations for interconnector capacity and increasing the accuracy of its reserve requirement. Balanced against this are the potential loss of synergies between the SO and TO, which are discussed in Section 5.

- **(C) The EMR delivery function as the ring-fenced entity. As with Option B, thi**s would help mitigate conflicts with other NG businesses (the TO, SO and competitive businesses). However, it would also reduce or eliminate synergies with the SO as the SO would be outside the ring fence. This could also potentially increase costs to consumers as some of the functions that could be integrated with the wider SO may have to be carried out separately resulting in duplication. One rationale suggested for this tight ring fence around the EMR delivery role is that to achieve synergies under Option B, the SO may have to have significant discretion that would allow it to adjust the ranking of bids post-auction or the allocation of contracts to factor in, for example, location. This lack of transparency over how EMR processes work could reduce predictability and cause stakeholders to be less confident in the EMR processes.

- **(D) Parts of the combined SO and EMR.** It may be that in designing proportionate responses to potential conflicts of interest, it is preferable to put a ring-fence around some of the combined SO and EMR functions. For example, there could be a separate Information handling team that could be physically, and legally separated from the rest of National Grid. The team's sole duty would be to aggregate and anonymise data that is then used by the SO in delivering EMR. Under this option, all information flows would be strictly monitored. Similarly, if there is one particular element of the delivery role that lead to significant conflicts of interest but which could usefully be separated without affecting synergies with the rest of the role, this could be ring-fenced too.

How 'high' should that ring fence be?

208. The 'height' of the regulatory ring fence depends on the materiality of conflicts, how strong the incentive to act on the conflict is and how easy it is for National Grid to act on the conflict.

209. The height of any regulatory ring fence is a continuum of regulatory measures that can be considered as complementary and mutually reinforcing. Some ring fencing measures, such as restrictions on information flows, address the ability to act on a conflict. Other ring fencing measures, such as employee separation including the de-linking of bonuses from overall group performance, can address to some extent the incentive to act on a conflict. We note that the incentive to act on a conflict cannot be completely removed while the ring-fenced entities remain within one company.

210. We have identified three broad options for regulatory ring fencing, though note that as ring fencing measures are a continuum of measures, other combinations would also be possible.

- **(1) Restrictions on information flows**: This would involve the regulation of information flows from the ring fenced entity including restrictions on access to computer systems. This would prevent information obtained by the ring fenced entity being available to other parts of National Grid, reducing the ability to benefit unfairly from the EMR delivery role. However, restrictions on information flows may not address the information conflict if, for example, employees can transfer relatively easily between businesses. Employee separation measures or additional requirements on the processes for employee transfer between businesses can help to address this issue. There would remain an issue of senior staff potentially having access to commercially useful information (including on the direction of government policy) and being involved in the management of other entities within the NG group and involved at the overall NG group level.

- **(2a) Additional ring fencing measures** could include, in addition to restrictions on information flows:

  - *Physical separation* of hardware, facilities and premises between the EMR delivery body and other National Grid entities. This could strengthen the restriction of information flows, reducing the ability to share information.

  - *Separation of employees and remuneration* (e.g. cooling off periods when staff are transferred between businesses and remuneration and bonuses de-linked from the performance of National Grid). This could strengthen the restriction of information flows. It can also reduce the *incentive* to use the EMR role to favour the TO or other businesses if remuneration is not linked to the performance of other businesses or the National Grid group of companies as a whole.

  - *Financial separation* (e.g. separation of accounts and limits on cross shareholdings), could reduce the *incentive* to use the EMR role to favour the TO or other businesses.

- (2b) **Legal separation**, in addition to the measures set out above, legal separation would require the ring fenced entity to be a separate legal entity and for the directors of the ring fenced entity to act independently of the other National Grid businesses. This could more fully address the information conflict (as those responsible for the management of the ring fenced entity would not participate in the management of the National Grid group overall and would be independent in decision making from other activities outside of the ring fence) and could reduce the *incentive* to use the EMR role to favour the TO or other businesses as the links between the ring fenced business and the rest of the National Grid group would be relatively weak.

211. In terms of the degree of separation, we propose keeping these options open, including the higher degrees of separation given the concerns expressed by some stakeholders and since the details of EMR policy are in the process of being finalised. The final policy design will need to be understood and further analysis carried out to come to a final view on business separation. We would welcome views on the appropriate degree of separation, and your reasons for these views. In particular we would welcome views on what would be a proportionate approach to business separation.

212. As set out in the conclusion of our open letter published in March, we consider that at a minimum there will need to be restrictions on information flows. In addition to this, it may be necessary, subject to further analysis, to include some physical and employee separation to make this more effective. Currently there are only very specific regulatory restrictions on the flow of information within NGET (e.g. between the TO and SO) relating to applications from one user for alternative connection to the transmission systems in England & Wales and Scotland. Whether further degrees of separation are necessary is an issue we intend returning to when we have had feedback from stakeholders, more detail on the design of EMR, and, to the extent that it is possible, a better understanding of the materiality of the conflicts.

Mitigations – business separation	
9.	**a) Overall, will the design of EMR, the proposed governance arrangements and the existing regulatory framework be sufficient to mitigate the conflicts that we have identified? Please explain your reasoning.** **b) Are other mitigations also likely to be necessary? If so, please specify what and why.** **c) Are business separation requirements (beyond restrictions on information flows) necessary?** **d) If business separation is necessary what entity should be subject to the ring fence?** **e) What degree of business separation do you think would be necessary to mitigate conflicts of interest?** **f) How can we best protect the synergies between the EMR and SO roles when considering additional mitigation measures?**

7. Conclusions and next steps

213. This consultation has set out conflicts of interest that may arise from the System Operator taking on the EMR delivery role. It also seeks the views of stakeholders on the range of mitigating actions that are available to address any conflicts of interest.

214. The consultation will close on 29 January 2013. We intend to publish a final report in Spring 2013 which will set out our conclusions for whether further mitigating measures are necessary and, if shown to be necessary, what these will be.

215. Ofgem and DECC would like to hear the views of interested parties in relation to any and all of the issues set out in this consultation, in particular responses to the specific questions that are set out in each section. Responses (clearly marked) should be received by 29 January 2013 and should be sent to: europeanwholesale@ofgem.gov.uk and emi@decc.gsi.gov.uk. Unless marked confidential, all responses will be published by placing them in Ofgem's library and on its website and on DECC's website[14].

216. DECC and Ofgem will hold a workshop in January 2013 to give interested parties the opportunity to share and discuss their views. To register your interest for this event please email your details to emi@decc.gsi.gov.uk. Any questions on this consultation should, in the first instance, be directed to david.oneill@ofgem.gov.uk or giles.hall@decc.gsi.gov.uk.

217. Further work ahead of the final report will include:

- Looking at the materiality of the potential conflicts and likelihood of them arising so that proportionate measures can be designed;
- Holding a workshop for stakeholders ahead of the consultation closing; and
- Analysing the responses of stakeholders to the consultation.

218. If the report concludes that mitigation measures are necessary, these will need to be implemented. These can be done through one or a combination of the following routes:

- Ongoing design of EMR. The details of EMR design including the role of the System Operator will be set out in secondary legislation, which will follow Royal Assent. This is subject to the will of Parliament but is currently anticipated to be the end of 2013.
- Use of the powers to address conflicts of interest that the Government is proposing to take in the Energy Bill. If approved by Parliament, these can be used following Royal Assent.

[14] Respondents may request that their response is confidential. We shall respect this request, subject to any obligations to disclose information, for example, under the Freedom of Information Act 2000 or the Environmental Information Regulations 2004. Respondents who wish to have their responses remain confidential should clearly mark the documents to that effect. Respondents are asked to put any confidential material in the appendices to their responses.

- Use of Ofgem's existing powers
- Voluntary measures taken forward by National Grid.

219. We intend that mitigating measures will be implemented in time for EMR to be operational, currently anticipated to be mid-2014.

220. We recognise that there is still further work to be done on the design of EMR and therefore the role of the SO as the delivery body. We intend to continue to monitor the possibility of new conflicts of interest emerging both during set-up and once EMR is operational. We can, for example, use the consultation on secondary legislation implementing EMR, to seek views from stakeholders on any potential conflicts of interest that were not captured in this consultation, for example if there are significant changes to the role anticipated for the delivery body, and where further detail and clarity on the role of the SO becomes available.

Annex A: Overview of National Grid's existing business interests

221. National Grid, the parent company of the Great Britain (and offshore) electricity System Operator, is a FTSE 100 shareholder-owned company. It has a range of business activities across North East America and GB. National Grid Electricity Transmission plc (NGET) holds a transmission licence granted under s.6(1)(b) of the Electricity Act 1989, which covers its activities as SO in GB mainland and in offshore waters.

222. Figure 2 shows NGET's electricity transmission system for England and Wales (orange), the LNG terminal owned by National Grid (black triangle) the National Grid gas distribution operating area (shaded green area) and gas transmission (green lines). National Grid's subsidiaries also have ownership interests in electricity interconnectors with Netherlands and France – Figure 2 shows where they meet the UK.

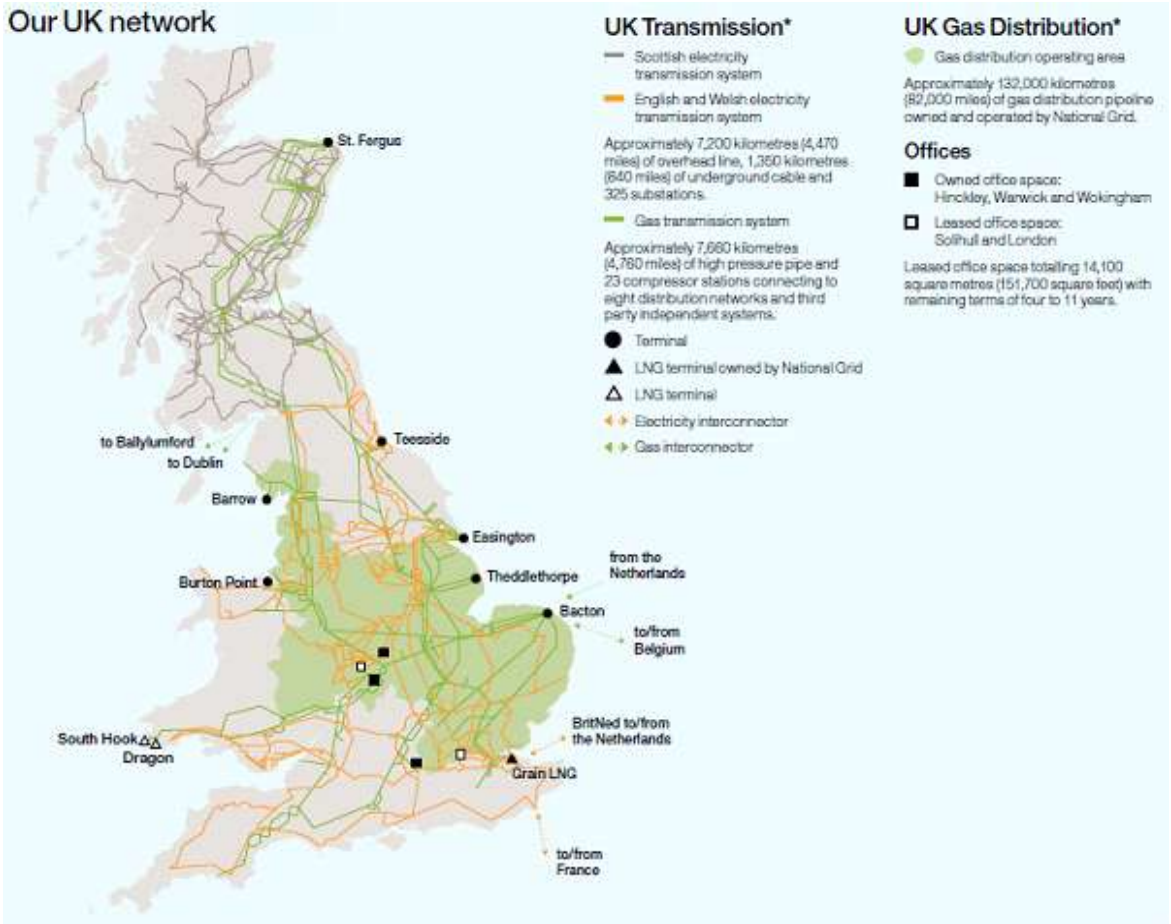


Figure 2: National Grid UK network business

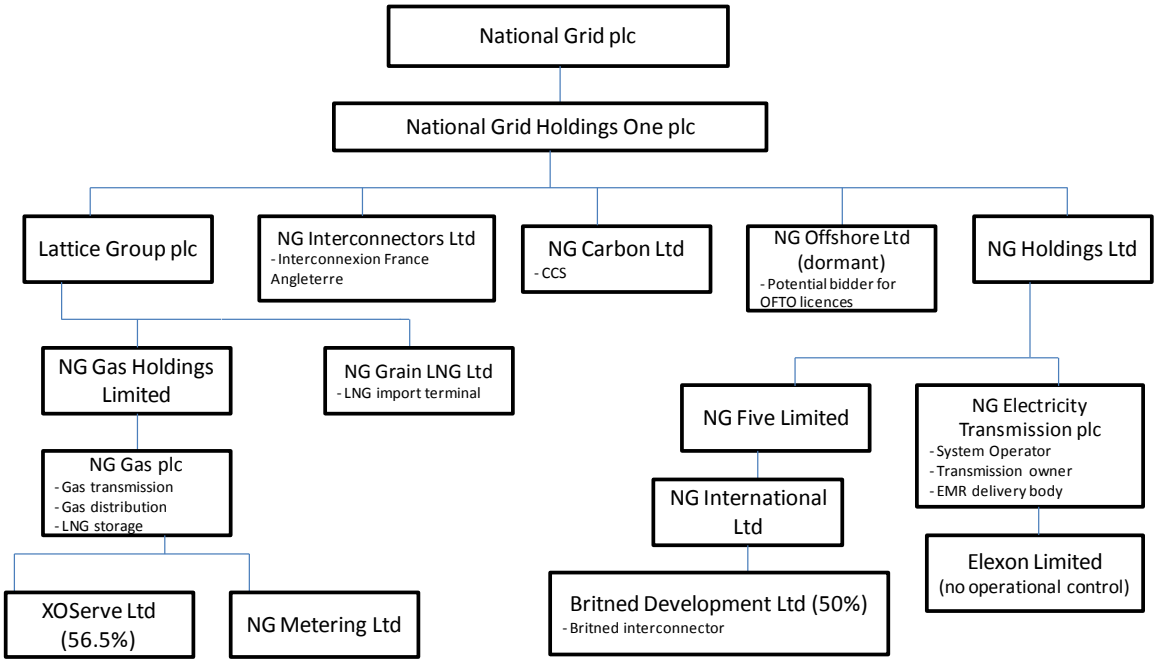
Source: National Grid Annual Report 2011/12

223. Not all of National Grid's broad range of businesses are explicitly shown in Figure 2. NGET is the electricity system operator for Great Britain and also the National Electricity Transmission System Operator for offshore waters and projects located in the Renewable Energy Zones. National Grid Gas plc is the SO for the gas transmission network for Great

Britain. Also not shown are the inactive offshore electricity transmission business (which currently does not hold any licenses), gas storage and National Grid's CCS business – NG Carbon Ltd – created to develop carbon dioxide transportation infrastructure in the UK.

224. Figure 3 is a simplified representation of the National Grid UK group structure, and shows:

- That National Grid's electricity System Operator activities are conducted by the electricity transmission licensee. The SO is therefore not a distinct legal entity: the TO and SO are part of NGET plc.
- That National Grid is not a vertically integrated undertaking – it does not undertake generation or supply activities in the UK.
- The broad range of National Grid activities in energy networks – that National Grid is a horizontally integrated undertaking in UK networks



Based on National Grid plc corporate structure at 30/9/2011.
This chart shows the principal UK operating companies and excludes a number of National Grid PLC's businesses including: finance, overseas, property, etc
NG = National Grid

Figure 3: National Grid's UK group structure

Source: National Grid

225. Figure 4 shows a snap shot for the financial year 2011/12 of the contribution of each business activity to National Grid's total UK turnover of £5.5bn.

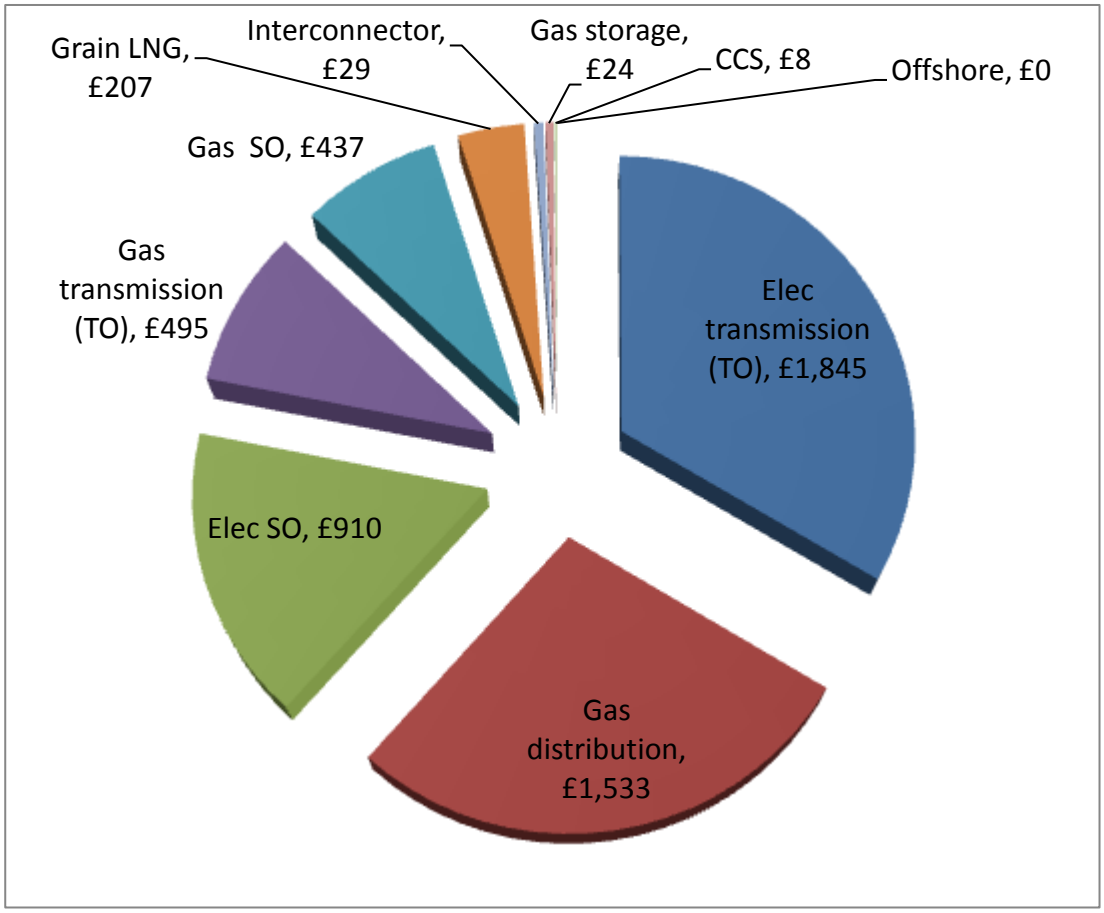


Figure 4: National Grid plc UK turnover, 2011-12, £m

Source: National Grid. (Note, first this omits turnover of gas metering and of property, and second electricity transmission also includes amounts to be remitted to Scottish Transmission companies).

226. Figure 4 shows that operations in mainly monopoly conditions account for the vast majority of National Grid's UK turnover. Of these, the single largest item is electricity transmission at £1.8 billion. Gas distribution follows closely behind with a turnover at £1.5 billion. Other businesses operating in largely monopoly conditions – including electricity and gas system operation, and gas transmission, account for between £910m and £437m in turnover respectively. Businesses operating under largely competitive conditions – Grain LNG, interconnection, storage, CCS and offshore (inactive) – account for a relatively small portion of National Grid's turnover: around £270m.

Annex B. Overview of existing regulatory regime for National Grid

Legislative and regulatory constraints and Ofgem oversight

227. The regulated entities within National Grid are electricity transmission, gas transmission, gas distribution, electricity interconnection, gas storage and Liquefied Natural Gas (LNG) facilities. The regulatory regime is formed of legislation and licences, giving powers and duties to the Gas and Electricity Market Authority (GEMA) in relation to licensed entities (and storage and LNG facility operators). GEMA is supported by the Office of Gas and Electricity Markets (Ofgem) as the GB regulator. The Authority's powers and duties are largely provided for in statute – in particular the Gas Act 1986, the Electricity Act 1989, the Utilities Act 2000, the Competition Act 1998, the Enterprise Act 2002 and the Energy Acts of 2004, 2008 and 2010 – as well as arising directly from European Union legislation.

228. Section 4(1) of the Electricity Act 1989 (as amended) sets out that persons involved in the generation, distribution, transmission, supply, transportation or who participate in the operation of electricity interconnectors, require licences15. Persons may be exempted from this requirement by the Secretary of State under section 5 of the Electricity Act 1989. A licence may include such conditions as appear to the Authority to be requisite or expedient having regard to its principal objective and statutory duties. This section summarises the relevant legislation and regulations that affect National Grid's regulated entities, presenting them by National Grid business activity.

229. One example of a relevant licence condition is Special Condition C1 of National Grid Electricity Transmission plc's (NGET) transmission licence requires that NGET conducts its transmission business[16] in a manner best calculated to secure that in meeting its obligations under the licence the licensee (NGET) or any affiliate or related undertaking of the licensee[17] obtains no unfair commercial advantage including, in particular, any such advantage from a preferential or discriminatory arrangement. In order to determine whether NGET was giving unfair commercial advantage to an affiliate or related undertaking the relevant entity would need to fall within the definition of either an affiliate or a related undertaking of the licensee as such terms are defined in NGET's transmission licence, and the facts would have to be assessed on a case by case basis to determine whether unfair commercial advantage is conferred by the activity in question. A case by case assessment would also need to be made in order to determine whether any unfair commercial advantage was accruing to NGET. The provisions of this licence condition do not therefore constitute a blanket prohibition on any activities which may potentially give rise to unfair commercial advantage.

[15] The licenses also require the establishment of a number of multilateral industry codes that underpin electricity markets. These codes establish detailed rules for industry that govern market operation, the terms for connection and access to energy networks. Licensees need to sign up as parties to codes in order to operate in electricity markets.

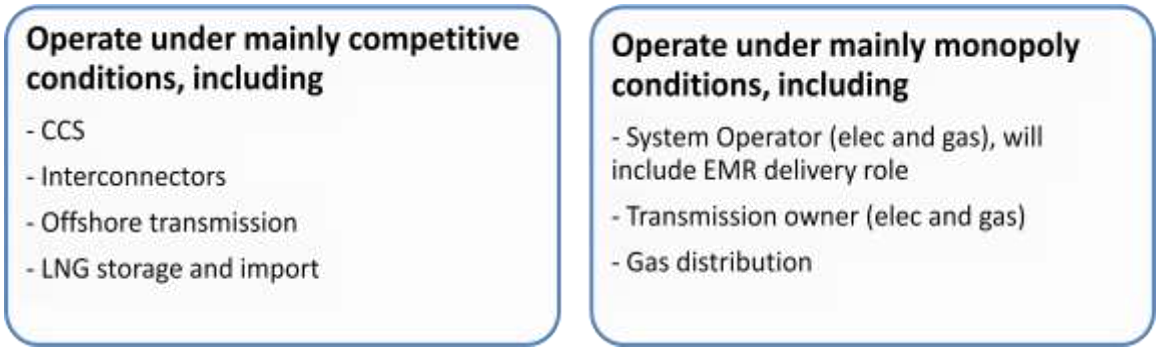
[16] 'transmission business' is defined in NGET's transmission licence and includes most of the activities conducted by NGET except provision of settlement services or provision of services to/ on behalf of other persons.

[17] 'affiliate' and 'related undertaking' are defined in NGET's transmission licence by cross-reference to the definition in the Companies Act 1985.

230. Special Condition C2 of NGET's transmission licence requires that NGET puts in place systems of control and governance arrangements necessary to ensure compliance with Special Condition C1 (and standard conditions B5 and B6 of NGET's transmission licence) and has in place a statement describing the practices, procedures and systems adopted to secure compliance. For relevant offshore transmission interests, special condition C2 specifies what systems of control and governance (detailed in the table 6 in Annex B) need to be set out in that statement, in order to maintain the appropriate managerial and operational independence of NGET from any relevant offshore transmission interest[18].

231. Before outlining the relevant legislation and regulation by business activity, a distinction can be made between National Grid's activities that operate in mainly competitive conditions, and those that operate under mainly monopoly conditions. See Figure 6.

Figure 5: National Grid's relevant activities according to extent of competition



232. Note that Ofgem regulates all of those entities except for CCS. (Figure 5 does not cover all of National Grid's activities – for example, gas metering.)This distinction between competition and monopoly conditions is helpful for much of the analysis in this document, not least because the two groups are exposed to different levels of competition and consequently subject to different types of regulation. While it can be argued for example that there may be consumer benefits if those businesses that operate in monopoly conditions have access to more information, this is less likely to be the case where competitors are present and may be disadvantaged.

233. Businesses that operate in a competitive market are incentivised to be efficient and to offer value for money for their consumers through the possibility of losing those customers to more efficient and better value competitors. Some businesses such as NG offshore transmission are subject to competitive tendering which provide a market based incentive to offer value for money. Once allocated the licence provides its holder with a time limited regional monopoly. As such the licensee is subject to licence requirements and regulation. Another business in this category includes gas metering where the market sector is open to competition but where some elements of the business are subject to price controls. According to the distinction highlighted above, these businesses are labelled as operating 'mainly' under competitive conditions

[18] A 'relevant offshore transmission interest' is defined in special condition C2 as an affiliate, related undertaking or business unit of an ultimate controller of the licensee which (a) is participating in, or intends to participate in, a competitive tender exercise to determine a person to whom an offshore transmission licence is to be granted; or (b) is an offshore transmission owner.

234. Businesses operating under mainly monopoly conditions are not exposed to competitive constraints. They are typically monopoly networks that have largely already been built, and are not exposed to competition for new network build in the way interconnection and offshore transmission are, although Ofgem is introducing competition in transmission for certain networks. For this reason they are subject to more intrusive regulation.

Businesses operating under largely monopoly conditions

226. Presented below is an overview of the legislation and regulatory requirements to which National Grid businesses operating under largely monopoly conditions are subject. It shows the extent of regulation pertaining to these businesses – including controls and stipulations relating to revenues, outputs, and prices, among other factors.

- National Grid Electricity Transmission plc (NGET): owns the high voltage electricity transmission system in England and Wales. It is the System Operator of GB onshore and offshore transmission systems.
    - Relevant legislation:
        - Includes the electricity transmission licence granted under s.6(1)(b) of the Electricity Act 1989.
        - A summary of legal and licence obligations is presented in Table 6 at the end of this Annex
- National Grid Gas plc: owns and operates the high pressure transportation system in GB, four distribution networks and LNG storage facilities.
    - Relevant regulation: includes two gas transporter licences granted under s. 7 of the Gas Act 1986: one in respect of its gas national transmission system (NTS) business and one in respect of its four gas distribution network (DN) businesses. Revenues and outputs to be delivered for transportation, distribution and LNG storage are also subject to price controls set by the Authority.
- Xoserve Limited (56.5% owned by National Grid Gas plc): manages the data associated with the majority of gas meter points across the country, carries out registration and customer switching services for the industry and manages the energy allocation and invoicing on behalf of Gas Transporters.
    - Relevant regulation: Xoserve discharges service obligations, the scope of which is set out in the Uniform Network Code (signed by gas transporters and gas shippers) and the Agency Services Agreement (signed by gas transporters). Ofgem has recently favoured adoption of a cooperative model where decisions and costs of data services are borne by users (shippers/suppliers)
- National Grid Metering Limited (owned by National Grid Gas plc): provides metering services to around 17 million gas meters for the companies that supply gas to domestic, industrial and commercial consumers.
- Elexon Limited (owned by NGET): delivers the Balancing and Settlement Code (BSC).
    - Relevant legislation: includes Section C of the BSC which prescribes the constitution of Elexon, its role, powers, management, liability position and subsidiaries. NGET has no operational control. Elexon is not regulated by Ofgem.

Activities operating under *largely competitive conditions*

227. Below is an overview of the legislation and regulatory requirements to which National Grid businesses operating under largely competitive conditions are subject. These serve largely to regulate the monopoly post award of contract: before this stage the market provides the main constraint.

- National Grid Grain LNG Limited owns and operates the Isle of Grain LNG import terminal
    - Relevant legislation includes: exemption from third-party access required by section 19D granted by Ofgem under s. 19C of the Gas Act 1986.
- National Grid Interconnectors Limited: jointly owns and operates the Interconnexion France Angleterre (IFA) with RTE SA (the French transmission system operator)
    - Relevant regulation includes: Interconnector licence granted under s.6(1) (e) of the Electricity Act 1989.
- BritNed Development Limited (50% owned): a joint venture with Dutch transmission system operator TenneT. The company owns and operates the GB – Netherlands interconnector.
    - Relevant regulation includes: Interconnector licence granted under s.6 (1)(e) of the Electricity Act 1989. BritNed has an exemption under licence condition 12 of its licence providing that standard licence conditions 9 (use of revenues), 10 (charging methodology to apply to third party access) and 11 (requirement to offer terms for access) of its licence are suspended from operation, on the terms and subject to the conditions set out in its exemption.
- National Grid Carbon Limited: conducts Carbon capture storage related activities
    - Relevant legislation includes: DECC (OCCS) not Ofgem has responsibility for the code giving power to regulate CCS activities.
- National Grid International Limited: develops interconnectors with various countries
    - Relevant legislation includes: Any interconnectors developed will be subject to licensing under s.6(1) (e) of the Electricity Act 1989.
- National Grid Offshore Limited: is dormant but may bid for future offshore transmission operation (OFTO) licences.
    - Relevant legislation includes: the bidding process is covered by the Tender Regulations (SI 1903) and any licence would be granted under s.6(1)(b) of the Electricity Act 1989.

SO incentives regulation

228. The SO activities of the SO are also subject to incentive regulation. Incentive regulation is designed to incentivise the SOs to deliver their its functions at value for money for customers.

229. From 2013 this regulation will be based on the RIIO (Revenue = Incentives + Innovation + Outputs) principles for regulating monopoly energy companies. These principles ensure that sustainability and the needs of both current and future consumers are at the heart of regulation. The SO incentive regime is currently being revised in line with RIIO and, running from 2013, it will be the first SO regulatory framework to be based on the RIIO principles. These aim to:

- Focus the SO on delivery of outputs: Ofgem will set out which outputs the SO will be held accountable to deliver, and will set suitable incentives relating to these outputs through licence requirements, reputational incentives and financial incentive schemes. Ofgem will also set out how output incentive schemes may be adapted over time.

- Focus the SO on delivering outputs at long term value for money: Ofgem will set cost targets and upfront sharing factors that determine how cost reductions (or increases) will be shared between the SO and consumers. The cost incentive schemes will include uncertainty mechanisms where appropriate.

- Focus the SO on working with the TOs to reduce overall costs of system operation: Ofgem will set out outputs and cost incentives taking into account the interactions between the SO and TO roles, and the interactions of incentives on them.

230. Ofgem has recently consulted on the incentive regime from April 2013[19]. In this paper, proposals were put forward for a range of incentives for electricity outputs (and gas system costs and outputs), covering a period of up to eight years. For the electricity costs scheme a different approach was proposed, moving away from complex modelling and focussing more on establishing principles and monitoring outcomes with financial incentives consistent with this approach.

Table 6: Summary representation of relevant legal and licence obligations (cont...)

This table is a summary representation of the relevant legal and licence obligations and is not a substitute for reading and understanding the relevant legal obligation. A tick in the column indicates that there may be some degree of separation imposed by the relevant requirements between NGET and other businesses in the NG Group. This requirement may not apply on the facts of the particular case, an exception may apply, or the relevant circumstance may fall outside of the scope of the separation requirement. A case by case assessment will therefore be necessary of the application of the requirements summarised in tabular form below to the circumstances of a particular case.

[19] http://www.ofgem.gov.uk/Markets/WhlMkts/EffSystemOps/SystOpIncent/Documents1/IP%20SO%202013.pdf

Existing separation requirements between NGET and other NG businesses	Offshore transmission	Inter-connection	CCS	Gas transportation	Gas distribution	Gas storage & LNG
Other obligations						
NGET is not permitted to conduct any business or carry on any activity other than the transmission business. The 'transmission business' is defined as the authorised business of NGET or any affiliate or related undertaking in the planning or development or construction or operation or maintenance of NGET's transmission system or the national electricity transmission system or the provision of transmission services or the co-ordination and direction of the flow of electricity onto and over the national electricity transmission system including the balancing services activity, and any business in providing connections to the national electricity transmission system, but does not include any business of NGET or any affiliate or related undertaking in the provision of settlement services in connection with the BSC or the Pooling and Settlement Agreement; or(ii) any other business of NGET or any affiliate or related undertaking in the provision of services to or on behalf of any one or more persons. (Condition B6 of the standard conditions of the transmission licence - Restriction on activity and financial ring fencing)	√	√	√	√	√	√
Prohibition on staff from operational decisions which might be discriminatory (Gas Transporter Standard licence conditions Condition 4D: Conduct of Transportation Business)					√	
Having taken into account relevant price and technical differences, NGET **cannot discriminate** as between any persons or classes of persons in its procurement or use of balancing services. (Condition C16 of NGET's licence – Procurement and use of balancing services)		√				

This table is a summary representation of the relevant legal and licence obligations and is not a substitute for reading and understanding the relevant legal obligation. A tick in the column indicates that there may be some degree of separation imposed by the relevant requirements between NGET and other businesses in the NG Group. This requirement may not apply on the facts of the particular case, an exception may apply, or the relevant circumstance may fall outside of the scope of the separation requirement. A case by case assessment will therefore be necessary of the application of the requirements summarised in tabular form below to the circumstances of a particular case.						
Existing separation requirements between NGET and other NG businesses	Offshore transmission	Inter-connection	CCS	Gas transportation	Gas distribution	Gas storage & LNG
Prohibition of discrimination NGET is required to conduct its transmission to secure that, in meeting its obligations under its transmission licence: (a) the licensee; (b) any affiliate or related undertaking of the licensee including,: (i) any affiliate or related undertaking that intends to participate in a competitive tender exercise to determine a person to whom an offshore transmission licence is to be granted; or (ii) any affiliate or related undertaking participating in a competitive tender exercise to determine a person to whom an offshore transmission licence is to be granted; that is a subsidiary of, or is controlled by an ultimate controller of, NGET; (c) any user of the national electricity transmission system; or (d) any other transmission licensee; obtains no unfair commercial advantage including, in particular, any such advantage from a preferential or discriminatory arrangement, being, in the case of such an advantage accruing to NGET, one in connection with a business other than its transmission business. (Special Condition C1 of NGET's licence: Prohibited Activities and Conduct of the Transmission Business). **This condition requires assessment of whether 'unfair commercial advantage' accrued to the relevant entity on a case by case basis. Confirmation of NGET affiliates and related undertakings is required**	√	√	√	√	√	√
Legal						
separate boards to fulfil their role as if director of a company whose sole business is the business in respect of which he is a member of has been established This establishes separate managerial boards for each of the system operator and the relevant offshore transmission interest (Extract from Special Condition C2 of NGET's licence Separation of NGET and Relevant Offshore Transmission interests)	√					

This table is a summary representation of the relevant legal and licence obligations and is not a substitute for reading and understanding the relevant legal obligation. A tick in the column indicates that there may be some degree of separation imposed by the relevant requirements between NGET and other businesses in the NG Group. This requirement may not apply on the facts of the particular case, an exception may apply, or the relevant circumstance may fall outside of the scope of the separation requirement. A case by case assessment will therefore be necessary of the application of the requirements summarised in tabular form below to the circumstances of a particular case.						
Existing separation requirements between NGET and other NG businesses	Offshore transmission	Inter-connection	CCS	Gas transportation	Gas distribution	Gas storage & LNG
NGET is required, in carrying out its licensed activities, to put in place and at all times maintain such **systems of control and other governance arrangements** which are necessary to ensure that it complies with the obligations in standard condition B5 (Prohibition of Cross-subsidies), standard condition B6 (Restriction on Activity and Financial Ring Fencing), and Special Condition C1 (Prohibited Activities and Conduct of the Transmission Business). (Extract from Special Condition C2 of NGET's licence Separation of NGET and Relevant Offshore Transmission interests)	√	√	√	√	√	√
Financial						
Prohibitions of cross-subsidies NGET is required to procure that the transmission business does not give any cross-subsidy to, or receive any cross-subsidy from, any other business of the NGET or of an affiliate or related undertaking of NGET. This licence condition only prohibits cross-subsidies to the extent that the businesses are indeed affiliates or related undertakings of NGET within the meaning of the CA 1985. (Condition B5 – Prohibition of Cross Subsidies)	√	√	√	√	√	√
NGET is required to keep such **accounting records** and other records as are necessary so that the revenues, costs, assets, liabilities, reserves, and provisions of, or reasonably attributable to the transmission business are separately identifiable in the accounting records of NGET. (Condition B1 of NGET's licence – Regulatory Accounts)	√	√	√	√	√	√

This table is a summary representation of the relevant legal and licence obligations and is not a substitute for reading and understanding the relevant legal obligation. A tick in the column indicates that there may be some degree of separation imposed by the relevant requirements between NGET and other businesses in the NG Group. This requirement may not apply on the facts of the particular case, an exception may apply, or the relevant circumstance may fall outside of the scope of the separation requirement. A case by case assessment will therefore be necessary of the application of the requirements summarised in tabular form below to the circumstances of a particular case.						
Existing separation requirements between NGET and other NG businesses	Offshore transmission	Inter-connection	CCS	Gas transportation	Gas distribution	Gas storage & LNG
Employee						
NGET is required to ensure (without prejudice to the generality of the requirement above) to maintain appropriate **managerial and operational independence** of NGET from any relevant offshore transmission interest (an offshore transmission interest is defined as an affiliate, related undertaking, or business unit of an ultimate controller of NGET which intends to participate in an offshore licence tender or is an offshore transmission owner). This provides for separate requirements relating to the separation of relevant offshore transmission interest and NGET. NGET is required to ensure that no breach of the requirements to maintain appropriate managerial and operational independence of NGET from any relevant offshore transmission interest occurs as a result of any arrangements for access by any relevant offshore transmission interest or by any person engaged in, or in respect of, the relevant offshore transmission interest with respect to equipment, facilities or property employed for the management or operation of the national electricity transmission system under NGET's transmission licence. (Extract from Special Condition C2 Separation of NGET and Relevant Offshore Transmission interests)	√					

This table is a summary representation of the relevant legal and licence obligations and is not a substitute for reading and understanding the relevant legal obligation. A tick in the column indicates that there may be some degree of separation imposed by the relevant requirements between NGET and other businesses in the NG Group. This requirement may not apply on the facts of the particular case, an exception may apply, or the relevant circumstance may fall outside of the scope of the separation requirement. A case by case assessment will therefore be necessary of the application of the requirements summarised in tabular form below to the circumstances of a particular case.						
Existing separation requirements between NGET and other NG businesses	Offshore transmission	Inter-connection	CCS	Gas transportation	Gas distribution	Gas storage & LNG
Physical						
NGET is required to ensure that no breach of the requirements to maintain appropriate managerial and operational independence of NGET from any relevant offshore transmission interest occurs as a result of any arrangements for access by any relevant offshore transmission interest or by any person engaged in, or in respect of, the relevant offshore transmission interest with respect to **premises or parts of premises** occupied by persons engaged in, or engaged in respect of, the management or operation of the national electricity transmission system under NGET's transmission licence. (Extract from Special Condition C2 Separation of NGET and Relevant Offshore Transmission interests)	√					
Information separation						
Section 105 of the Utilities Act 2000: information (relating to the "affairs of any individual or any particular business") is not to be disclosed during the lifetime of the individual or so long as the business continues. There are significant exceptions such as that information can be disclosed where disclosure is made by one licence holder to another and is required by that other licence holder for carrying out activities authorised by that licence	√	√	√	√	√	√

Annex C. Business separation

231. Business separation measures may affect incentives across a range of conflict types, as well as abilities. As business separation measures cut across conflict types, an introduction to business separation measures and how they may mitigate conflicts in principle is presented here. How they mitigate in practice is considered in chapter 6.

232. Examples of business separation requirements are outlined in Table 7 below, broadly increasing in stringency

Table 7: Examples of business separation requirements (existing and potential)

Information separation	restrictions on access to confidential information and computer systems
Separation of employees and staff	separation of employee incentive schemes.
	strict requirements affecting the transfer of employees from one business to another such as 3 month cooling off periods
	appointment and duties of a compliance monitor may ensure appropriate separation of staff as well as provide accountability for other separation measures
Physical separation	typically includes separation of property, facilities and premises
Financial separation and additional financial obligations	separate auditing and reporting of accounts
	separation of revenues and prohibition of cross-subsidy
	requirement not to hold or acquire shares or investments in other relevant business
Legal separation and additional obligations	a requirement for directors to fulfil their roles as a director of a separate company whose sole business is the business in respect of which the legal board of which he is a member has been established
	a requirement for the licensee to procure from each company which is at any time an ultimate controller of the licensee a legally enforceable undertaking in that the ultimate controller will refrain from any action which would then be likely to cause the licensee to breach any of its obligations under relevant legislation or under the relevant licence. This condition attempts to deter ultimate controllers from directing different businesses such that they benefit unfairly
	a requirement to act in an economic and efficient way, and not to discriminate against or in favour of other parties (Licence conditions, Electricity Act 1989/ Gas Act 1986)

233. These measures are additive and complementary. For example, the separation of information may be further strengthened by all the other measures. Similarly, the effectiveness of financial separation or legal separation may be greatly enhanced by the other.

234. There are three potential ways that business separation measures may mitigate negative effects arising from access to information. They are

i. to restrict the ability to exploit a conflict of interest e.g. by placing controls on the flow of information.

ii. to diminish incentives – the potential benefit to National Grid of acting on a conflict of interest where it has the ability to do so, through, for instance:

- financial separation – such measures might hinder the EMR delivery body from directly internalising financial benefits accruing to other National Grid businesses from its actions and so diminish the incentive at the SO Director level (but not National Grid level) to pursue the conflicting interest. Employee separation measures that restrict the scope for broad NG employee remuneration schemes may similarly help to ensure incentives are focused at the business activity level rather than National Grid level.

- legal separation – may similarly help to focus incentives at the business activity level rather than National Grid level. An example is a requirement for the relevant entities to be legally separate and for the directors to fulfil their roles as an independent director of a separate company whose sole business is the business in respect of which the board of which he is a member has been established

- ownership separation – can entirely eliminate the incentive and remove the conflict of interest. However ownership separation would also entirely eliminate all the synergies with National Grid existing operations.

iii. a combination of the above (to restrict abilities and to diminish incentives)

235. Table 8 maps different business separation measures according to their potential in principle to address the ability – to access information, to exercise discretion, and to exert influence – to act upon the conflicting interest (ability to access information, to exercise discretion, and to exert influence).

Table 8: Potential for business separation measures to address conflicts by type

<table>
<tr><td rowspan="3">measures</td><td colspan="6">Conflict type</td></tr>
<tr><td colspan="2">to access information</td><td colspan="2">to exert influence</td><td colspan="2">to exercise discretion</td></tr>
<tr><td>ability</td><td>incentive</td><td>ability</td><td>incentive</td><td>ability</td><td>incentive</td></tr>
<tr><td>information</td><td rowspan="5">has potential to restrict ability

(measures may be complementary and additive)</td><td rowspan="2">does not address incentive</td><td rowspan="5">does not restrict ability</td><td rowspan="2">does not address incentive</td><td rowspan="5">does not restrict ability</td><td rowspan="2">does not address incentive</td></tr>
<tr><td>physical</td></tr>
<tr><td>employee</td><td rowspan="3">(particularly in combination) reduces incentive at EMR level but not Group level</td><td rowspan="3">(particularly in combination) reduces incentive at EMR level but not Group level</td><td rowspan="3">(particularly in combination) reduces incentive at EMR level but not Group level</td></tr>
<tr><td>financial</td></tr>
<tr><td>legal</td></tr>
</table>

Penalties for failure to comply with licence conditions

236. Ofgem has powers that allow it to ensure compliance with business separation requirements – those that are already in place as well as those that might be put in place.

237. Ofgem‘s enforcement powers derive from legislation governing the gas and electricity markets in Great Britain. The principal legislation governing Ofgem comprises the Gas Act 1986, the Electricity Act 1989 and the Utilities Act 2000. Under the Gas Act 1986 and under the Electricity Act 19891989, the Authority has powers to ensure that regulated persons (as defined in the Gas Act 1986 and in the Electricity Act 1989) comply with licence conditions and relevant requirements of the Acts. The term regulated person is defined in the Gas Act and in the Electricity Acts and includes under the Gas Act 1986 a licence holder; a distribution exemption holder; a supply exemption holder; the owner of a storage facility and the owner of an LNG import or export facility. Under the Electricity act 1989 it includes a licence holder; a distribution exemption holder and a supply exemption holder.

238. Where it appears to the Authority that a regulated person may be contravening, or may have contravened, any licence condition – including a business separation requirement – or relevant requirement of the Acts, Ofgem may decide to investigate and the Authority may serve a notice on any person, for instance requiring certain information.

239. Where the Authority is satisfied that a regulated person is contravening or is likely to contravene any licence condition or relevant requirement of the Acts, the Authority can issue provisional or final orders to make provision for the purpose of securing compliance with that condition or requirement.

240. The Authority may also impose on the regulated person a financial penalty of such amount as is reasonable in the circumstances of the case – not exceeding 10% of the regulated persons’ applicable turnover in its business year preceding the date of the Authority’s notice.

The Authority will not impose a penalty on a regulated person where it is satisfied that the most appropriate way of proceeding is under the Competition Act 1998.

Annex D. Description of the EMR delivery role

241. This section describes the functions of the SO's role in delivering EMR. The aim of this Annex is to provide sufficient detail on the SO's role for respondents to answer the questions in the consultation on potential conflicts and synergies and possible mitigation measures. This chapter focuses on the SO role during the operational life of EMR from 2014.

242. There are other organisations that are part of the EMR process. These include Government, Ofgem, the CfD counterparty, industry and consumer groups. Where the activities of these bodies intersect with those of the System Operator they are covered below. Further details on the roles of these bodies within EMR are covered in the policy update published alongside introduction of the Energy Bill[20].

Summary of the functions of the EMR delivery role

	Capacity Market (assuming Capacity Market is initiated)	**Contracts for Difference**
Analysis	• Collecting evidence and conducting analysis and modelling to inform key Ministerial decisions on whether and how the Capacity Market will run, in particular how much capacity to contract for. This will be set out in the delivery plan and annual updates if the Capacity Market is initiated.	• Collecting evidence and conducting analysis and modelling to inform key Ministerial decisions on the level of support for technologies. This will inform the delivery plan and annual updates.
Allocation	• Carrying out the pre-qualification process to determine participation in any capacity auction. • Running a competitive auction for providers of capacity.	• Instructing CfD counterparty to sign contracts based on assessment of eligibility criteria set by Government, within budgetary limits set by Government • Running a competitive allocation process, where Government has decided to move to competitive processes. Any competitive process will be designed and set

[20] http://www.decc.gov.uk/en/content/cms/meeting_energy/markets/electricity/electricity.aspx

		out by Government.
Operational	• Monitoring progress of capacity providers against milestones to assess if all the agreed capacity will be provided in the target year. • Monitoring delivery of plant during the delivery year e.g. providing information on whether plant is available at times of system stress • May have a role in imposing penalties according to pre-defined rules set by Government or Ofgem for non-delivery of capacity.	• Monitor take up of contracts to inform analysis provided as part of annual updates to delivery plan • Provide information or analysis to inform Ministerial decisions on the move to allocation windows (following initial first come first served stage)
Secondary trading and/or secondary auctions	• Carrying out the pre-qualification process for any new potential capacity providers and receiving information on new holders of traded capacity agreements. • Running secondary auctions if additional capacity or technology specific capacity should be required mirroring processes in primary auction.	• N/A
Changes to rules and/ or mechanism design	• Providing analysis which may result in CM rule changes by Government or Ofgem. The SO may make technical rule changes. Other changes, for example those relating to auction or penalty regime rules may be subject to approval by either Government or Ofgem.	• Providing analysis which may result in CfD rule changes by Government or Ofgem.

1. Role in developing analysis to inform Ministerial decisions

243. This section explains the analytical work the SO will carry out as delivery body for EMR. It covers the delivery plan and analytical processes during steady-state from mid-2014 onwards. Further details on the process for the first delivery plan, which will be published prior to 2014, and more detail on the role of the Panel of Technical Experts can be found in Annex E to the *Electricity Market Reform: policy overview*[21].

244. In summary, the SO will produce analysis which will inform Ministers' decisions on key delivery aspects of the CfD and CM. The Government will publish these decisions in a delivery plan published every five years and updates published every year, along with the supporting analysis for those decisions. The key decision for Ministers in relation to the CM will be, how much capacity to contract for, if the CM is initiated. In relation to CfDs, the key decision will be the CfD strike prices for renewables during administrative price setting and or decisions to support future competitive CfD award.

Commissioning the analysis

245. The analytical process will be initiated by Government commissioning analysis from the SO. It will do this publically and will clarify the scope and purpose of the analysis that is to be conducted by the SO. The commission will set out Government's existing objectives and constraints for the analysis to reflect,for example security of electricity supply, decarbonisation and policy costs, and the relevant detailed aspects of the analysis. For example, it may state the assumptions that will be provided by Government, and require the analysis to show the impacts of different scenarios on Government's objectives.

Evidence-gathering and analysis

246. The SO will aim to utilise the best available evidence by, for example, gathering evidence from a broad range of sources including generators, suppliers and developers or using existing evidence from the market. It will conduct analysis based on this evidence, as well as information it or the market already holds, to:

    a. give an assessment of the long term security of supply outlook and the capacity needed for the next delivery year of a capacity auction (if the CM is initiated), i.e. in four years' time, taking into account potential future generation mixes.
    b. Model future CfD strike prices for renewables and theirlikely impacts on, for example, Government's objectives.

247. The analysis will be scenario-based to show how different scenarios impact on Government's decisions in different ways. It will not offer recommendations to Government on the decisions Government will take but will provide analysis to show the trade-offs between Government's objectives so that it can take those key decisions on an informed basis.

[21] http://www.decc.gov.uk/en/content/cms/meeting_energy/markets/electricity/electricity.aspx

248. The SO's analysis will have to reflect Government's objectives and show the impact on any constraints, for example, an enduring reliability standard for the CM or spending envelope set through the Levy Control Framework.

Scrutiny of the analysis by the Panel of Technical Experts

249. The analytical process and the analysis provided will be scrutinised by a Panel of Technical Experts (the Panel). The Panel will be independent of industry, Government and the SO. It will test the technical parameters developed by the SO, such as assumptions made, any inputs and modelling techniques. It will also scrutinise the process to ensure that the SO has engaged with an appropriate range of stakeholders, followed appropriate internal governance processes, and met any requirements imposed by Government. The Panel will scrutinise the analysis throughout the process, report to Government regularly including formal reports, alongside the analysis provided by the SO. The Panel's final report will be published alongside the EMR delivery plan and annual updates.

Ministerial decisions and consultation

250. On initially receiving the SO's analysis and before it is made public, Ministers may ask it to carry out further analysis, for example requesting that it runs additional scenarios. The Panel of Technical Experts will scrutinise this iterative process. Once Ministers are satisfied that they have the analysis required, they will either consult on the analysis or make the relevant decision, depending on which decision they are making.

251. For the key CfD decisions such as setting strike prices for renewables, Government intends to consult on the SO's analysis. It will also consult on an enduring reliability standard that is set for the capacity market.

252. If the CM is initiated, the Government does not currently intend to consult on its annual capacity volume decision i.e. how much capacity to contract for. This decision is likely to be based on an enduring reliability standard which will set a target based upon inputs, the key input being demand. Government will have to make a trade off between security of electricity supply and cost.

253. Following any consultation, Government may ask the SO to update the analysis. Following receipt of the updated analysis, Government will then make its final decisions and publish its decisions along with the supporting analysis in the delivery plan. Some of the decisions will be published in the delivery plan or annual update; some may be published outside of the delivery plan cycle.

2. Role in delivering Contracts for Difference

Allocation Phase

205. After the Government has announced its decisions on strike prices in the delivery plan, the delivery body will run an allocation process to award CfDs to renewable projects[22] .

206. The System Operator will assess eligibility for CfDs and determine which applications have been successful on the basis of published criteria, set in advance by the Government.

207. As part of the application process, the SO will need to confirm a number of criteria have been met:

- Eligibility: evidence that proposed project is from an eligible generation technology and that the company proposing it is a legal entity that qualifies for the CfD scheme;
- Proof that planning permission has been obtained and a grid connection offer has been received and signed: a copy of the successful award of planning permission and a signed Grid Connection Offer that confirms that the grid will be developed at or before the 'Target Commissioning Date' will be required. The criteria will be further developed to ensure it is appropriate for all technologies.
- Capacity of the proposed generating facility: the size in MWs or GWs of the project that the developer intends to develop; and
- Target Commissioning Date: the date by which the project is aiming to commence operation.

208. Checking eligibility will involve no discretion for the SO. We envisage a process where the SO will assess the incoming applications against a straight-forward checklist.

209. The information above will confirm that a CfD can be issued by the CfD counterparty and also determines by reference to the Target Commissioning Date the appropriate strike price as set out in the most recently published delivery plan.

The process for allocating CFDs: Control on budget

210. As set out above, the System Operator will instruct the CfD counterparty to enter into CfDs when satisfied that the eligibility criteria have been met.

211. As Government's decarbonisation policies have to operate within a financial envelope the SO will be instrumental in ensuring that no more CfDs are issued than there is budget available to cover. Government will provide the SO with a budget and rules for monitoring how much of that budget has been expended.

[22] The systems that apply in relation to projects undergoing FID Enabling or CCS competition processes and in relation to CCS and nuclear projects that come forward projects after the FID Enabling window closes and the CCS competition concludes will be informed by the approach being applied in these standard CfD arrangements

212. In the near term it is envisaged that the budget will allow CfDs to be issued on a first come, first served basis. However there will come a point at which there is greater demand for CfDs than the number that can be allocated under the available budget. In such circumstances there is a need for a process to ration the requests for CfDs to the available budget. The Operational Framework[23] sets out details of how this will work in practice.

213. Government will set the criteria for switching to allocation rounds in a way that should mean that the switch takes place once a number of CfDs have been issued and once the budget envelope available to future projects has been reduced. For example a move to allocation using rounds might occur when it is expected that there will be less than, say, 50% of the CfD budget left remaining for each delivery year once CfDs have been allocated over the next twelve months.

214. Through using allocation rounds in this way, the Delivery Body will be able to monitor and exercise finer control over the number of CfDs which the CfD counterparty is instructed to issue. This will allow effective rationing to be introduced when demand for CfDs exceeds the available budget. Government will work with the Delivery Body and other stakeholders to design the system of allocation by rounds used by the Delivery. The Government will need to ensure that the system minimises disruption to developers' project pipelines and also limits gaming risks.

215. Once allocation rounds are in use in the system, Government anticipates that the system might function as set out below:

a. The Delivery Body will announce the move to allocation rounds.

b. Allocation rounds will occur once every 6 months.

c. Government anticipates an allocation round will take 3 months and during this period

i. Projects will have 4 weeks to apply (in the application period);

ii. Following the application period, the System Operator will have 2 weeks to assess the projects that have been submitted to check their eligibility;

iii. If allocation to all the eligible projects would not exceed the available budget, then CfDs will be issued to all applicants; and

iv. If allocation to all the eligible projects would exceed the budget envelope set by Government, an objective methodology will be applied to enable the Delivery Body to identify successful projects.

[23] http://www.decc.gov.uk/en/content/cms/meeting_energy/markets/electricity/electricity.aspx

216. At this stage the dates are indicative. Government expects to finalise the design details and set them out alongside the workings of the financial framework for CfDs in the (Draft) Delivery Plan.

217. In an allocation round, the SO will apply an objective methodology set by Government to enable it to identify successful bidders. Details on the methodology and how it will be applied will be set out in July 2013 alongside the fully termed CfD. However, it is intended that the process will be mechanistic, involving little or no discretion for the SO.

Post-allocation phase

254. The main role of the SO stops at the signature of the contract by the CfD counterparty. From that point, the CfD counterparty[24] will monitor whether pre-commissioning milestones are being met and, if necessary, it will enforce the terms of the contract.

255. The SO will have a role in monitoring current payments and potential future payments so that it can provide information to Government on costs under the CfD regime. This information will inform the annual updates to delivery plans, in which analysis of costs will be a key aspect.

Changes in CFD design and rules

256. Unlike the previous sections, rule setting is not a distinct phase - it will occur alongside or as part of the other sections. The SO will use its ongoing experience of delivering EMR to provide data or analysis that may inform changes to the design of the regime for CfDs. It could for example be asked to provide analysis to inform a decision on moving to competitive processes. This would be part of the delivery plan process set out above and would likely be requested by the Government as part of the process of commissioning analysis.

3. Role in delivering the Capacity Market

257. If the first capacity auction is run in 2014, the SO will run the auction annually following the decision on how much capacity to contract for. There are two distinct parts to the auction: the pre-qualification process and the auction itself.

Pre-qualification

258. The pre-qualification process is currently undergoing detailed design. It is likely that it will operate differently for existing generating plant, new generating plant, and for demand-side providers. The aim of the process will be the same for all capacity providers; to ensure the criteria and principles set down in CM policy design are met by all capacity providers.

[24] More details on the CFD counterparty can be found here: http://www.decc.gov.uk/en/content/cms/meeting_energy/markets/electricity/electricity.aspx

259. In the pre-qualification process, the SO will receive applications from those wishing to participate in the auction. There will likely be two parts to this process. The first stage would be fairly mechanistic requiring the SO to determine whether a potential provider is eligible to bid. This might be done using defined, transparent criteria leaving no scope for the SO to exercise discretion. Such criteria might include :whether the potential bidder is compliant with the Grid Code (or associated distribution network code), that they have a Grid connection, that their output at times of system stress would be visible to the SO through metered output and could be passed across to the settlement agent, that they have generated or reduced demand or demonstrated capability to do so in the last year (new or re-commissioned plant would need an alternative criterion), planning consent (for new providers) has been obtained and checking that a DSR provider has contracts in place to reduce demand. This list is meant to be illustrative, not comprehensive. Nor does it mean that the Government will definitely use any of these criteria.

260. The second stage would be to determine how much capacity could be bid into the auction from a given bidder. This determination would likely involve the exercise of a certain degree of discretion by the SO – though it could still be based on defined, transparent criteria set by the Government or Ofgem. The SO could either have the power to confirm levels of capacity bid against their best understanding of the volume a provider was likely to achieve (e.g. using historical output data), or the SO could have less discretion and simply check volumes bid into the auction against levels agreed by the capacity provider with some other regulatory authority. In the case of demand-side response, there could be a requirement to demonstrate systems for achieving demand reduction, based on existing meter information. For new plant, the SO may have to assess a project's status to ensure it can reasonably deliver in four years' time, for example using a check-list including development consents and connection offers but potentially also using physical checking that milestones have been achieved.

261. The rules for the pre-qualification process would likely be set out transparently in advance and consulted on in order to ensure a robust assurance framework around the pre-qualification process with regulatory oversight over the exercise of any discretion by the SO. Such oversight would include an appeals process for parties that felt they had not received the right decision in the pre-qualification process.

Auction process

262. The role for the SO in running the auction will initially be to receive and verify the bids according to clear criteria agreed in advance by the Government or Ofgem after industry consultation. The enduring reliability standard will be known in advance (the Government will consult on this in the first delivery plan in mid 2013) and there is also likely to be a demand curve set by the Government in advance to inform the auction.

263. The SO will then run the auction itself rank verified bids and compile information on the how much capacity to contract for. There is an outstanding question of whether and how to take account of locational constraints when assessing the capacity volume. To ignore locational

constraints completely may result in a stock of capacity which was not actually reliable in times of system stress as constraints could prevent certain capacity from contributing at such times. However, it is not necessarily straightforward to take the likely impact of locational constraints into account ex ante. One option which is being considered would be for extra capacity to be procured to cover the amount of capacity successful in the auction which lies behind a constraint. The information about where constraints lie is public and transparent. The SO would present to Government the results of the auction, how much of the successful capacity is behind a constraint and therefore the additional amount of unconstrained capacity to be procured using the same auction bids. There would be very little discretion or decision making for the SO in this model.

264. Another option would be to require the SO to take location into account as well as price when ranking bids. In this case the SO would have some more discretion and influence over the successful capacity providers in the auction. However, such discretion would be limited in scope and exercised only in accordance with a methodology agreed by Government (or Ofgem) in advance of the auction following industry consultation .

265. Once the decision has been taken on how much capacity to contract for, the SO will allocate capacity agreements to the successful bidders based on the Government contract decision. It will have no discretion in this process. The payment process will then pass to the settlement agency to manage. Further details on the payment model for the Capacity Market can be found in the policy update published alongside the Bill[25].

Operational Phase

266. Once capacity agreements have been allocated, the SO will monitor the performance of the successful bidders against the requirements of the capacity agreement. This will be in two distinct phases: the first in the period between the auction and the delivery year, and the second during the delivery year(s).

During the period leading up to the delivery year

267. We expect that the SO will monitor the participants' performance against the terms of the capacity agreement. For existing plant the SO would get access to output data from performing its existing SO functions. For new-build, this could include regular checking that project milestones have been reached. The relevant milestones would be defined in advance by the Government (or Ofgem) and in consultation with stakeholders as appropriate. There could also be pre-defined trigger points at which the SO could conduct more extensive audits to assess the likelihood of a plant coming online at the agreed time, and potentially a final check to ensure the plant is capable of generating the capacity that was agreed in the successful bid before any payments commence. The trigger points and methodology for such checks would be agreed by Government (or Ofgem) and consulted on in advance. For demand side providers the checks could involve whether the provider has

[25] http://www.decc.gov.uk/en/content/cms/meeting_energy/markets/electricity/electricity.aspx

demand reduction contracts in place with end users. Again the criteria and methodology for such checks would be agreed by Government (or Ofgem), consulted on with industry as appropriate and set out in advance.

268. In the event that this monitoring shows that participants are failing to meet the agreed terms, the SO will have a role in the resulting remediation process, using the rules defined by Government or Ofgem set out in the relevant framework e.g. regulations or codes. The SO will monitor the market, gather information on construction milestones and assess whether the expected capacity will arrive on time. If participants are unlikely to deliver, having missed their milestones, the SO will inform Ministers so that it can decide whether additional capacity should be contracted for in secondary auctions. In addition, the rules would probably set out that in certain specified circumstances (e.g. where critical milestones have been missed) the SO would be required to enforce a contracted sanction (as set out in the rules). This sanction could be the loss, or partial loss, of the financial bond posted by the participant at the beginning of the pre-qualification process. The circumstances under which the SO would be required to impose a financial penalty, the size of that penalty and any appeals process associated with such penalty would be set out in rules agreed by the Government or Ofgem and consulted on with stakeholders.

269. The information on whether the project has met its milestones will be provided to the body holding the bond (which could be the SO) so that the sanction can be imposed.

During the delivery year

270. During the delivery year(s) of the capacity agreement, the SO will ensure the terms of the capacity agreement have been met. Capacity providers are obliged to deliver energy whenever needed to ensure security of electricity supply, i.e. in real system stress situations. In the delivery year, they receive the payment for their capacity that was set in the capacity auction. When there is system stress, if they are not delivering energy up to the full level of capacity they offered in the auction, they face a financial penalty (in proportion to the level they have not delivered). There may be some exceptions applied to the application of a penalty for example where a party's generation is being held back by the SO as they are behind a system constraint. This model could also include some additional checking given the relatively low likelihood of system stress events occurring. In its simplest form this could just involve checking a generator runs a number of times per annum. Details of the penalty/incentive regime, and when it will be applied, will be decided by Ofgem/ Government and set out in regulations or codes..The role for the SO here will be very similar to the role it already carries out today meaning that there ought to be potential for substantial synergies.

Secondary trading and/or auctions phase

271. It may be decided that trading of capacity agreements and/or secondary auctions, are desirable for participants of the Capacity Market, for example to enable Demand Side Response/Reduction (DSR) participation or to contract for additional capacity. Ministers will make this policy decision, but the SO and possibly Ofgem will advise on whether a secondary auction is needed.

272. In the case of secondary trading, the SO core role will be as in the pre-qualification process set out above, but for new participants who want to trade capacity agreements. The results of any trading where the underlying obligation to provide capacity has changed hands would need to be communicated to the SO, which would then need to pass this information onto the settlement agency. The SO could potentially manage a trading platform to enable these transactions. However, secondary trading does not necessarily require a formal trading platform to record trades and the movement of obligations, since this can equally happen on a financial basis.

273. A secondary auction may be called if it is decided by Government that capacity predicted to be provided by the original auction will be insufficient to meet demand in the target year. This decision will be based on analysis by the SO, including latest demand projections, capacity procured and capacity capable of delivery. Further, some capacity may be held back from the initial auction so other technologies can bid-in: DSR providers, for example, may find it easier to participate in an auction with a shorter lead-time. The SO's role in a secondary auction would be as in the initial auction, i.e. carrying out the mechanistic processes to run the auction, pre-qualification and application processes and contract allocation.

Rule-setting

274. Most of the fundamental rules for the CM will be set before the first auction. Changes to the rules will then be possible throughout the operation of the instrument. The SO's role here will mainly be to inform Government or Ofgem who will sign off on all the key rules, criteria, methodologies or similar necessary to operate the capacity market. For some technical and detailed rules it is possible that the Government will delegate rule making and amendment to the SO subject to suitable and proportionate regulatory oversight.

275. There are three main processes for the SO might be involved in rule changes, broadly in a hierarchy based on the materiality of the change:

i. The SO or industry recommends a change, highlights a problem or provides data/analysis to inform a decision by either Ofgem or Government who will ultimately make the change (for example, since it requires changes to licences or regulation).
ii. The SO or industry proposes a change but is required to seek the consent and sign-off of Government or Ofgem before making the change. This could be done through an existing code, a new code or through another mechanism such as regulations.
iii. The SO sets parameters independently and publishes them. Rules that the SO could change independently would be restricted to technical mechanistic processes and timing details to ensure the CM is run effectively. It is possible that even detailed processes will fall into categories i and ii above and require sign-off by Government or Ofgem but in order to be pragmatic, it may be required that the SO can independently set these.

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