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ofgem

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

Final report

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Department of Energy and Climate Change
3 Whitehall Place
London
SW1A 2AW

Telephone: 0300 068 4000
Website: www.decc.gov.uk

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For further information on this publication, contact:

Institutional Frameworks, Department of Energy and Climate Change, 3 Whitehall Place, London SW1A 2AW. Telephone: 03000685726. Email: emi@decc.gsi.gov.uk Or Electricity Policy, Ofgem, 9 Millbank, London, SW1P 3GE, Email: europeanwholesale@ofgem.gov.uk

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Office of Gas and Electricity Markets
9 Millbank
London
SW1P 3GE

Telephone: 020 7901 7000
Website: www.ofgem.gov.uk

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Executive Summary

1. In December 2011, the Government announced that it intended to confer the delivery function for its Electricity Market Reform (EMR) programme onto the National System Operator (SO), National Grid Electricity Transmission plc (NGET) owing to the strong synergies with NGET's existing role in the electricity market. The Government acknowledged that this may also give rise to conflicts of interest and initiated a joint project with Ofgem to assess these potential conflicts and propose mitigating action if shown to be necessary. This report sets out the findings of that assessment.
2. The joint analysis conducted by DECC and Ofgem has concluded that, on the basis of existing SO activities, current market arrangements, and the current design of EMR, conflicts of interest are manageable subject to the implementation of various mitigation measures. DECC is recommending in this report mitigations, which are intended to be effective, enforceable, proportionate, and have regard to the synergies that arise from the SO delivering EMR. Ofgem supports these recommendations.
3. The mitigations proposed in the report are:
 - The continued design of EMR in a way that minimises the risks of conflicts of interest arising, through transparency, scrutiny and limits on the SO's discretion.
 - The proportionate ring-fencing of some of the EMR functions within NGET and from other NG plc businesses to further mitigate the risk of conflicts of interest in a way that allows key synergies to be realised.
 - Additional protection for commercially-sensitive information submitted to the SO for the delivery plan analysis through a data handling facility.
 - Ensure that regulation provides for managerial, information, physical, employee, and legal separation of certain National Grid 'competitive businesses' from NGET, that present potential conflicts of interest with the EMR delivery role. DECC and Ofgem are exploring how best to achieve this.
4. The mitigations recommended in this report are appropriate in light of the need to deal with EMR-specific conflicts of interest, and the need to address these now.
5. These are the right measures for the current situation based on the current stage of development of EMR policy. However we recognise that the situation may change and so we need to keep these measures under review. In particular we will revisit the measures should:
 - EMR, the SO's role under EMR, or wider electricity and gas markets, evolve

- They prove not to be effective and need to be reinforced or re-assessment of the risk of conflicts of interest shows that some of these measures are no longer needed
 - The wider SO role evolves, for example owing to policy developments at the GB or European level (for instance leading to greater responsibility for the TSO¹ in system planning or as a result of broader market changes)
6. It is intended that the measures in this report will be taken forward by DECC primarily through the continued design of EMR and through the use of the Secretary of State's powers proposed under the Energy Bill, subject to the passage of the Bill through Parliament. The measures are expected to be in place for EMR to be operational in 2014.

¹Under Article 2 of the Electricity Directive, "transmission system operator" is defined as a natural or legal person who carries out the function of transmission and is responsible for operating, ensuring the maintenance of and, if necessary, developing the transmission system in a given area and, where applicable, its interconnection with other systems, and for ensuring the long-term ability of the system to meet reasonable demands for the transmission of electricity. In GB TSOs are holders of transmission and interconnector licences.

Chapter 1. Introduction

1. In the December 2011 Technical Update to the Electricity Market Reform (EMR) White Paper², the Government announced that it intended to confer the EMR delivery functions onto the National System Operator, National Grid Electricity Transmission plc (NGET)³.
2. The Technical Update acknowledged that as well as there being strong synergies between the EMR delivery functions and the System Operator's current role, there are also potential conflicts of interest that could arise within NGET and between NGET and NG plc's other businesses particularly the competitive businesses. The Government committed to assessing these conflicts of interest and synergies in a joint project with Ofgem. The project would also consider whether any mitigating action was required.
3. This report concludes that project. It follows a public consultation which closed on 29 January 2013. This report should be considered to be the Government's formal response to that consultation. All consultation responses have been published on the DECC⁴ and Ofgem websites alongside this report.

Background to Electricity Market Reform & the role of the System Operator⁵ in delivering EMR

4. EMR aims to meet the significant long-term challenges of delivering the UK's renewable energy targets and decarbonising the country's energy infrastructure, whilst maintaining secure and affordable electricity supplies.
5. EMR introduces two key mechanisms into the electricity market:
 - Contracts for Difference (CfD) - 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.
6. In December 2011, the Government announced that the National System Operator would be the delivery body for EMR.

²https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/48253/3884-planning-electric-future-technical-update.pdf

³NGET is certified under the Electricity Act 1989 as 'ownership unbundled' (as required under the EU Third Package), this means that NGET complies with the ownership unbundling requirement as set out in the Electricity Act 1989. There are no further requirements for NGET's SO and TO business to be separated. The ownership unbundling requirement in the Electricity Act 1989 requires NGET to comply with five tests separating it from supply and production (see GEMA Decision Certification of transmission system operators ('TSOs') under the ownership unbundling requirements of the Third Package)

⁴<https://www.gov.uk/government/consultations/synergies-and-conflicts-of-interest-arising-from-the-system-operator-delivering-electricity-market-reform-emr>

⁵For simplicity NGET in its role as System Operator is referred to as the 'SO' from here on

7. The role of the System Operator in delivering EMR can be summarised as:

- Providing analysis to inform Ministers' key EMR decisions: primarily on the level of support for low-carbon technologies in the case of CfD 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 System Operator in monitoring whether capacity agreement conditions are being met, for example whether capacity is available at times of system stress.

8. The Government introduced an Energy Bill⁶ in November 2012 to legislate for EMR. Subject to the passage of the Bill and subsequent secondary legislation, we expect EMR to be operational in 2014.

Joint DECC and Ofgem project on synergies and conflicts of interest

9. The joint project between DECC and Ofgem assessing synergies and conflicts of interest has been running since the beginning of 2012.

10. In March 2012, DECC and Ofgem published an open letter to stakeholders seeking their views on potential conflicts of interest between the EMR role and NGET and also other National Grid businesses and how they might be mitigated, and potential synergies and how they might be maximised. We received 25 responses from a range of stakeholders.

11. The interim report⁷, published in May 2012, 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;
- that it was already clear that mitigation measures would need to include requirements for the System Operator to be transparent in its delivery role, and restrictions on the EMR-related information it obtains flowing to its other businesses.

12. Following further work with DECC's EMR Institutional Frameworks expert group⁸, internal DECC and Ofgem workshops, and in light of further detail on EMR design announced alongside the Energy Bill, we consulted in November 2012. The consultation set out our analytical approach to considering conflicts of interest and synergies, the potential range of conflicts of interest and synergies that had been identified and potential mitigating actions.

⁶<https://www.gov.uk/government/organisations/department-of-energy-climate-change/series/energy-bill>

⁷https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/42903/5365-outcome-of-the-27-march-2012-workshop-and-response.pdf

⁸<https://www.gov.uk/government/policy-advisory-groups/institutional-framework-emr-expert-group>

13. The 16 respondents to the full consultation that closed on January 29 included three trade associations, eleven generators and suppliers, Consumer Focus, and National Grid. Details of the responses and our proposals in light of those responses are set out in this report.
14. The intention is that the measures set out in this report will be implemented in large part through the continuing design of the detail of the EMR instruments and the exercise of powers within the Energy Bill, subject to the Bill's passage through Parliament. We intend to consult on the measures in the autumn. We aim to have all mitigation measures in place by the time EMR is operational, currently anticipated to be in 2014.
15. This report sets out our findings from the consultation responses and the further analysis that we have carried out since the consultation was published. It also sets out proposals for how to mitigate conflicts of interest while maintaining synergies. It first considers the conflicts of interest and synergies between the existing SO and EMR role before setting out the proposed mitigations. It recognises that, should the EMR delivery function, the wider role of the SO, or other relevant circumstances, change, alternative measures might become appropriate or necessary, and that the situation will therefore have to remain under review.

Chapter 2. Synergies arising from the System Operator acting as EMR delivery body

16. The Technical Update to the EMR White Paper and the conflicts of interest consultation document set out that the SO had been chosen to deliver EMR due to the strong synergies between its current role and the delivery of both CfDs and the Capacity Market:

- The SO is in a unique position at the heart of the electricity system: this makes it suited to undertake analysis to inform Government's decisions on EMR implementation, and to deliver the CM if implemented.
- Its current work balancing the electricity transmission system gives it an understanding of the balancing requirements of different technologies, and the impacts these may have on transmission network reinforcements.
- It has extensive experience of running tenders and auctions both on the electricity side and on the gas side of its businesses.
- Delivery of these two mechanisms by a single organisation will ensure a joined up approach to CfD and the CM and, combined with the SO's current roles, will provide value for money for consumers; and
- The SO already has much of the relevant technical expertise, commercial and financial skills necessary to deliver the CfD in the UK and CM in Great Britain

17. These synergies will result in benefits from NGET taking on the EMR role relative to any other body, new or existing, carrying out the role. These synergies derive from expertise, experience and information that National Grid already has as a result of its existing role in the energy market. Annex A sets out those synergies in greater detail. This chapter summarises the responses received in the consultation and details further analysis we have carried out on synergies.

Responses to the consultation

18. The consultation produced differing views from respondents on synergies between the EMR delivery role and the SO's current functions. Four respondents were supportive of the view that synergies had significant potential and four respondents intimated that synergies were relatively limited; and a further three respondents thought that synergies were not yet clear given uncertainty about EMR design.

19. Some respondents noted that National Grid already has the information that will be required for it to carry out the EMR delivery role; one respondent noted that this information could be provided to the delivery body regardless of whether National Grid is the delivery body, and one respondent noted that transparent publication of non-confidential information could realise

synergies. Others noted that lack of discretion for the SO in discharging the EMR role will limit synergies.

20. Several respondents felt that some of the synergies with the SO were from their perspective conflicts of interest, particularly where they related to lower SO balancing costs, which could result in reduced costs to consumers.

21. National Grid provided additional detail on where and how synergies between the SO's current role and the new EMR role may arise. It also noted the importance of synergies between the SO and Transmission Owner businesses.

Further analysis of the synergies

22. In order to understand the value of the synergies that were set out in the consultation document, we commissioned the consultancy KPMG to assess them (as well as potential conflicts of interest – see chapter 3). KPMG performed a qualitative assessment of the three synergies outlined below⁹:

- Operational and administrative cost savings, economies of scope (relating to the use of offices, property, staff and administration) and/or cost savings from avoiding the duplication of work. KPMG's assessment is that the size of this synergy as a percentage of the costs associated with setting up a new entity to act as the delivery body is likely to be significant.
- Better SO outcomes: where delivering EMR can increase the efficiency (or lower the costs of) the existing SO role, e.g. lower balancing costs, efficient procurement of reserves, system planning benefits and efficient constraint management. KPMG's assessment is that it does not expect the impact of this synergy to be significant given the proposed role under EMR and the existing SO role.
- Better EMR outcomes i.e. increased efficiency/cost savings in delivering EMR. This could be achieved through leverage of the SO's experience, including in developing analysis for efficient CfD strike price setting, efficient demand and reserve margin analysis for the Capacity Market, efficient capacity procurement, fewer blackouts, diversity in generation mix, and Capacity Market auction experience. KPMG's assessment is that cost savings from leveraging the SO's skills and experience may be significant, particularly in terms of improved efficiency and communication with industry. Given the importance to the overall success of EMR of transparent, efficient communication, well-run auctions, and robust and efficient analysis, KPMG consider these benefits are significant.

23. Given the KPMG analysis, and noting the diversity of stakeholder views, we have carefully considered synergies in developing mitigation measures to ensure that, where possible, these synergies are retained. This is addressed further in Chapter 4.

⁹ More detail is in Annex A

Chapter 3. Conflicts of interests arising from the System Operator acting as EMR delivery body

24. The consultation document set out that there were three categories of potential conflicts of interest arising from NGET acting as delivery body for EMR:

- An ability for NGET to use information that it has access to through its EMR delivery role to the advantage of its other businesses and other NG plc businesses;
- An ability for NGET to exert influence over decisions made by others (i.e. Ministers) to favour National Grid businesses;
- An ability for NGET to exercise discretion in the operation of EMR in such a way as to favour or advantage NGET and other National Grid businesses.

25. The specific conflicts relating to these areas are listed in Table B1 in Annex B.

26. The consultation document did not seek to establish the likelihood of these conflicts of interest arising and recognised the possibility that they may not arise.

27. The consultation set out some indicators of the possible materiality of different conflict types based on the size and operating profits for the different National Grid businesses. However, the consultation did not attempt to analyse the materiality of conflicts of interest, noting this would be subject to further analysis, which is set out later in this chapter.

Responses to the consultation

28. The detail of the responses is set out in Annex B. The key messages from stakeholders were:

- Respondents broadly agreed with the range of potential conflicts of interest presented in the consultation document, with many expressing concerns about them. Some stakeholders considered certain potential synergies to be conflicts of interest, particularly in relation to the SO business.
- Several respondents raised concerns about National Grid handling confidential information. While this was not always linked with a specific conflict of interest, it was the major concern cited by a number of respondents.
- Most respondents (12 out of the 16) said that the lack of detail and general uncertainty around the design of EMR made it difficult to identify conflicts, assess the materiality of conflicts, or decide on appropriate mitigations.

Further analysis on materiality of conflicts of interest

29. We set out in the consultation document that we would carry out further analysis of the conflicts of interest. As we did for the synergies (see chapter 2), we asked KPMG to consider the potential impact of conflicts of interest and synergies, as well as the probability of them arising. The aim was to provide analysis of the risks in order that proportionate mitigations could be designed. We asked KPMG to consider all the conflicts of interest set out in the consultation document as well as any new conflicts that were identified in responses to the consultation, and any that emerged through KPMG's own analysis.
30. To assess the materiality of potential conflicts of interest, KPMG analysed both the probability of a conflict arising and the financial impact on National Grid's profits as a consequence of acting on any conflict. In some cases, KPMG also quantified the impact on consumers. The assessment was based on a series of tests developed by KPMG, modelled by Pace Global, and using DECC, Ofgem and publicly available data.
31. In considering probability, KPMG considered 'executability' (the ease with which National Grid is able to act on a potential conflict, given the type of conflicts and the design of the relevant EMR elements) and 'detectability' (the ease with which National Grid's potential action could be detected) and 'consequence' (the potential consequences to National Grid if its action were detected)¹⁰. These consequences KPMG assumed include reputational risk, potential profit uncertainty resulting from potential fines, penalties, damages claims and the re-assessment of aspects of the System Operator's role as delivery body by Government.
32. Further details of the analysis can be found in the KPMG report published alongside this report¹¹.
33. The analysis drew two main conclusions:
- The potential additional profits to National Grid from acting on the conflicts of interest identified is around £50m - £70m in total (on a Net Present Value basis) between now and 2030. This is equal to approximately 3%¹² of NG's annual earnings attributable to shareholders. The combined impact on consumers of the two conflicts of greatest materiality for consumers was estimated to be between £0.7b and £1.5b between now and 2030.
 - The probability of nearly all of the conflicts arising is low, based on the assumptions KPMG made in its assessment of detectability, executability, and consequences.

¹⁰KPMG did not undertake a legal or enforcement analysis of existing (or potential future, including EMR design) legislation or licence conditions or of enforcement powers, so 'detectability' and 'consequences' are based on KPMG's assumptions that conduct resulting in a conflict of interest would breach licences or legislation, and this would be detected and enable enforcement action to be taken, fines to be imposed, and third parties to make claims for damages. In practice 'detectability' is subject to the asymmetry of information that exists between regulated entities and regulators and 'consequences' are dependent on breach of a licence condition or a legislation, detection of that breach, sufficient evidence of a breach, and of enforcement action being proportionate and appropriate to take in all of the circumstances of the relevant case.

¹¹<https://www.gov.uk/government/consultations/synergies-and-conflicts-of-interest-arising-from-the-system-operator-delivering-electricity-market-reform-emr>

¹² KPMG note that "impacts are calculated as profit distributed to equity not total profit. If the business is highly leveraged the profit distributed to equity is small"

34. The analysis found that the most material conflicts, if they were to arise, would be:

- If National Grid were able to use its role to exert influence or exercise discretion to over-procure capacity for the benefit of NG's electricity and gas Transmission Owner businesses, this could result in an increase in National Grid profits of £14m - £35m over the period to 2030, with associated detriment to the consumer of between £0.5b - £1.3b, in terms of additional capital expenditure. KPMG, based on the assumptions it made, assess the probability of this conflict arising as low owing to the level of transparency and oversight from Ofgem/DECC and the Panel of Technical Experts¹³, particularly where over procurement is obviously self-interested.
- If National Grid were able to use its role in providing analysis or administering CfD and CM to the benefit of its interconnection business, this could result in a potential impact of £20m in total between now and 2030. This was considered low probability based on KPMG's assumption of high detectability and the potential consequences of detection.
- If National Grid were able to favour generation over demand-side response (DSR) in the Capacity Market, this could result in an impact of £5m additional profit between now and 2030. The associated detriment to the consumer (in terms of additional capital expenditure) is estimated to be around £185m. This was considered medium probability as KPMG assumed it would be difficult to detect if NGET was conflicted given limited knowledge and experience of the DSR market. However, KPMG considered, based on the assumptions it made, that probability would move to 'low' over time as DSR established a track record.
- If National Grid's Offshore transmission business gained access to offshore capacity procurement information that can give it a first mover advantage, this could lead to a conflict with associated profit to NG of around £8m. KPMG, based on the assumptions made, consider the probability of this arising as low owing to the limited nature of the advantage resulting from advance information and that forensic analysis could make step changes in NG bidding behaviour detectable (although subtle changes over time would be less so).

35. We have considered the particular conflicts of interest related to interconnection, DSR and offshore transmission in more detail in Chapter 4, when considering mitigations through the design of EMR.

36. Overall, the KPMG analysis suggests that the profits to National Grid and likelihood of acting upon the conflict are relatively low. This was an important consideration in designing the mitigations in the next chapter.

¹³<https://www.gov.uk/government/policy-advisory-groups/electricity-market-reform-panel-of-technical-experts>

37. The potential total additional profits to National Grid from acting on the conflicts of interest of around £50m - £70m (on a Net Present Value basis between now and 2030) may be compared with National Grid's UK annual operating profit of approximately £2.3b (in 2011/12).
38. However we have noted that the consumer impacts in relation to additional capital expenditure associated with conflicts are potentially quite substantial: £0.7b - £1.5b between now and 2030 from exerting influence or exercising discretion to over-procure capacity or favour generation solutions over DSR to benefit the gas and electricity TO business.
39. It is also important to note that KPMG did not look at the potential wider impacts of conflicts of interest arising, for example the effect on competition and competitors where National Grid operates under competitive, or potentially competitive, conditions (e.g. CCS, LNG, interconnection and offshore transmission). As noted in several consultation responses, these are markets that may grow significantly in the coming decade, and this growth may be driven to a large extent by EMR. When considering the risk of conflicts of interest arising, we have taken account of the critical importance of protecting and encouraging effective competition in these markets.
40. Given the size of potential consumer impacts and the views of stakeholders (and having regard to the importance of investor and industry confidence in the EMR institutional set-up), we have carefully considered whether mitigating measures are required, subject to them being proportionate to the risks set out in this chapter, effective, enforceable and minimising the loss of synergies between the SO's existing role and EMR role.

Chapter 4. Mitigating conflicts of interest

41. The consultation document set out a range of potential measures to mitigate potential conflicts of interest. It did not set out any preferred options, nor did it commit to any specific actions except on the separation of confidential information. It also stated that we would aim to ensure that any mitigation is effective and proportionate and that the aim in designing mitigations was not necessarily to eliminate the conflicts entirely but to reduce the risk of conflicts to an acceptable level and manage the risk should they arise. In coming to the conclusions set out in this chapter, we have also considered the potential costs that some mitigations entail, including potential lost synergies which could result in less effective delivery of EMR.

42. The consultation document set out that mitigations fall into three main categories:

- The existing regulatory framework under which National Grid (particularly NGET) operates: this, for example, provides some controls over the flow of information around its businesses.
- The design of EMR. This would cover transparency, scrutiny and limited discretion in the EMR delivery role.
- Information restrictions and business separation. This can include separation of information, employees, management, and location up to legal unbundling.

43. This chapter sets out the responses to the possible mitigation measures. The main themes that emerged were:

- The design of EMR - transparency, scrutiny and limits on discretion - was seen as necessary for mitigating conflicts. For example, several respondents said that National Grid should have no discretion.
- Nearly all respondents felt that business separation was a necessary additional step to protect against conflicts of interest and to ensure the protection of confidential information.
- Most respondents supported the ring-fencing of the EMR functions from the rest of National Grid at the level of legal unbundling. This was to some extent driven by a preference for a cautious approach given uncertainty over EMR design.

44. Having considered these responses and carried out further analysis (as set out in Chapter 3) this chapter sets out our proposals - with underpinning rationale - for the following mitigation measures:

- Mitigations through the existing regulatory regime
- Mitigations through design of EMR

- Mitigations through information / business separation

Mitigations through the existing regulatory regime

45. The consultation document set out that National Grid already operates under a number of controls within the existing regime which would help to mitigate conflicts of interest, for example:

- Special Condition C1 (SC C1) of National Grid Electricity Transmission plc's (NGET) transmission licence 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.
- Special Condition C2 (SC C2) of NGET's transmission licence requires that NGET puts in place systems of control and governance arrangements to ensure compliance with SC C1 and to have in place a compliance statement. For offshore transmission, SC C2 specifies what systems of control and governance need to be set out in that statement.
- 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.

46. There were few specific comments from respondents to the consultation on current regulation, though the majority, based on their knowledge of the existing regulatory regime and proposed design of EMR, said that they did not think that the existing regulatory regime (and the proposed design of EMR) would be sufficient to mitigate the potential conflicts that were identified.

47. National Grid felt that existing controls along with some new targeted controls restricting EMR specific information to the EMR team would manage any conflicts that may arise. It explained that it interpreted SC C1 as placing a broad information separation requirement between NGET and all other NG businesses, including the competitive businesses. While this may be the way NGET operates in practice there is no explicit requirement for NGET to impose information separation between NGET and other businesses except to the extent this leads to an unfair commercial advantage. NG also made the point that, in its view, NGET is legally separated from competitive businesses in the National Grid group (for example, interconnectors, CCS, offshore transmission and LNG) by virtue of existing statutory and regulatory obligations.

48. One respondent said that, while it recognised that there are ring-fences around National Grid's competitive businesses, these should be reviewed to ensure they are effective. This was felt to be important as, while the competitive businesses currently represent relatively small proportions of National Grid's overall profits, they are expected to increase in importance over time. Another respondent said that additional action in the existing regulatory regime will be required in relation to National Grid's interconnection business as a result of EMR.

Proposal to ensure competitive businesses are legally separate from NGET

49. Having reviewed the responses to the consultation we are of the view, that in addition to the other measures set out in this chapter, we will need to ensure that regulation provides for managerial, information, physical, employee, and legal separation of certain 'competitive businesses' (for example, offshore transmission, interconnectors, and CCS), from NGET, that present potential conflicts of interest with the EMR delivery role. DECC and Ofgem are exploring how best to achieve the necessary separation, whether by modifications to NGET's licence conditions or other means.

Mitigations through EMR design

50. The consultation document set out that conflicts of interest can be managed through designing EMR in a way that reduces the risk of them arising –for example, by providing for transparency and scrutiny of the System Operator's analysis and limiting its discretion.

51. The consultation responses broadly supported the measures proposed under EMR design and felt that that these would be necessary to mitigate conflicts but not on their own sufficient. Several respondents noted that clear roles and responsibilities should help to mitigate conflicts of interest - with Government being clearly responsible for policy - and that transparency around the interactions between the System Operator and the main players in EMR was important.

52. Regarding the analytical function that National Grid is being asked to carry out for the delivery plan, respondents noted the importance of Government initiating the analysis and being clear about the methodology that National Grid would use. Suggestions for how to maximise transparency and scrutiny included having Ofgem playing a role in scrutinising the analysis, complete transparency of communications between Government and the SO and an independent audit of the analysis. Some respondents acknowledged the role of the Panel of Technical Experts (PTE), though one respondent suggested it should have more industry experience on it.

53. On discretion, most respondents who discussed this issue said that National Grid should have no discretion and that processes should be mechanistic. However some respondents suggested that discretion should not be ruled out: one respondent said that there should be scope for discretion provided it was within defined processes and procedures; another noted that we should have regard to where there were advantages to giving National Grid discretion.

54. Since consultation responses showed broad support for the measures related to EMR design, and following further analysis set out elsewhere in this document, we propose to take forward measures through the design of EMR, as set out below.

Transparency and scrutiny of the delivery plan analysis

55. The SO will provide analysis to inform key Ministerial decisions on EMR such as strike prices for generic CfDs and the annual decision on the volume of capacity to contract for in a Capacity Market, if initiated. These decisions will be published in the EMR delivery plan or associated annual updates. The SO will not make any of these decisions. The delivery plan analysis will be initiated by Government and carried out within parameters set by Government.

56. The Government has established a Panel of Technical Experts¹⁴ to scrutinise the analysis that the SO provides. The first Panel of Technical Experts for the first delivery plan has been appointed and its terms of reference have been published. These explicitly ask the PTE to consider conflicts of interest in reaching their conclusions on the analysis. This will continue to be the case with the enduring Panel. The Panel's report will be published.
57. As well as scrutiny by Ministers and the Panel, Government will publicly consult on the delivery plan before it is finalised and on how the reliability standard is set for the Capacity Market. In addition, in drawing up its analysis for the annual decision on the volume of capacity to contract for, the SO will consult on its methodology and assumptions ahead of preparing the analysis. The intention is that there is no analysis produced by the SO which will not at some point be subject to public consultation, either by the SO or by Government.
58. This analysis will inform Ministers' decisions and the analysis and supporting data and assumptions will be published, subject to any restrictions related to confidential data.

Limits on discretion and transparent processes

59. While a small number of respondents felt that some element of discretion for the System Operator may be desirable, DECC is of the view that accountability for EMR outcomes rests with Ministers and that the delivery body should therefore have limited discretion in running the allocation process for CFDs or the auction for the Capacity Market. Government will ensure that where discretion is required to ensure the effective delivery of EMR, it is within transparent, clear parameters and that participants have a route for redress, for example via appeals processes.
60. In response to specific concerns raised in the consultation, we will pay particular attention to CfD allocation where there is a budget constraint. As the consultation document set out, where the number of CfD applications approaches a limit determined by Government, an additional process beyond the 'tick-box' eligibility criteria approach under First-Come First-Served may be required. This will be based on an objective methodology, from which the SO will have limited or no discretion to deviate. The same principle of objectivity and the need for mechanistic processes will apply to Capacity Market pre-qualification and the auction itself.
61. Importantly, the Government or Ofgem will set clear rules and processes that the SO will have to operate within in order to deliver EMR. While we are still considering the appropriate legal vehicle for these rules and processes, we will ensure that they are public and transparent. This is so that individual EMR participants know what to expect and understand fully the role of the SO. This will minimise the risk of conflicts of interest arising.

Oversight by Government and Ofgem

62. In carrying out the delivery functions, 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.

¹⁴<https://www.gov.uk/government/policy-advisory-groups/electricity-market-reform-panel-of-technical-experts>

63. Government will set the EMR delivery functions of the System Operator (SO) in secondary legislation, which will become conditions or relevant requirements of NGET's licence, enforceable by Ofgem. This carries the risk of a fine of up to 10% of turnover if NGET breaches its licence conditions, this breach is detected and there is sufficient evidence to prove the breach, and enforcement action is proportionate and appropriate to take in all of the circumstances of the relevant case. 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 secondary 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.
64. 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.
65. As it is Government that will set 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. In support of this aim, the Government will set out the information it requires from the System Operator in legislation, enforceable as relevant requirements by Ofgem.
66. 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 (and make Ofgem aware of the feedback it has given 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, following the necessary Parliamentary procedures;
 - as a last resort, transfer delivery functions to another body.

Specific measures within EMR design to address concerns raised in consultation responses and in the KPMG analysis

67. There are also some specific measures and clarifications about EMR that we can provide concerning those conflicts that were considered most material within the KPMG analysis, some of which were also raised by consultation respondents.
68. The two most material conflicts according to KPMG's analysis relate to the potential for the SO to use its role to exert influence or exercise discretion to benefit NG's electricity and gas TO (through over-procurement of capacity, and favouring of generation over demand-side response). We believe that the Panel of Technical Experts role will be important in this regard, charged as they will be with ensuring that the analysis is objective and high-quality. We will also ensure that, following the first delivery plan, the System Operator will consult on its methodology and assumptions prior to developing its analysis, similar to the process for the existing capacity adequacy assessment it carries out for Ofgem currently.

69. In relation to the potential for the SO to influence the procurement of generation solutions through the Capacity Market over demand-side solutions, we will consider these issues as part of designing the demand-side response (DSR) elements of the Capacity Market. In particular, we will consider whether DSR assumptions and any DSR modelling used in developing the delivery plan analysis could be provided by a party other than NGET - similar to the approach used for certain assumptions in the first delivery plan. Regarding the possibility of NGET using the pre-qualification process to disadvantage DSR providers, we believe that this is unlikely given that the rules will be set by Government or Ofgem, will be transparent and will involve NGET carrying out mechanistic processes with limited discretion. DECC is carrying out a pilot scheme of DSR and as part of that, will consider how DSR participates on an enduring basis. Mitigating potential conflicts of interest will be considered as part of that work.
70. In any case, it is important to note that in both these cases, Ministers will make the final decisions and National Grid's role will be to provide analysis to support those decisions.
71. Another of the most material conflicts as identified in KPMG analysis related to the SO's use of its role in providing analysis or administering CfD and CM to benefit NG's interconnection business. EMR will be designed to ensure the System Operator's will not have discretion to favour interconnectors, in as much as they participate in EMR, and the Panel of Technical Experts will help ensure that any analysis relating to interconnection is scrutinised, along with the rest of National Grid's EMR analysis. We will continue to ensure that appropriate safeguards are in place as we further develop the design of EMR. This conflict will also be addressed by the proposals set out above regarding the competitive businesses.

Mitigation through business separation and information restrictions

72. The consultation document asked respondents whether, in addition to the existing regulatory framework and the design of EMR, business separation (from NGET and / or other NG plc businesses) may be required. This would be in addition to the information restrictions that we said were necessary following the call for evidence in Spring 2012. The consultation was clear that in considering whether it is necessary, we would need to be confident, as far as is possible given that any analysis is based on uncertain future scenarios, that such measures would be effective and proportionate.
73. Nearly all respondents felt that business separation was necessary, in addition to the mitigations set out in terms of EMR design and existing regulatory controls. The majority of respondents regarded legal unbundling of the EMR functions as necessary; in some cases this was due to uncertainty over EMR design.
74. In terms of the specific form of separation, the consultation set out options around the width of the ring-fence (which functions of NGET should be subject to business separation) and the height of the ring-fence (which levels of separation should apply to those functions).
75. Table 1 below sets out the options for the height and width of the ring-fence and which options were preferred by respondents. The columns represent the 'width' of the ring-fence, for example whether it should sit around the combined SO, TO and EMR (i.e. NGET) or whether the ring-fence should be established within NGET around either the System Operator business or the EMR functions. The rows represent the degree of separation, for example whether it is an information ring-fence or an employee, physical or legal ring-fence.

Table 1. Business separation options and consultation responses

Entity to be separate Degree of separation	A. EMR + SO + TO.	B. EMR + SO	C. EMR	D. EMR + SO targeted
1. Regulation of information flows	1		1	
2a. 1 plus deeper separations (employee, physical, financial)	1		1	
2b. 2a plus legal separation			12	

Note: In 2 cases, ownership unbundling of the EMR function (or parts of) was preferred – these are shown as ‘2b’ in the table above. In 2 cases, an explicit preference was not expressed and we have interpreted responses.

76. KMPG consider that, based on their assumptions, the probability of conflicts of interest arising is low in most cases. However, given the size of the potential impacts on consumers; the views of stakeholders, and the need for confidence in the EMR institutional set-up, we have considered the case for business separation of the EMR functions.

77. While we recognise that most respondents preferred legal unbundling of the EMR functions, our analysis suggests that it would be disproportionate, particularly in light of the steps set out above that we will take in designing National Grid's EMR delivery role and ensuring the separation of the competitive businesses. Legal separation would make it very difficult to realise any of the synergies with its existing role, which our analysis suggests could be significant.

78. We are proposing business separation that is proportionate to the risks, enforceable, effective in tackling conflicts of interest and ensuring confidence in EMR and that retains synergies where possible. We consider that the following measures should be implemented:

- NGET’s EMR employees working on the ‘administrative’ functions (CFD allocation, and running the Capacity Market auction and pre-qualification) should be separate (and physically separate) from other SO staff but will be within the System Operator business. In addition there will be an information ring-fence around the EMR administrative functions¹⁵. Employee separation will prevent staff working part-time on EMR and part-time on the SO or TO businesses. There will be monitoring and reporting on the flow of employees from NGET to this EMR delivery entity and vice versa, with limited restrictions on these flows in order to ensure that expertise and experience can flow into the EMR body. This measure will help address concerns expressed by stakeholders about the role of the System Operator in administering CFD allocation and Capacity Market processes.

¹⁵ Some of this information may need to pass outside of these EMR functions for the effective delivery of EMR, for example to the counterparty body. Where there is an exception to the ring-fence this would be clearly set out wherever the obligation sits (for example the licence).

- Since many of the EMR functions rely on information that the System Operator already holds (for example, in relation to pre-qualification requirements under the Capacity Market), information will be allowed to flow from the SO into the EMR functions.
- The SO and EMR analytical functions will be integrated in order to realise the synergies associated with linking these two roles, but all staff working on EMR analysis would be subject to non-disclosure requirements so EMR information would not pass outside the SO. This would enshrine the principle that other National Grid businesses and the TO would only see EMR information at the same time as the rest of the market.
- The Board Director responsible for EMR will be required to sign off a compliance statement that NGET does not confer an unfair commercial advantage on itself or other NG businesses as a result of carrying out the EMR delivery role and, specifically, that the analysis that the EMR analysis team conducts has not been influenced unduly by National Grid's Transmission Owner business, nor has EMR information flowed to the TO. The statement will also specify that the necessary systems of control and other governance arrangements to ensure that this is the case are in place and would be in addition to current requirements.
- All commercially confidential data for the purposes of drawing up the delivery plan analysis will be received by a small team of data handling staff who will aggregate and anonymise it before it is used in developing EMR analysis. This addresses a major concern expressed by stakeholders about the handling of confidential data.
- A compliance code for staff working on EMR activities, which will set out what information will be required, by whom and how it will be handled, will be produced ahead of EMR being operational, following engagement with stakeholders.
- The requirements will be set out clearly in the NGET transmission licence, with the risk of a 10% turnover fine for non-compliance. National Grid will be required to report publicly on an annual basis on how it is implementing these requirements.

79. We have set out above a series of measures in this report that we consider are proportionate to the risks of conflicts of interest arising, will be enforceable and effective in tackling conflicts of interest and ensuring confidence in the EMR institutional set-up and will retain the synergies between the System Operator's role under EMR and its existing role. How we will implement these measures is set out in the next chapter.

Chapter 5. Next steps

80. We will implement the measures set out in chapter 4 over the course of the implementation of EMR in the following ways:

- Where mitigation is through the design of EMR, we will implement the findings through the design of EMR. The EMR documents published alongside the Energy Bill set out that further detail on EMR design will be available on the Capacity Market and the CfD in summer 2013.
- Where the measures relate to information and business separation, these will, where appropriate, be implemented through National Grid Electricity Transmission's transmission licence. DECC will use the powers it is taking in the Energy Bill to implement these measures, subject to the passage of the Bill through Parliament. DECC intends to consult on the proposed licence modifications in the Autumn, with the intention of implementing the measures in time for EMR being operational in 2014.

81. The mitigations recommended in this report are solely to deal with EMR conflicts of interest and are consistent with the timetable for EMR. The mitigations may need to be revisited should:

- EMR, the SO's role under EMR, or wider electricity and gas markets, evolve
- They prove not to be effective and need to be reinforced or a re-assessment of the risk of conflicts of interest shows that some of these measures are no longer needed
- The wider SO role evolves, for example owing to policy developments at the GB or European level (for instance leading to greater responsibility for the TSO¹⁶ in system planning or driving broader market changes)

82. In reviewing the measures in this report, all options set out in the consultation document remain on the table.

¹⁶Under Article 2 of the Electricity Directive, "transmission system operator" is defined as a natural or legal person who carries out the function of transmission and is responsible for operating, ensuring the maintenance of and, if necessary, developing the transmission system in a given area and, where applicable, its interconnection with other systems, and for ensuring the long-term ability of the system to meet reasonable demands for the transmission of electricity. In GB TSOs are holders of transmission and interconnector licences.

Annex A: Synergies

83. The November 2012 consultation set out that DECC chose the SO as EMR delivery body on the basis of the following synergies with its existing role:

- The SO is in a unique position at the heart of the electricity system: this makes it suited to undertake analysis to inform Government's decisions on EMR implementation, and to deliver the CM if implemented.
- Its current work balancing the electricity transmission system gives it an understanding of the balancing requirements of different technologies, and the impacts these may have on transmission network reinforcements.
- It has extensive experience of running tenders and auctions both on the electricity side (STORetc) and on the gas side of its businesses.
- Delivery of these two mechanisms by a single organisation will ensure a joined up approach to CfD and the CM and, combined with the SO's current roles, will provide value for money for consumers; and
- The SO already has much of the relevant technical expertise, commercial and financial skills necessary to deliver the CfD in the UK and CM in Great Britain - noting nevertheless that SO will need to procure new employees to fill this role. In particular, the SO already has systems and information for accurately assessing generator availability and operation, and carrying out analysis on how much generation of different technologies will come on line under different long-term scenarios.

84. The consultation document also set out that synergies may arise where the SO is able to lower its balancing costs leading to potential savings for consumers. These could be achieved by facilitating short term efficiency improvements by allowing for potentially more efficient procurement of reserves (in terms of volume, level of flexibility required in the system and location) and consideration of impact on constraints.

85. The EMR role could also allow for 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.

KPMG analysis of materiality of synergies

86. KPMG performed a qualitative assessment of the three categories of synergies outlined below:

- Operational/administrative cost savings: economies of scope (office, property, staff, administration) and/or cost savings from avoiding duplicate work;

- Better SO outcomes: where delivering EMR can increase the efficiency (or lower the costs of) the SO role, e.g. lower balancing costs, efficient reserves procurement, system planning benefits and efficient constraint management; and
- Better EMR outcomes: increased efficiency/cost savings in delivering EMR through leverage of NG's experience, including efficient CfD strike price setting, efficient demand and reserve margin analysis for CM, efficient capacity procurement, fewer blackouts, diversity in generation mix, and CM auction experience.

87. On the first, KPMG suggests that operational/administrative cost savings could occur as one-off cost savings that arise due to additional learning and set-up costs that any alternative delivery body would have to incur to perform the role, and ongoing cost savings that would accrue through the avoidance of duplicate work. KPMG estimate that given NG's institutional knowledge, established processes and systems, the likely steep learning curve for staff in technical roles, and their established presence in the market, it is likely that the size of the synergy (as a percentage of the costs associated with setting up a new entity as the delivery body) would be significant.

88. On the second, KPMG's qualitative assessment suggests that the potential impact on better SO outcomes will depend on both the extent to which business separation and information restrictions between the SO and EMR functions exist and the extent to which the SO is able to exert influence (or exercise discretion). On the former, the greater the degree of separation, the smaller the benefit of potential synergies from a joint role (note that DECC and Ofgem intend to facilitate this synergy through establishment of aggregated and anonymised data flows from the data handling team to the SO). On the latter, while the delivery of the EMR role would likely provide the SO with better information, the value of such is limited by how much the SO can currently do to influence decisions made by generators. As KPMG gauge that such influence is currently limited, they do not expect the impact of this synergy will be significant.

89. On the third, KPMG's qualitative assessment suggests that that the potential impact on better EMR outcomes will depend on the extent to which business separation and information restrictions between the SO and EMR functions exist. On this issue, note that DECC and Ofgem intend to facilitate this synergy by allowing information and employee flows from the SO to the EMR delivery body but with restrictions on flows going the other way. KPMG consider that the cost savings from leveraging NG's skills and experience may be significant particularly in terms of improved efficiency and communication with industry. Given the importance of transparent, efficient communication, adequately run auctions, and robust and efficient analysis to the overall success of EMR, KPMG consider these benefits should be considered significant.

Annex B. Conflicts of interest

90. The consultation document set out that there were three categories of potential conflicts of interest:

- An ability to use information that National Grid has access to through the EMR delivery role to the advantage of its other businesses.
- An ability to exert influence over decisions made by others to favour National Grid businesses
- An ability to exercise discretion in the operation of EMR in such a way as to favour or advantage National Grid businesses

91. Table B1 below sets out the specific examples of these categories of conflicts of interest as set out in the consultation document.

Conflict type	Specific examples cited in the consultation document
To access information	<ul style="list-style-type: none"> • The Transmission Owner could benefit if it could anticipate where generators may wish to locate new generation and purchase land that it could then sell on for a profit • Gas transmission, distribution and gas system operator activities could have privileged information on likely future gas generation build • Offshore, interconnection, Carbon Capture & Storage (CCS) and gas LNG could have access to Government intentions ahead of the rest of the market and give them a competitive advantage
To exert influence through the analytical function	<ul style="list-style-type: none"> • The System Operator business could benefit from over-procurement of capacity or favouring capacity that creates a more flexible and responsive generation mix • The Transmission Owner business could benefit from <ul style="list-style-type: none"> ○ increased on-shore network build from over-estimated capacity requirements ○ favouring of generation solutions over demand-side reduction. • Gas system operation, transmission and storage could benefit from over-estimation of capacity requirements or from undue weight being given to intermittent technologies • Businesses subject to revenue control could benefit from influence over assumptions made on the cost of capital within the analysis
To exert discretion	<ul style="list-style-type: none"> • Transmission Owner business could benefit <ul style="list-style-type: none"> ○ If new generation is advantaged in, or offshore of, England and Wales; ○ if larger generation that connects to the transmission network rather than distribution is favoured ○ if generation over demand-side response is favoured • Gas system operation, transmission and storage could benefit from technology mixes that require more use of gas • CCS and interconnector businesses could benefit from decisions that favour those businesses • Offshore business could benefit from decisions that create more opportunities for offshore transmission

Stakeholder consultation responses on conflicts of interest

Information conflicts

92. The consultation suggested that there was limited potential for conflicts of interest with National Grid's monopoly businesses arising from it having to access to certain information through the EMR role.

93. Several respondents said that there was a potential conflict of interest with the System Operator's existing role as purchaser of services to balance the electricity system. Respondents felt that if it were able to access confidential information from generators, for example relating to costs, it could use this to increase its bargaining power and drive down its payments for balancing services. Note that the potential for National Grid to reduce the costs of its balancing services to the benefit of consumers was recognised in the consultation document as a synergy.
94. Related to this was a concern about the potential confidential data that industry was expected to share with National Grid as a direct result of the EMR role - including the cost data required for the strike price analysis. This was not always linked to a specific concern that the System Operator would benefit financially from this information but arose from a general concern about data sharing and the risk of data leakage. One respondent said this risk, alongside the interaction with balancing services, meant the System Operator may not receive the best quality evidence for developing the delivery plan analysis.
95. With respect to the competitive businesses, where people specifically commented on these, they agreed with the conflicts presented in the consultation document. It was noted that other conflicts could emerge over time and should be monitored given that those areas, while small in terms of National Grid's profits now, may become more over time.

Influence conflicts

96. As set out in the table above, these relate to the ability to influence the key EMR decisions that Ministers will make in relation to strike prices and setting the volume of capacity to contract for.
97. Most respondents agreed with the conflicts of interest set out in the consultation document. Cost advice in relation to CfDs, potential over-procurement of capacity in the Capacity Market and overestimating the potential role for interconnection were all cited as areas of particular concern.
98. National Grid felt these were unlikely to arise due to the nature of the regulatory regime - for example it argued that it could not benefit financially from over-procurement in the Capacity Market.

Discretion conflicts

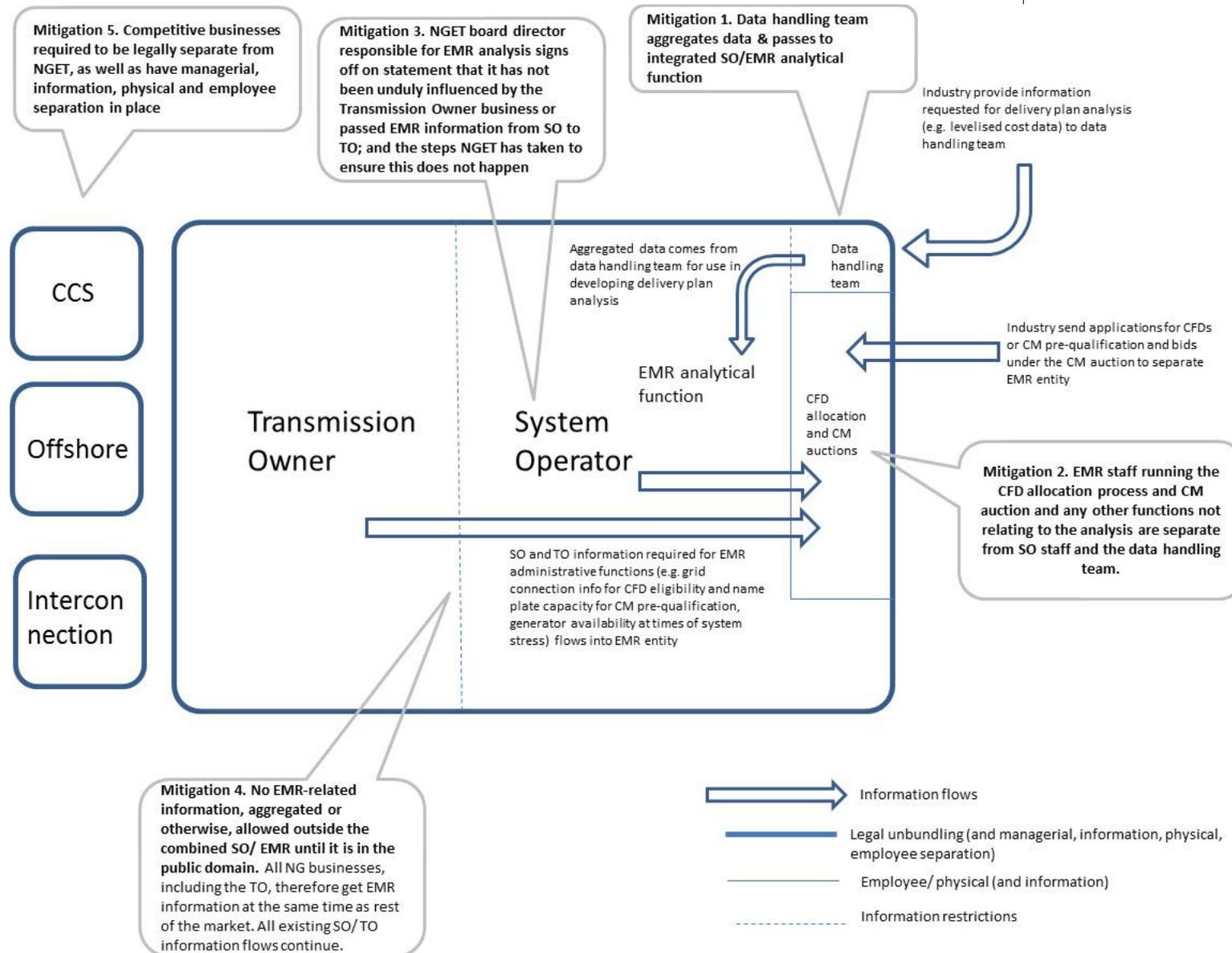
99. As set out in the table above, these relate to any discretion that the System Operator may have in carrying out the administrative functions of EMR, for example allocating CfDs and running the Capacity Market auction. Most of the comments on this type of conflict focussed on the CfD allocation process.
100. A number of respondents noted that National Grid owned a Carbon Capture and Storage (CCS) business and CCS plant would be eligible for CfDs.
101. One respondent noted that, if foreign generation is able to participate in the CfD allocation process, National Grid could favour CfDs abroad to ensure its interconnector projects benefit.

102. General concerns were raised over any potential for the CfD allocation to be based on constraint management and how CfD allocation would operate under a budget constraint.
103. The Carbon Capture and Storage Association, of which National Grid is a member, said conflicts relating to the CfD allocation process were overstated and the proposed tick-box nature of the CfD allocation during the 'first come first served' stage should mitigate against them.

Other comments on conflicts of interest

104. Regarding the materiality of the conflicts of interest, a number of respondents considered that the conflicts of interest they had identified were material. While there were only a few comments on the materiality of specific conflicts of interest, respondents noted material conflicts with the Transmission Owner and System Operator business as a result of the EMR role.

Annex C. Proposed business separation of EMR functions within NGET



Annex D. Description of the EMR delivery role

105. This section describes DECC's current expectations of the functions of the System Operator in delivering EMR. The aim of this Annex is to provide further detail on the SO's role and focusses on its role during the operational life of EMR from 2014.

Summary of the functions of the EMR delivery role

	Capacity Market (assuming Capacity Market is initiated)	Contracts for Difference
Analysis	<ul style="list-style-type: none"> 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 put in place. This will be set out in the delivery plan and annual updates if the Capacity Market is initiated. 	<ul style="list-style-type: none"> 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	<ul style="list-style-type: none"> Carrying out the pre-qualification process to determine participation in any capacity auction. Running a competitive auction for providers of capacity. 	<ul style="list-style-type: none"> 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. The principles governing any competitive process will be set out by Government.

<p>Operational</p>	<ul style="list-style-type: none"> Monitoring progress of capacity providers against [one] milestone[s] 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 for passing to settlement agency to impose penalties according to pre-defined rules. Running spot-tests on providers outside of periods of system stress under conditions set by Government 	<ul style="list-style-type: none"> Monitor take up of contracts to inform analysis provided as part of annual updates to delivery plan
<p>Secondary trading and/or secondary auctions</p>	<ul style="list-style-type: none"> Carrying out the pre-qualification process for any new potential capacity providers and receiving information on new holders of traded capacity agreements. 	<ul style="list-style-type: none"> N/A
<p>Changes to rules and/or mechanism design</p>	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> Providing analysis, if requested by Government, which may result in CfD rule changes by Government or Ofgem.

Role in developing analysis to inform Ministerial decisions

106. 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 2014 onwards.

107. 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 put in place, 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 decisions to support future competitive CfD award.

Commissioning the analysis

108. 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

109. 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. For the Capacity Market annual decision on the level of capacity to procure, it will be required to carry out a consultation on its methodology and assumptions.
110. It will conduct analysis based on this evidence, as well as information it or the market already holds, to:
- 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.
 - Model future CfD strike prices for renewables and their likely impacts on, for example, Government's objectives.
111. The assessment in relation to the Capacity Market will inform a decision by Ministers on how much capacity to put in place to meet an enduring reliability standard which will be set by Ministers as part of the first delivery plan. The first reliability standard will be informed by analysis carried out by independent consultants and the System Operator will not carry out the analysis itself. However, if the reliability standard needs to be changed over time (and this is considered unlikely to happen on regular basis, if at all), the SO may have a role in providing analysis to support this decision.
112. In addition, in advance of the annual decision, Ministers will set a demand curve methodology. The purpose of the demand curve is to allow for the possibility that the price of capacity may turn out to be higher or lower than the price expected when the reliability standard was set.
113. Capacity Market auctions will happen four years before the delivery year. However there will also usually be year-ahead auctions to ensure that the right amount of capacity is available in the delivery year based on the latest analysis. DECC will set out the target level of capacity to procure in the year ahead auction. A number of considerations will be taken into account when setting the level of capacity to procure in this auction, for example up-to-date

analysis on the amount of CfD plant that will be generating and demand forecasts. The amount of capacity procured from the four year ahead auction will be taken into account in the same way and inform the amount to procure in the year ahead auction.

Taking location into account within Capacity Market analysis

114. While we do not intend the Capacity Market to be locational in the first instance, there will be provision/functionality for zonal auctions to be held if deemed necessary in the future. It is anticipated that in this case the SO could play a role but it will not make any decisions on the move to zonal auctions.

Scrutiny of the analysis by the Panel of Technical Experts

115. 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. It will also specifically consider National Grid conflicts of interest with its existing businesses and include a section on this in each final report.
116. 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

117. 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.
118. 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 and demand curve methodology as part of the first delivery plan and whenever these need to be changed.
119. If the CM is initiated, Government does not currently intend to consult on its annual capacity volume decision i.e. how much capacity to put in place. This decision is likely to be based on an enduring reliability standard (and associated demand curve) 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 and the final decision will rest with Ministers.

The SO will however consult on the methodology and assumptions that it plans to use prior to the carrying out of the analysis.

120. 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. SO delivery role in allocating Contracts for Difference

121. 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.
122. As part of the application process, the SO will need to confirm a number of criteria have been met:
- Eligibility: evidence that the 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 project's planning permission decision note and a signed Grid Connection Offer that confirms that the grid will be developed at or before the 'Target Commissioning Date' will be required. This criteria will be further developed and supplemented as appropriate, for example to ensure it is appropriate for all eligible 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.
123. The criteria will be further developed to ensure it is appropriate for all technologies.
124. It is currently anticipated that checking eligibility will involve no or minimal discretion for the SO. We envisage a process where the SO will assess the incoming applications against a straight-forward checklist. The information above will confirm that a CfD can be issued by the CfD counterparty and also determines the appropriate strike price by reference to the Target Commissioning Date.
125. There will be an appeals process for participants to challenge any determination by the SO that a project has not met the eligibility criteria. The exact process is yet to be determined.

126. In the near term it is envisaged that the budget will allow CfDs to be issued on a first come, first served basis where allocation is anticipated to remain comfortably within the available CfD budget. After a specified trigger point is reached the System Operator will instigate a process of allocating CfDs through allocation rounds. Ultimately, after a significant proportion of the CfD Budget has been committed there will come a point at which within a round 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 distinguish between the requests for CfDs to the available budget.
127. 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 a particular delivery year once CfDs have been allocated over the next twelve months.
128. 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 ensuring the scheme operates within the budget available to it. 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. The Government will need to ensure that the system minimises disruption to developers' project pipelines and also limits gaming risks.
129. In an allocation round, the SO will apply an objective methodology set by Government to enable it to identify successful bidders.

The rules for rationing applications to the available budget

130. We anticipate that National Grid's role will be limited to applying the objective criteria and consequently will be applying no or minimal discretion in deciding which projects receive a CFD under a constraint.
131. The application of such an objective methodology may require the System Operator to receive sensitive information. Such information would be treated carefully and arrangements will be implemented to ensure the protection of sensitive data and manage any potential conflicts of interest, as set out in the main section of this report.
132. Full details on the methodology and how it will be applied will be set out in July 2013 alongside the fully termed CfD.

Post-allocation phase

133. The main role of the SO stops at the point of the allocation decision. From that point, the CfD counterparty¹⁷ will monitor whether pre-commissioning milestones are being met and, if necessary, it will enforce the terms of the contract.
134. The SO may 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.

Longer-term move to competitive processes for CFD allocation

135. 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

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

Pre-qualification

137. A pre-qualification stage will take place around four months ahead of the auction and is designed to confirm the eligibility status of capacity that providers wish to bid into the capacity auctions. Pre-qualification requirements will vary for different types of capacity (e.g. for generation and DSR). It is intended that participation in the pre-qualification stage will be mandatory for all eligible licensed generation; however participation in the actual auction is voluntary. The pre-qualification process will impose different requirements on different types of plant (for example on new plant, existing plant intending to undergo significant refurbishment, and other existing plant).
138. At the pre-qualification stage all such plants must register through a tick box mechanism whether they will provide capacity in the delivery year and how they will participate in the auction.

¹⁷ More details on the CFD counterparty can be found here:

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

Criteria for participation in the auction

139. Potential providers will have to register for the pre-qualification stage ahead of the primary auction.
140. The purpose of the pre-qualification stage is to confirm the eligibility status of capacity that prospective capacity providers wish to bid into the capacity auctions and to reduce complications which could otherwise prevent the effective operation of a price based auction. The SO will undertake a series of mechanistic checks of the capacity providers' application to assess their ability to deliver on their prospective capacity obligations should they be successful in the auctions.
141. Plant which is able to demonstrate achievement of the key criteria at their individual Capacity Market Unit (CMU) level will be considered as having provided an acceptable level of surety as to their ability to deliver and are therefore considered eligible to participate in the auction process. The criteria for existing plant could include:
 - i. submission of a verified de-rated capacity,
 - ii. passing a financial check
 - iii. has generated onto GB system up to their bid level and
 - iv. has a valid Transmission Entry Capacity (TEC) to GB (or interconnected zones) for the delivery year – where appropriate for their size of CMU.
142. Existing plant which intends to undergo significant refurbishment may also have to submit additional information, for example:
 - v. a Board Certificate and Board approved business plan justifying the finance requirements for their proposed essential expenditure. The business plan will be submitted to Ofgem and not to the System Operator.
143. New plant is also likely to have to submit additional information, for example:
 - vi. evidence of a valid Development Control Order and;
 - vii. submission of plausible construction milestones to achieve commissioning onto the GB system in addition to the aforementioned de-rated capacity and financial checks.
144. The key point is that, in carrying its role in pre-qualification, National Grid will be operating within a clear set of rules and will have limited discretion.
145. We are considering how the de-rated capacity of each plant (which it can bid into the auction) should be set. We are seeking to ensure that the SO role will be primarily mechanistic and on a transparent basis with limited discretion.

146. The pre-qualification process will also confirm providers' compliance with the Grid Code, the existence of a connection for the relevant delivery year and the CfD FIT/RO status of the bid capacity.
147. The rules for the pre-qualification process would 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

148. The SO will then run the auction itself, mechanistically rank verified bids on the basis of cost and compile information for Ministers.
149. Once the results of the auction have been announced, 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.

Operational Phase

150. 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

151. We expect that new plant will need to demonstrate progress towards delivery, for example by providing evidence of their Substantive Financial Commitment to their project within a year of being awarded the Capacity Agreement. This is to provide assurance additional to that of the pre-qualification stage that agreements have not been provided to speculative projects which fail to progress to commissioning. Failure to provide sufficient evidence of such a commitment would result in the termination of the new plant's Capacity Agreement.

During the delivery year

152. During the delivery year(s) of the capacity agreement, the SO will play a role in ensuring that the data is made available such that an assessment can be made as to whether the terms of the capacity agreement have been met. Capacity providers are obliged to deliver energy (or reduce demand) 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 (or reducing demand) up to the full level of their obligation at that time, they will face a financial penalty.

153. If the the participant has failed to provide the required capacity, the SO will pass the information (which it already holds through its existing work) to the settlement agency for the penalty to be applied, under rules set out by Government or Ofgem.
154. There will be specific arrangements for new plant which has not delivered capacity on time. National Grid's role in these arrangements will be within a specific set of rules and it will have limited discretion.
155. We expect that the SO would retain an ability to spot test providers in the exceptional circumstances of where they had failed to demonstrate their capacity volumes to the SO's satisfaction over the previous delivery year. Designated providers would be required to generate to the volume of their capacity agreement at a date and time specified by the SO, with penalties being applied for plant not able to demonstrate when tested. We expect that, if testing arrangements are included, plant would receive advanced notification of the test periods, with the System Operator taking account of pre-agreed class type plant dynamics when determining each plant's notification period. The SO would be limited to testing any specific CMU on a specified number of occasions within any particular delivery year. Any penalties for failing tests would be clearly set out in advance.

Secondary trading

156. Providers will be able to physically trade out of their capacity obligations up to the start of the relevant delivery year, with such trades being notified to, and verified by, the SO. The consent of the SO will also need to be obtained to the novation of the any capacity agreements and the grounds of consent will be objective i.e. that the assignee is a qualified unencumbered capacity provider. From the start of the delivery year - for which the capacity obligations are valid - onwards, providers will be able to financially trade ('hedge') their obligations via bilateral agreements but will not be able to physically trade their capacity obligations.
157. New plant will not be able to physically trade its capacity obligations in advance of the delivery year until they have reached operational status – defined as Interim Operational Notification.

Rule-setting

158. 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.

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Department of Energy & Climate Change
3 Whitehall Place
London SW1A 2HD
www.decc.gov.uk

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