System Operators, Transmission and Transportation System Owners, Generators, Shippers, Suppliers, Customers, Investors and other interested parties

Promoting choice and value for all gas and electricity customers

8 March 2012

Dear Colleague,

Electricity Market Reform (EMR): Potential synergies and conflicts of interest arising from the designation of the Great Britain (GB) System Operator (National Grid Electricity Transmission plc) as delivery body for the proposed Capacity Market and Feed-in-Tariff Contracts for Difference (FiT CfDs)

Purpose of this letter

DECC's technical update on EMR published in December 2011 indicated that DECC intends to confer the EMR delivery function on the GB System Operator (SO).

Such an expanded role for the SO offers opportunities to exploit synergies between the new EMR responsibilities and the SO role, resulting in benefits to consumers. However, there is also the potential for new conflicts of interest to arise in addition to the issues that Ofgem currently manages through regulation.

This letter seeks views on the potential for synergies and conflicts of interest and on the ways that such conflicts of interest may be mitigated. It does not address broader issues about how National Grid is regulated in a post-EMR environment. We are consulting for four weeks in order to inform the legislative process for EMR, decisions on the design of EMR delivery arrangements, including governance arrangements for the EMR delivery body, and future SO regulatory and incentive arrangements. There will be a second round of consultation in the summer where DECC and Ofgem will test emerging conclusions on the nature and scale of any potential conflicts of interest and recommendations for mitigating actions, as appropriate. It is envisaged that a final report will be published after this second round of consultation.

The background and context for this consultation are set out in Appendix 1 which covers:

- The aims of EMR.
- The history of consultation on EMR.
- The proposed responsibilities for the SO in relation to Feed in Tariffs (FiT CfDs) and the Capacity Market.
- The reasons why DECC is of the view that the SO is best placed to take on the EMR delivery role.

National Grid plc (National Grid)

National Grid is a FTSE 100 shareholder owned company. National Grid Electricity Transmission plc holds a transmission licence granted under s.6(1)(b) of the Electricity Act

1989 which covers its activities as SO in GB. In addition to its role as SO, National Grid has a number of varying business interests in GB and more widely.

These interests include: England and Wales transmission owner (TO), owner and operator of the GB gas transmission network, a number of GB gas distribution networks, an LNG import terminal at the Isle of Grain and LNG storage facilities. It also has interests in interconnectors, the development of carbon capture schemes, offshore electricity transmission networks and service provision to the gas and electricity industry. An overview of National Grid's business interests including the ownership structure and regulatory framework is provided in Appendix 2.

Role of the SO as potential delivery body for the proposed Capacity Market and FiT CfDs

The conferral on the SO of the EMR delivery functions for the proposed FiT CfDs and Capacity Market is likely to have implications in terms of:

- **Access to additional information:** The SO's new roles will mean that it has access to more information on those it does business with and more information on electricity markets (and broader energy markets) in general. It will also have information at an earlier stage – when, for example, generators are planning their investments – than now.

- **Ability to make or influence decisions:**
  This could be through two routes:
  - Through the advice it provides to DECC in terms of the key rules and parameters for FiT CfDs (e.g. strike prices) and the Capacity Market (e.g. on how much capacity to contract for and whether to run an auction).
  - Through the operational independence it has in performing both roles. The SO is likely to have some discretion in performing its roles which may include some flexibility over how the two mechanisms are implemented in practice including contract allocation. The exact level of discretion will be determined by DECC. Further details on its role in administering the schemes can be found in Appendix 1.

The increased access to information, influence through the advice it provides to DECC, and discretion over certain decisions have the potential to lead to synergies and conflicts of interest. The following sections outline the potential for these synergies and conflicts of interest to arise and, in respect of potential conflicts of interest, provide examples of potential mitigation measures.

Opportunities – potential synergies

The SO already has responsibilities and expertise in planning the transmission system. The additional information and influence of the SO over the parameters determining the generation mix and the location of generation could support more efficient investment, such as consideration of trade-offs between generation and transmission investment (e.g. whether it is more economical to build new generation in an import restricted area or to remove the network congestion). This new information and discretion may allow the SO to take a more holistic view of generation and transmission (including interconnection) potentially allowing it to plan and deliver the overall system more efficiently. For example, the value of additional generation capacity depends on the flexibility and location of that capacity. To the extent that EMR allows the SO some discretion, and appropriate incentives are in place, the value of additional capacity can be better maximised taking into account other generation, transmission and interconnection plans and decisions.

The SO also already has responsibility in operating the transmission system to specified security standards. The additional information and ability to influence the parameters of generation would assist the SO in its operation of the system, for example by increasing

the accuracy of its reserve requirement (in terms of volume, level of flexibility required in the system and location) supporting security of electricity supply.

Similarly, the expanded role of the SO could help identify the need for additional interconnector capacity at locations that contribute most to security of electricity supply and the efficient operation of the system. The influence of the SO in such decisions could lead to interconnectors being located where they provide the most benefit to the GB system, for example by making the best use of transmission and generation assets.

There may also be positive knock-on effects for the gas system as improved planning of the electricity system may allow better planning of the gas system: for example, whether more capacity is needed and how flexible the gas system needs to be to adequately respond to more intermittent electricity generation.

If the SO takes into account these synergies, benefits to consumers could result through more effective and efficient delivery of the EMR objectives. These synergies may be more likely to be realised and therefore lead to overall benefits where the National Grid businesses involved are licensed activities not exposed to competition. These activities are already scrutinised and regulated by Ofgem. Regulation may need to evolve to ensure that appropriate incentives are in place to maximise the synergies between existing and new functions.

Risks – potential conflicts of interest

The factors that give rise to potential synergies – the access to information and additional decision making powers and influence - may also give rise to conflicts of interest that compromise effective EMR delivery, depending on the incentives that the SO and National Grid face more widely.

The potential for the SO to have more ability to influence decisions under EMR could result in it having an influence over the type, location and volume of new generation connecting to the system. Under Ofgem's RIIO-T1 price controls, NGET in its TO role faces various incentives. Under its EMR role, NGET will have an additional lever to try and be more cost effective during the regulatory period: NGET will potentially be able to influence the choice of generation projects that enable it to deliver the required output under RIIO-T1 for lower levels of transmission capital expenditure or with lower risk of overspend, compared to alternative generation projects including those that might have influenced their RIIO proposals. However, when new incentives are being set for the next regulatory period, NGET may have an incentive to increase the overall level of the regulatory asset value and make EMR choices that involve it in significant TO expenditure where this can be demonstrated as efficient to the regulator.

The additional information and ability to influence decisions may also lead to conflicts of interest where the National Grid business involved is operating in a competitive environment. In such a case National Grid may be able to obtain a competitive advantage either with respect to the amount, quality and timing of information it has access to in its EMR delivery role or with respect to its ability to use information to actually favour its commercial arms. For example, if information in respect of the need for new low carbon generation at particular locations could be passed to its CCS business (National Grid Carbon Limited) then this could give National Grid's CCS business an unfair advantage over other competing businesses. Alternatively, National Grid's CCS business could divert its resources to projects which appear to have characteristics or assumptions that align more closely with the direction of travel for EMR. Appendix 3 contains additional illustrative examples of potential conflicts.

In addition to the potential areas of conflict, the EMR functions will increase both the complexity of the SO role and the dependence of the GB energy sector as a whole on the SO's effective performance of its role. The new EMR delivery responsibility will require the SO to play a full role in delivering a sustainable energy system. This will require the SO to

take a proactive approach, for example in respect of facilitating new solutions for delivery of EMR, such as demand side response.

The prominent role of the SO could mean any potential threats to National Grid's overall business become more significant threats to the GB energy sector as a whole than is currently the case, meaning that appropriate supervision of existing and new SO functions, including getting incentives properly aligned, is all the more important. The increased complexity of the SO and its roles may make regulation of the SO more complex and the need for transparency greater.

Potential mitigation measures

To the extent that conflicts may arise it is necessary to consider potential mitigation measures. Mitigation measures will need to be able to address effectively any potential causes of conflict (access to information or ability to make or influence decisions) and be proportionate to the materiality of the potential issue. Mitigation measures will also need to avoid the risk of generating unintended consequences and ensure that potential synergies leading to effective and efficient delivery of EMR are maximised.

Examples of potential mitigation measures which may be best suited to addressing conflicts that arise from access to additional information include:

- Ring-fencing elements of National Grid's business, such as systems, management, location, staff and/or structure.
- Management of access to and use of information.
- Transparency of processes for EMR delivery.

Examples of potential mitigation measures which may be best suited to addressing conflicts that arise from the ability to make or influence decisions include:

- Putting in place appropriate incentives that make performing the SO and EMR roles to maximise societal benefits in the SO's best interests.
- Scrutiny of the advice that the SO provides to Government on the key parameters of the FiT CfDs and Capacity Market.
- Scrutiny of the SO's use of discretion and transparent assessment of outcomes delivered.

The examples above are not exhaustive. Legal unbundling of certain businesses, including creation of new subsidiary companies under National Grid, and ownership unbundling are also possibilities. Changes to the design of EMR delivery arrangements, such as allocating roles and responsibilities between Government and the System Operator, and setting up an appropriate accountability framework, including performance management of the delivery body, may also be effective mitigation measures.

It may also be that careful design of EMR delivery arrangements, current regulations and processes (including Ofgem's incentive regulation and the close scrutiny of transmission investment costs) or the corporate structure of National Grid (within which it already has experience of maintaining separation between some of its businesses), mean that potential conflicts will not arise in practice. Appendix 2 sets out the relevant corporate structure of National Grid and summarises the regulation currently in place.

Process and next steps

The responses to this consultation will inform the legislative process for EMR and the governance arrangements for the EMR delivery body. As a result of the legislative timetable for EMR it is necessary to limit the timing for responses to this consultation to four weeks. A second round of consultation will take place in the summer.

Ofgem and DECC would like to hear the views of interested parties in relation to any of the issues set out in this letter. We would especially welcome responses to the specific questions which we have set out in Appendix 4.

Responses (clearly marked) should be received by 5 April 2012 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. Respondents may request that their response is confidential. Ofgem 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.

DECC and Ofgem are holding a workshop at 9.30am (for a 10am start) to 12.30pm on 27th March 2012 at the Institute of Mechanical Engineers (Christopher Hinton Room), One Birdcage Walk, Westminster, London SW1H 9JJ to give interested parties the opportunity to share and discuss their views. To register for this event please email your details to harriet.williams@ofgem.gov.uk.

Any questions on this letter should, in the first instance, be directed to david.o'neill@ofgem.gov.uk or giles.hall@decc.gsi.gov.uk.

Yours faithfully

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Ofgem

Jonathan Brearley,
Director of Energy Markets and Networks,
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Appendix 1: Background

Aim of Electricity Market Reform

The aim of EMR is to meet the significant long-term challenge of decarbonisation and to deliver our renewable energy targets, while maintaining secure and affordable electricity supplies. This is within a context of significant planned capacity closure within the next decade, concerns at lack of flexibility of new low carbon generation, volatile oil and gas prices and a wide range of scenarios for future demand.

History of consultation

An initial EMR consultation document was published in December 2010 with responses to this in March 2011. This informed the publication of an EMR White Paper in July 2011, which also sought further consultation on the type of Capacity Mechanism. The December 2011 Technical Update set out further information about the institutional arrangements and the chosen Capacity Mechanism - a Capacity Market.

Proposed responsibilities for the SO

As set out in the Technical Update, Government will be responsible for setting the policy approach and objectives and for taking final decisions on key rules and parameters. The SO will provide independent, expert advice to Government on key rules and parameters for FiT CfD. This could involve presenting alternative generation mix scenarios that make clear the trade-offs between Government's objectives. For the Capacity Market the SO may be responsible for providing advice to Government on the level of capacity to be contracted.

The Government will make the relevant final decisions, following scrutiny of the SO's advice and potentially drawing on external expertise, including Ofgem.

The SO will also administer the FiT CfD and Capacity Market. The detailed design of the two mechanisms is still being developed but set out below are some possible functions the SO could carry out.

The role of the SO in relation to FiT CfDs could include:

- Determining whether generators meet eligibility criteria for receiving FiT CfDs. While the type of generation that will be eligible for FiT CfDs will be a matter for Ministers, NGET may have some discretion over some technical eligibility criteria such as assessing the extent to which projects are likely to occur.
- Drafting some specific terms of contracts incorporating the particulars of the project and setting "implementation conditions" which will have to be met, for example the timetable for delivery of a project.
- Issuing contracts for difference.
- Monitoring projects until commissioning, including potentially requiring information from generators to ensure "implementation conditions" are being met.
- Publishing reference prices.
- Providing advice to DECC on technology costs that will be used to help develop advice to the Secretary of State.
- Administering auctions where Government considers it appropriate to use greater use of tendering or auctioning as a mechanism to set the level of FiT CFD support.

For delivery of the Capacity Market the SO's role could include:

- Providing advice to support Ministerial decisions on how much capacity to contract for and whether to run an auction, in particular when to run the first auction.

- Administration of capacity auctions including advising on design of the auction process; review and verification of bids to participate in the auction; and overseeing the operation of the auction in accordance with technical rules.
- Issuing capacity agreements to successful participants in the auction and monitoring behaviour of participants.
- Administering and monitoring secondary trading of Capacity Market agreements if secondary trading is available.
- Reporting to Government on Capacity Market performance for policy and accountability purposes.

DECC is of the view that the SO is best placed to take on the delivery role as:

- It is an independent private company, which is important to give investors confidence that the mechanism will be implemented transparently and predictably.
- Independence can be balanced by establishing accountability to Government through a clear decision making process and ongoing reporting requirements.
- It already has the technical expertise and commercial and financial skills necessary to deliver the schemes.
- Building on its expertise, payment models can be designed to provide for a credit-worthy payment structures.
- Delivery of both mechanisms through a single organisation can ensure value for money.

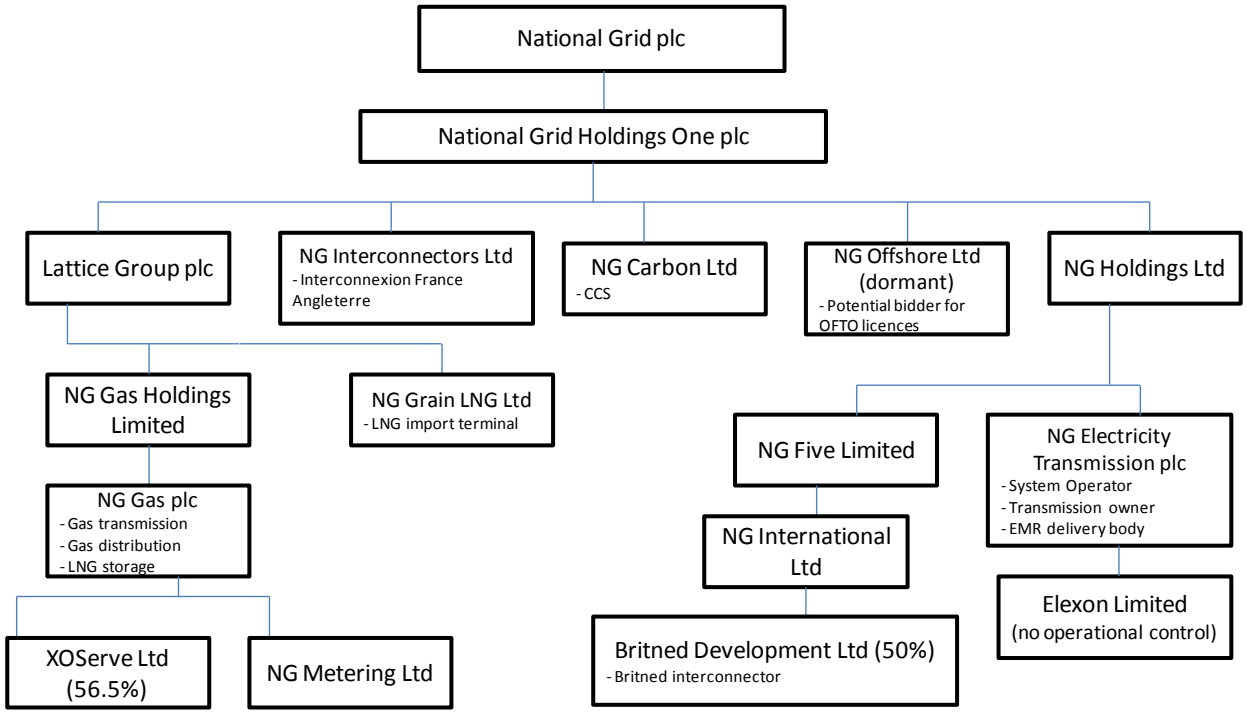
There are strong synergies between the SO's existing role and the proposed new functions. In terms of the Capacity Market, the SO already has a role in assessing the capacity of the overall electricity system in Great Britain and in procuring short term electricity reserves to deal with unexpected supply issues. The SO has experience of accurately assessing generator availability which is relevant to the Capacity Market.

The SO also has experience of running competitive tenders for a range of services, and is well placed to oversee auctions under both the FiT CfD and Capacity Market. The SO has existing relationships with suppliers, large generators and providers of demand-side response (DSR), which should give industry confidence in the management of FiT CfD and Capacity Market contracts.

More generally, the SO has experience and an in depth understanding of the electricity market which will help to ensure the effective implementation of the FiT CfD and Capacity Market within the existing market framework. It will be important to take into account the impact of these new schemes on the whole electricity system, including the impact on network build and maintenance and the impact on electricity trading and balancing costs. The SO is well placed to be able to take this view.

DECC and Ofgem have launched this joint project to assess the extent to which the SO performing the EMR delivery role creates new conflicts of interest and/or new synergies for National Grid. It is intended that this project looks at synergies and potential conflicts from when National Grid would formally take on the delivery role, currently anticipated to be in 2014. Before then, it is recognised that National Grid may have access to information, commercially sensitive or otherwise, in the course of preparing for this new role. It is expected that National Grid will sign a legally binding agreement covering confidentiality and management of information for staff and contractors working on EMR delivery. To the extent that any conflicts of interest may arise in relation to CCS, DECC is considering what measures, if any, need to be taken prior to the launch of its CCS competition, including the possibility of agreeing specific-CCS measures prior to concluding any wider arrangements.

Appendix 2: National Grid's businesses



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

Business	Activity	Relevant Legislation / Regulation
National Grid plc	Overall parent company	The Authority has powers under the Enterprise Act 2002 and under the Competition Act 1998 to investigate and to sanction breaches.
National Grid Electricity Transmission plc (NGET)	Owns the high voltage electricity transmission system in England and Wales. System Operator for GB onshore and offshore transmission systems.	Electricity transmission licence granted under s.6(1)(b) of the Electricity Act 1989. Revenues and outputs to be delivered are subject to price controls set by the Authority.
Elexon Limited (Owned by NGET)	Delivers the Balancing and Settlement Code (BSC).	Section C of the BSC prescribes the constitution of Elexon, its role, powers, management, liability position and subsidiaries. NGET has no operational control.
National Grid Gas plc	Owns and operates the high pressure transportation system in GB. Owns and operates four distribution networks. Owns LNG storage facilities.	Holds 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 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 and carries out registration and customer switching services for the industry. Also manages the energy allocation and invoicing on behalf of Gas Transporters.	Xoserve is currently owned and governed by gas transporters (GTs), and GTs recover allowed costs through price controlled network charges.
National Grid Metering Limited (owned by National Grid Gas plc)	Metering services to around 17 million gas meters for the companies that supply gas to domestic, industrial and commercial consumers.	The Authority has powers under the Enterprise Act 2002 and under the Competition Act 1998 to investigate and to sanction breaches.
National Grid Grain LNG Limited	Owns and operates the Isle of Grain LNG import terminal	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).	Interconnector licence granted under s.6(1) (e) of the Electricity Act 1989.
BritNed Development Limited (50% owned)	Joint venture with Dutch transmission system operator TenneT. The company owns and operates the GB – Netherlands interconnector.	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	Carbon capture storage related activities.	Any use of the gas transmission network for carbon capture will be subject to the Authority's approval.
National Grid International Limited	Developing interconnectors with various countries.	Any interconnectors developed will be subject to licensing under s.6(1) (e) of the Electricity Act 1989.
National Grid Offshore Limited (dormant)	Dormant but may bid for future offshore transmission operation (OFTO) licences.	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.

Appendix 3: Illustrative examples of potential conflicts of interest

In this Appendix we provide some hypothetical examples of how potential conflicts of interest might arise (or might be perceived to arise). There is no assumption that National Grid will abuse its position – the purpose of this analysis is to establish a structure that reduces potential concerns.

Illustrative example 1. Favouring generation requiring greater network build in England and Wales over generation located in Scotland or favouring generation solutions generally over demand side reduction solutions (that require less network use) might affect the profitability of the electricity transmission network in England and Wales. The potential for the SO to have more ability to influence decisions under EMR could result in it having an influence over the type, location and volume of new generation connecting to the system. Under Ofgem's RIIO-T1 price controls, NGET in its TO role faces various incentives. Under its EMR role, NGET will have an additional lever to try and be more cost effective during the regulatory period: NGET will potentially be able to choose generation projects that enable it to deliver the required output under RIIO-T1 for lower levels of transmission capital expenditure or with lower risk of overspend, compared to alternative generation projects including those that might have influenced their RIIO proposals. However, when new incentives are being set for the next regulatory period, NGET may have an incentive to increase the overall level of the regulatory asset value and make EMR choices that involve it in significant TO expenditure where this can be demonstrated as efficient to the regulator.

Illustrative example 2. Decisions made under EMR or use of information might affect the profitability of National Grid's CCS business. This could be through favouring CCS itself as a type of generation, and also through favouring CCS locations where National Grid's CCS business had specific interests.

Illustrative example 3. Decisions under EMR could favour the development of interconnectors (in general or specific projects) and therefore affect the profitability of National Grid's separate interconnectors business. This could occur through favouring an amount (via the Capacity Market) and mix of generation that will lead to more peaky market prices and therefore more volatile price differentials with neighbouring markets (which is the key driver for interconnectors' revenues).

Illustrative example 4. If EMR decisions favour more remote generation investment offshore, this could allow National Grid's offshore business more opportunities to bid for building the necessary transmission. National Grid may also benefit from increased offshore wind generation where it requires upgrades to be made to the transmission network onshore.

Illustrative example 5. In respect of its gas transportation business, National Grid may be impacted if EMR favours gas generation projects. The use of additional gas in generation is likely to result in additional use of National Grid's gas transportation network, which may include the requirement to expand the network, therefore affecting the profitability of National Grid's gas business.

Appendix 4: Questions

To help us consolidate responses we ask that you frame your responses where possible in the context of the following questions:

Q1: Please provide your views on the synergies that may arise given National Grid's proposed functions as EMR delivery body.
Q1a: Please be a specific as possible as to what these synergies will be, how you consider they may arise, and how customers may benefit.
Q1b: Please provide any views you have on how these synergies could be maximised and what evidence would support the existence of synergies and enable analysis of their benefit.

Q2: Please provide your views on the conflicts of interest that you consider may arise given the new information that National Grid Electricity Transmission plc may have access to and the influence and discretion it may have under proposed EMR responsibilities.
Q2a: Please be as specific as possible as to what these conflicts of interest will be, how they will arise, your views on the potential materiality of them and how they may lead to customers' detriment and impact on effective delivery of EMR.
Q2b: What evidence would support the existence of conflicts of interest and enable analysis of the problem?

Q3: To the extent that you consider conflicts might arise, what measures do you consider would be most appropriate to eliminate, or reduce to an acceptable level, these conflicts?
Q3a: Please be as specific as possible, identifying where possible which mitigation measures are appropriate for which specific conflicts of interest.

Q4. Are there ways in which the design of the delivery arrangements for EMR, for example in the design of the relationship between Government, National Grid and Ofgem, could mitigate any potential conflicts of interest?

Q5: Do you think there are any areas of discretion in decision making that National Grid Electricity Transmission plc may have under the EMR role that give rise to specific areas of concern?
Q5a: Please specify what these areas are and why they give rise to concerns.