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Ofgem

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James Norman

London

SW1P 3GE 8 January 2016

Dear James,

Extending competition in electricity transmission: arrangements to introduce onshore tenders

Scottish Hydro Electric Transmission plc (SHE Transmission) welcomes the opportunity to respond to Ofgem's latest consultation on extending competition in electricity transmission. Whilst we have previously given cautious support to the concept of introducing competition into transmission, we have expressed concern over the development of a competitive regime, the assessment of benefits and the timetable for its introduction. Our concerns in these areas remain and are summarised below.

Project identification and pre-tender

We agree that a robust and streamlined process that clearly and efficiently identifies projects for tendering will be in the best interest of consumers. In our view, the process proposed for project identification and pre-tender activities for medium and longer term projects blurs the statutory obligations of the System Operator (SO) and Transmission Owners (TOs). We do not believe it is efficient to have a regime where both the SO and TOs would be identifying options to address system need, including SQSS compliance, and then undertake development of those options. Given the integrated nature of the transmission system, split responsibilities between the SO and TOs, along with the introduction of Competitively Appointed Transmission Owners (CATOs), will not lead to the development of an efficient, co-ordinated and economical transmission system; the lack of clarity around system design responsibilities and associated liabilities will lead to inefficiencies and duplication of work.

We are concerned that the blurring of responsibilities in this area, and the potential liabilities associated with such an uncoordinated approach with lack of accountability, will increase the risk to security of supply. This cannot be in the best interests of consumers.

In our view the SO role should be to identify system need, with the existing TOs maintaining responsibility for system design in their geographic areas. The only alternative is for a fully Independent System Operator (ISO) to be set up. If the latter is the preferred model, the ISO would take full responsibility, and the respective obligations, for all system design. In this scenario, until the ISO is in place, it will be essential that responsibility for system design is retained by one body, the TO, in the three geographic areas.

The high value threshold

We recognise that Strategic Wider Works (SWW) projects are the only ones where Ofgem can seek to introduce competition prior to RIIO-T2. However, Ofgem's proposal means that works in Scotland valued between £100 and £500 million could be subject to competition, whereas an identical project in England and Wales would not be. In our view, unless the high value threshold is set at the same monetary value across GB then the competitive process will be discriminatory. We would once again urge Ofgem to carefully consider the consequences of its proposals in this area.

For RIIO-T2 onwards the threshold, across the whole of Great Britain (GB), should be based on an updated Cost Benefit Analysis based on the experience gained in RIIO-T1.

Tender models

In terms of identification of projects for tender, European Directive 2009/72/EC and the existing 10 year network development plan are obviously relevant. We assume that Ofgem is taking account of the Directive but would welcome confirmation of this.

Each model has its pros and cons, whilst the early CATO build model presents the best opportunity for innovation and efficiency in design, the process presents a number of challenges in being able to assess bids and also for the pricing of bids. In contrast, only the late CATO build model can be used for RIIO-T1 projects deemed suitable for competitive tendering; and is likely to be the most compelling model for potential new market entrants. On balance, we believe the late model will provide the best opportunity for developing competition in onshore transmission assets in the short to medium term.

Notwithstanding this, we remain concerned that Ofgem is pressing forward with its proposals for competitive tendering without fully quantifying the costs, benefits or risks and we believe it is essential that Ofgem updates its March 2015 Impact Assessment as its proposals mature to ensure there is enduring benefit to consumers.

Market offering

Extending competition to onshore transmission assets is not the same as offshore competition. It will be essential that the financial structures of newly appointed transmission owners support the long term nature of owning operating and maintaining assets that are integral to the Main Interconnected Transmission System (MITS). CATOs will be owners/operators of critical UK infrastructure and we would strongly encourage Ofgem to implement a regulatory framework in line with current obligations for existing TOs, including financial ring-fencing arrangements, investment grade credit ratings, data assurance requirements and provision of regulatory information.

Conflict mitigation

In the short term, and prior to implementing any new competitive regime, it will be essential to clearly and completely separate out the SO & TO functions within National Grid's electricity transmission licence to ensure there are no conflicts of interest. The transitional arrangements discussed above will need to address conflicts of interest within existing TOs as well as between SO & TO.

We welcome the decision that existing TOs will able to compete for onshore assets as long as any conflicts of interest or risks arising from their participation are appropriately addressed. We are keen to work with Ofgem and industry to ensure that any concerns are addressed and that the TOs licences are amended to all such participation.

We expand on these areas below, and have responded to all of the consultation questions in an appendix to this letter. Where appropriate, we have added further questions that we believe must be addressed before competitive delivery can be successfully introduced into onshore transmission.

Detailed Response

The role of the SO in system design

Under the proposed early CATO build model the intention is that the SO identifies system need, selects options (desktop analysis) and identifies a preferred solution. Under the proposed late CATO build model the SO will also carry out the initial design solution, undertake surveys/studies and obtain consents.

In the consultation Ofgem notes that under the Networks Options Assessment (NOA) process the SO has responsibility, in co-ordination with TOs and in consultation with other stakeholders, to:

- Identify the needs of the GB transmission network; and
- Identify and assess options for meeting the future needs of the network, recommending a preferred option.

Ofgem sees a key role for the existing TO in identifying and considering options on its system to address system need. In conjunction (parallel), the SO is expected to identify options not identified by the TO, including options that meet the criteria for tendering. We do not believe it is efficient to have a regime where both the SO and TO would be identifying options to address system need, including SQSS compliance, and then undertake development of those options. Such split responsibilities blur the decision making process when what is needed under an integrated system planning regime is absolute clarity on roles and responsibilities with regard to system planning and design/development.

We are concerned that the blurring of responsibilities in this area, and the potential liabilities associated with such an uncoordinated approach with lack of accountability, will increase the risk to security of supply. This cannot be in the best interests of consumers. Ofgem must ensure that there is clarity on what obligations are assigned to which party and satisfy itself that any risk to security of supply is fully addressed.

In our view either the existing TOs must continue to carry out the initial design solution, undertake surveys etc **OR** a true ISO takes full responsibility, with the concurrent obligations in the Electricity Act amended such that it is only the ISO who has responsibility for developing an efficient, coordinated and economical system of electricity transmission.

Our preference is for the existing TOs to continue with this role, certainly in the short to medium term. The existing process works well, and is the result of many years of joint working between the SO and TOs. If, in the longer term, the decision is made to establish an ISO, then transitional arrangements will be essential as the new body starts to take over the role of the existing TOs in project identification, early development work and pre-tender activities. Once the ISO is established, the obligation under the Electricity Act 1989 for licensees to develop and maintain an efficient, coordinated and economical system of electricity transmission must be re-assigned such that the ISO has the obligation to <u>develop</u> an efficient, coordinated and economical system; with the TOs and CATOs having an obligation to maintain the system.

Thresholds for competitive delivery

We have previously expressed concern with the proposed £100 million high value threshold for competitive tendering of onshore transmission assets during RIIO-T1¹. In our view it is clearly discriminatory to allow projects of a value of £100 million and above to be considered for competitive tendering in Scotland but only to allow those projects of £500 million and above to be considered in England & Wales; it is disappointing therefore that Ofgem continues to believe that such a threshold is appropriate.

We recognise that SWW projects are the only ones where Ofgem can seek to introduce competition prior to RIIO-T2. However, Ofgem's proposal means that works in Scotland valued between £100 and £500million could be subject to competition, whereas an identical project in England and Wales would not be. In our view, unless the high value threshold is set at the same monetary value across GB then the competitive process will be discriminatory. We would once again urge Ofgem to carefully consider the consequences of its proposals in this area.

Tender models

We have previously written regarding SWW projects currently in flight; particularly the Western Isles and Shetland Island projects which we believe have progressed to such an extent that any decision to tender would result in delays and increased costs to the generation customers whose needs they are responding to. In addition to this, in terms of identification of projects for tender, European Directive 2009/72/EC and the existing 10 year network development plan are obviously relevant.

Each model has its pros and cons, whilst the early CATO build model presents the best opportunity for innovation and efficiency in design, the process presents a number of challenges in being able to assess bids and also for the pricing of bids. In contrast, only the late CATO build model can be used for RIIO-T1 projects deemed suitable for competitive tendering; and is likely to be the most compelling model for potential new market entrants. On balance the late model will provide the best opportunity for developing competition in onshore transmission assets in the short to medium term.

Notwithstanding this, we remain concerned that Ofgem is pressing forward with its proposals for competitive tendering without fully quantifying the costs, benefits or risks and we believe it is essential that Ofgem updates its March 2015 Impact Assessment as its proposals mature to ensure there is enduring benefit to consumers.

Proposed early CATO build model

With the output from the NOA being the trigger point for early model tendering, the tender specification will need to be high level and functional. This will present some difficulty in assessing bids with potential different solutions and innovative solutions. The criteria by which these tenders would be assessed will require detailed clarity and the basis of pricing of bids will need to be agreed. It will also be significantly challenging to fix costs early, so there will need to be a clear and defined process by which indicative bids are refined and on what basis this aligns with final tender selection.

As well as potential benefits, innovation is likely to bring different risks/challenges to projects. For example: how will parties be expected to handle these through the development process and ensure the innovative solutions offered are deployable and meet the required standards and specification?

¹ SSE letter, 2015-07-10 SHE Transmission response to Criteria consultation JC.pdf

Proposed late CATO build model

We recognise that a late CATO build model is the most likely model to deploy in the short to medium term, given the proposed timeline for implementation and status of current projects in development. There are, however, a number of significant factors to consider in the features of the proposed model:

- We note that the initial checkpoint for tendering assesses the output from the NOA process. The role of the SO is therefore key to the decision making at this point and we believe it reinforces the need to ensure separation between National Grid's SO and TO functions;
- For the tendering process, there needs to be clear guidance on the information and documentation required to populate a data room for tenderers, to ensure bids are prepared on an equitable basis;
- The model process dictates that the supply chain will have to engage with multiple parties during the procurement process. There is a risk that there is no appetite to engage in multiple tenders or that the supply chain seek recovery of additional tendering costs;
- We note that some potential CATOs are part of a larger group of companies who already form part of the supply chain for construction. This may give rise to conflict and put existing TOs at a disadvantage. Conflicts of interest considerations should also therefore apply to CATOs;
- It must be that the CATOs, as transmission licensees, have to tender in the same way as existing licensees to ensure there is a level playing field for all participants. If there is any potential for this not to be the case, then the Electricity Act and/or the licences granted must ensure it;
- We note that it is assumed that competitive tendering will open up the supply market to the
 transmission sector. It is our view that existing procurement arrangements for construction already
 compete in a global market and there are already challenges to supplying the existing TOs.
 Therefore the perceived additional benefits are not clear, reinforcing the need for Ofgem to update
 its March 2015 Impact Assessment;
- Under the late CATO model, roles under the Construction (Design and Management) Regulations 2015 will require to be clearly defined and set out. For example, will the Client be the SO or Ofgem, and who within these organisations will be responsible for discharging its relevant duties?
- In the early development phase of projects, network configurations and sequence of build are
 considered as part of the overall design. This is of particular importance where there are network
 constraints or reduced security circuits. In the late model, the SO will have to take a view on the
 build sequence before the appointment of the CATO and ensure this is taken into account in the
 overall design; and
- During construction, the CATO will have to balance the security of the network, with impacts on customers and generators during system outages. There will need to be clear accountability for decision making as to what optimum solution is agreed and deployed taking these factors into account.

The role of the SO is therefore key to the decision making at this point and we believe it reinforces the need to ensure clear separation between National Grid's SO and TO functions.

In either model, the existing TOs will have to accept assets connecting to their network; assets that could be integral to the Main Integrated Transmission System (MITS). While it is assumed that any new build assets will have to be constructed to the same standards as the existing TOs' and meet Grid Code

requirements, how will this be assured at time of commissioning? The roles and responsibilities of parties will need to be clearly set out, including the process for remedies if any shortcomings are raised.

It is essential that a robust and working regime is developed and, given the issues raised above, we would recommend a working group is set up to firstly develop the late build CATO model and, then, to assess options for the early build CATO model.

Consents and liabilities

We have discussed previously on our concerns regarding transfers of property rights and consents, and the different regimes in Scotland versus England & Wales. In addition to these concerns we have reservations about the tender process and supply chain engagement working in parallel, around requirements for Environmental Impact Assessments and the commitments and obligations to stakeholders

Legal jurisdiction

It is important to recognise that there are differences in planning/consenting arrangements and legal jurisdictions that may preclude transfer of assets, such as wayleaves and land agreements in Scotland. It is our view that a detailed review of issues in this area is undertaken as it may be necessary to change the current approach and seek agreement on changes with the relevant statutory and consenting authorities. This review needs to be put in hand as a matter of urgency.

Tender process and the supply chain

We have reservations about the tender process and supply chain engagement working in parallel. Based on our experience, we believe that earlier supply chain engagement is necessary to support the consenting process in particular and consideration of the design and constructability aspects of the project. While some of these aspects can be addressed by engagement of independent third parties, the engagement of the actual party constructing the asset can be a critical factor in securing consents for the project. If this proved necessary, the SO would have to take on responsibility for managing this and it may compromise the process for supplier engagement, and tendering options for the CATO later.

Environmental Impact Assessments

Under the late model, the SO will have to pick up input into the development, preparation and submission of Environmental Assessments (EA) and Statements (ES) in support of a Section 37 or Planning application, in line with the requirement under the Environmental Impact Assessment (Scotland) Regulations 2000 (EIA). These are key documents in the consenting process and are supported by significant stakeholder engagement. More often, details of the construction processes (which requires early input of the party constructing the asset) and specific mitigation measures to be deployed on the project must be included and the SO will have to work with existing knowledge or engage with the CATO/supplier to satisfy these needs, particularly with respect to an ES that, from experience, can be extensive. The consideration of such a document in the consenting process often drives the conditions that are then attached to any granted consent.

The definition of "The project" under the EIA is an important consideration in any ES. If scope is broken up to allow elements of competitive tendering along with some project scope remaining with the TO, how does the SO deal with this for any consent application supported by an ES?

Depending on the project phase, not all consents may be secured before the CATO is appointed. In the event that a Public Inquiry is called or a compulsory wayleave hearing is requested to determine the outcome of a consent decision, the responsibilities of parties will have to be clearly defined. It is likely that under the late model, both the SO and CATO will have to cooperate and both be represented to cover the various aspects of challenge. Depending on the status, it is likely the SO will play a larger part in this given its role in justifying the Need and also the design solution.

Commitments & obligations

Commitments to stakeholders and landowners, including any pre-agreed terms, are often discussed and agreed at various stages through the consultation and negotiation process for site selection, cable and overhead line routeing and consents. In the proposed late model, the SO will have to deal with these negotiations and any agreed commitments and obligations will have to be transferred on to the delivery CATO to honour and enact. There is a risk that the SO may readily agree to demands to ease the consenting process but this could place onerous conditions on the CATO, driving inefficiencies in delivery.

Similarly, consent obligations will have to be picked up by the CATO. Planning conditions can apply preconstruction, post-construction, post-commissioning and even enduring responsibilities (eg. long term habitat management or mitigative planting and maintenance). The CATO will have to ensure any enduring responsibilities are accounted for and any pre-construction requirements potentially picked up by the SO. If the SO has secured planning, there will need to be clear demarcation of responsibilities between the parties.

These issues reinforce the need for the existing TOs to retain responsibility for the initial design solution, necessary surveys and studies and for obtaining consents in a late CATO build model, unless and until a fully independent system operator is established.

Operations

SHE Transmission currently has economies of scale benefits in its operations in the north of Scotland. Our network of depots, stores, skilled staff and local knowledge will be difficult for new market entrants to replicate without high upfront costs. We recommend that Ofgem consider the opportunity for the existing TOs to offer operational services within their current license area to other CATOs. This could be done on regulated terms and as well as easing coordination of network operations with CATOs, could address a potentially prohibitive barrier to market entry.

We also recognise the need for there to be changes to the SO/TO Code (STC) arrangements to allow for management of operational interfaces, given the proposal not to have electrical separability.

Connections

We broadly support the approach that the proposed reform intends to encompass transmission investments necessary for generator connections that start in RIIO T2. We agree that the eligibility for connections infrastructure is determined at the time of application. However, we believe that this decision should not be re-visited. Given that generator connections can take a number of years and iterations in design, due to things like customer choice, consenting, other applications in the vicinity etc. this could vary the eligibility criteria outcome at different times. It is important to avoid customers potentially being moved around between competitive and non-competitive parties dealing with their connection.

Market offering and financial considerations

We believe that the proposed financial regime is overly simplistic and will result in an assessment framework where CATO bids will not be easily comparable. In our view the use of building blocks similar to the RIIO arrangements will be required to ensure comparability, instead of the proposed Tender Revenue Stream (TRS) approach. Such an approach should include fair, transparent and consistent cost assessment of justified capital and operating costs ('totex') across the whole life of the assets that will help to avoid complex financing structures obscuring a fair assessment of CATO bids.

- We are concerned with the proposals around the treatment of the asset at 25 years and its cost of
 financing and also note the uncertainty around asset lives following the BGT appeal to the CMA on
 RIIO-ED1; with how the residual regulatory asset value will be determined and its impact on
 financing risk/costs; and believe that further consideration of intergenerational implications across
 the 45 year asset life is required, particularly as a result of the proposed 25 year break point;
- Adopting a consistent regulatory approach to licencing, such as maintaining investment grade
 credit rating, financial ring-fencing, provision of regulatory and financial information, and data
 assurance requirements will be essential particularly as many of the 'pipeline' projects are of
 significant value and many new CATOs will be entities of significant value in themselves;
- Further consideration on the tax implications of 'exotic' tax structures and how this would be assessed against a cost benefits analysis and a responsible company paying a 'fair tax' is required;
- We believe that there are already appropriate incentives for delivery on completion that can be read across to the competitive regime. If guarantees are put in place to ensure the health of the assets at the 25 year break point, then payment during construction is not unreasonable and may reduce financing costs; and
- We believe that the inclusion of stakeholder engagement style incentives and obligations along with calibration of incentives against proposed operational and maintenance strategies will be essential for CATOs.

We believe that it will be essential to involve industry experts to design a robust and workable financial regime. In our view it will be essential to agree the regime structure prior to implementation of competition in order to provide clarity and certainty to all parties eg CATOs; CATOs of last resort and existing TOs.

We have responded separately to the recent CPI v RPI open letter consultation² and whilst, as noted, the intention of that letter was for OFTOs and Interconnectors, the lack of wider consultation is a concern. If the consultation is to inform the indexation approach for CATOs and RIIO-T2 then a much wider consultation is required, involving all the interested parties.

Conflict mitigation

In the short term, and prior to implementing any new competitive regime, it will be essential to clearly and completely separate out the SO & TO functions within National Grid's electricity transmission licence to ensure there are no conflicts of interest. The transitional arrangements discussed above will need to address conflicts of interest within existing TOs as well as between SO & TO.

We welcome the decision that existing TOs will able to compete for onshore assets as long as any conflicts of interest or risks arising from their participation are appropriately addressed. We are keen to work with Ofgem and industry to ensure that the regulatory regimes are aligned and avoid undue discrimination between customers of different licence types. It will also be important to ensure that the TOs licences are amended to allow such participation.

Given our concerns around the blurring of statutory obligations under the Electricity Act 1989 and our preference that the existing TOs maintain responsibility for system design in their geographic areas, it will be important to ensure that there is full transparency and management of information flows for projects that are to be competitively tendered.

Summary

SSE remains cautiously supportive of the concept of extending competition to onshore transmission assets. We consider that a later CATO build model is the best way forward in the short to medium term; but it is essential that the March 2015 regulatory impact assessment is revisited and updated. There is significant work still required to develop a robust and workable framework for competition and we believe it is essential that industry is involved through a series of expert working groups.

We continue to have significant concerns about Ofgem's proposal to limit the high value threshold across GB to £100 million during RIIO-T1 when only SWW projects are able to be competitively tendered. We are very firmly of the view that this is discriminatory and challengeable if Ofgem's decision following this consultation remains the same. We continue to reserve our position with regard to this.

We are also very concerned about the blurring of the statutory obligations between the SO and TOs that will occur with the proposed late CATO build model. These proposals will not lead to the development of an efficient, co-ordinated and economical transmission system as required by the Electricity Act 1989; this cannot be in the best interests of consumers. In our view the SO role should be to identify system need, with the existing TOs maintaining responsibility for system design in their geographic areas. The only alternative is for a fully independent system operator to be set up. If the latter is the preferred model, the ISO would take full responsibility, and the respective obligations, for all system design. In this scenario, until the ISO is in place, it will be essential that responsibility for system design is retained by one body, the TO, in the three geographic areas.

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² SSE Letter, 2015-12-08 Response to OFTO CPI RPI consultation MJB.pdf

We are happy to discuss the above and our response to the consultation questions further, and lool
forward to working with all interested parties as the competitive delivery framework is developed.

Yours sincerely,

Malcolm J. Burns Senior Regulation Manager Appendix: SHE Transmission response to consultation questions

CHAPTER: Two

Question 1: What are your views on the proposed detailed interpretations of new, separable and high value (the 'criteria')?

In principle, the definitions of new and separable are reasonable. It is important to note that where assets are not electrically contiguous, and an overall project package may be split to create a coherent package for development and tendering, the definition of the "project" is a key consideration for consenting purposes under the Environmental Impact Assessment (Scotland) Regulations 2000. Any associated Environmental Statements that support a consent application will have to consider the impacts of the defined project and where this covers multiple elements with multiple parties (existing TO, SO and CATO), cumulative impacts may have to be considered which adds significant complexity to the process. The responsibilities of parties in this respect will have to be carefully examined, particularly in the event of a Public Local Inquiry.

We continue to be concerned about Ofgem's proposal to set the high value threshold to £100 million across GB for RIIO-T1. Ofgem's proposal means that works in Scotland valued between £100 and £500 million could be subject to competition, whereas an identical project in England and Wales would not be. In our view, unless the high value threshold is set at the same monetary value across GB then the competitive process will be discriminatory. We would once again urge Ofgem to carefully consider the consequences of its proposals in this area.

With regard to the history of the different SWW thresholds, whilst we accept that our SWW threshold was proposed by us as part of our RIIO-T1 Business Plan, we have also previously explained the background and timing of this relative to submission of our revised Business Plan and the first mention of the potential for SWW projects to be competitively tendered³.

Question 2: Under what circumstances do you think asset transfer from an existing asset owner to a CATO would be required, recognising the principle that projects identified for tendering should be new?

Transfer of existing assets might not be possible in relation to preliminary works or land/property rights etc. This will very much depend on the terms of existing contracts which may not allow such transfer. For electrical plant and equipment, we do not see the need to transfer assets to another party. Under current arrangements, there is sufficient precedent for the funding and delivery of projects that involve multiple licensees. Asset ownership boundaries are clearly defined and adherence to the requirements of the Grid Code, industry standards, integration arrangements and affected parties' rights ensure that all those involved are required to consider the potential affect of their assets on the wider system and to act accordingly. There are an extensive range of factors that would need to be considered in the transfer of any assets: for example, valuation, condition status, liabilities, integrity and impact on non load outputs and allowances. It is our view that there is insufficient incremental benefit to consumers to merit the costs and additional time required to resolve these issues during the tender process.

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³ SSE letter, 2015-07-10 SHE Transmission response to Criteria consultation JC.pdf

Question 3: What are your views on our proposal that electrical separability should not be required at each interface, but that the SO can propose it to us if it thinks there is a cost-benefit justification based on system operability?

While precedent exists between existing TOs not to have electrical separability, it is important that the management and commercial arrangements between parties should be extended to CATOs. Consideration of obligations on parties needs to take account of a number of aspects due to the integrated nature of the main transmission system. For example, where one party's protection system is protecting another party's asset or where one party's protection and control arrangement relies on a communications infrastructure owned and controlled by another party. Who would be responsible for determining protection and control settings for a range of operational scenarios? Commercial arrangements and industry codes need to be amended to detail responsibilities and liabilities for design and performance on contingent assets and clarity of arrangements where one party may need another party to design or install specific infrastructure to maintain security of supply and or provide protection, control and signalling infrastructure eg fibre networks integral to an overhead line, or multiplexing interfaces at substations. It may be that for particularly strategic infrastructure, security requirements dictate a higher level of resilience or redundancy; this is the type of scenario where we foresee the SO bringing forward any additional requirements.

Question 4: What are your views on the suggested process and roles for identifying projects for tendering?

- We have proposed specific roles for the SO do you think there are any additional roles the SO could take on to support competition?
- What's the most appropriate way to ensure that the network options assessment (NOA) considers the widest range of network options, including those that would be tendered?

Under the proposed early CATO build model the intention is that the SO identifies system need, selects options (desktop analysis) and identifies a preferred solution. Under the proposed late CATO build model the SO will also carry out the initial design solution, undertake surveys/studies and obtain consents.

In the consultation Ofgem notes that under the NOA process the SO has responsibility, in coordination with TOs and in consultation with other stakeholders, to:

- o Identify the needs of the GB transmission network; and
- o Identify and assess options for meeting the future needs of the network, recommending a preferred option.

Ofgem sees a key role for the existing TO in identifying and considering options on its system to address system need. In conjunction (parallel), the SO is expected to identify options not identified by the TO, including options that meet the criteria for tendering. We do not believe it is efficient to have a regime where both the SO and TO would be identifying options to address system need, including SQSS compliance, and then undertake development of those options. Such split responsibilities blur the decision making process when what is needed under an integrated system planning regime is absolute clarity on roles and responsibilities with regard to system planning and design/development.

We are concerned that the blurring of responsibilities in this area, and the potential liabilities associated with such an uncoordinated approach with lack of accountability, will increase the risk to security of supply. This cannot be in the best interests of consumers.

In our view either the existing TOs must continue to carry out the initial design solution, undertake surveys etc OR a true ISO takes full responsibility, with the concurrent obligations in the Electricity Act amended such that it is only the ISO who has responsibility for developing an efficient, coordinated and economical system of electricity transmission.

Our preference is for the existing TOs to continue with this role, certainly in the short to medium term. The existing process works well, and is the result of many years of joint working between the SO and TOs. If, in the longer term, the decision is made to establish an ISO, then transitional arrangements will be essential as the new body starts to take over the role of the existing TOs in project identification, early development work and pre-tender activities. Once the ISO is established, the obligation under the Electricity Act 1989 for licensees to develop and maintain an efficient, coordinated and economical system of electricity transmission must be re-assigned such that the ISO has the obligation to develop an efficient, coordinated and economical system; with the TOs and CATOs having an obligation to maintain the system.

Question 5: What incentives and obligations should the SO and TOs have for undertaking preliminary works for tendered projects, and is there any value in considering a success fee incentive?

The definition and scope of preliminary works needs to be clearly set out in terms of what may be required for tendering purposes. Currently TOs have output measures associated with preconstruction works and any incentive arrangement will have to take account of impacts on existing obligations.

There are a number of factors that have to be considered in relation to preliminary works, particularly around liabilities and the quality and standards of work carried out. It is important to understand the responsibilities of parties and who deals with any issues associated with transfer.

Often a range of advanced works may be required either to facilitate construction due to constraints, or as part of consent conditions. This will require additional funding and there may be ongoing liabilities with these works (for example forestry clearance and maintaining wind firm edges and effects of wind blow). It is not clear who ensures the quality and standard of these works and ensures that they are delivered in line with the overall project programme requirements. Further clarity will also be required on how these additional costs will be treated.

The consultation suggests CATOs could recover costs due to problems with preliminary works. It is not clear which party Ofgem envisages costs being recovered from or on what basis?

Preliminary works can, on occasion, be used on more than one project where these are in close proximity. This drives efficiency across projects and it is not clear how such efficiencies can be maintained without some obligations being placed on parties around project interfaces.

What legal jurisdiction will transactions to transfer preliminary works take place under? It is important to recognise that there are differences in planning arrangements and legal jurisdictions that may preclude transfer, such as wayleaves and land agreements in Scotland. It is our view that a detailed review of issues in this area is undertaken as it may be necessary to change the current approach and seek agreement on changes with the relevant statutory and consenting authorities.

It is not clear whether a success fee incentive will be of value in this area on the basis that it may drive the wrong behaviours, where parties could compromise on standards and quality or make concessions that add liabilities to the constructing party, simply to ensure timely delivery of preliminary works and secure the incentive. This could result in problems for the party receiving transfer of works and the costs to resolve and potentially make good, would outweigh any incentive benefit intended to ensure timely delivery. A more balanced approach would be to clearly set out the required deliverables and align with output measures defined in license conditions. This is more akin to current TO arrangements or the concept of a balanced scorecard type approach.

Question 6: Should CATOs pay for the preliminary works at the point of transfer?

We believe that the CATO should pay for the preliminary works at the point of transfer.

As noted above, our strong preference is for the existing TOs to maintain responsibility for preliminary works (project identification and pre tender activities) and for system design. We do believe that an incentive linked to successful delivery will ensure such works are delivered on time.

CHAPTER: Three

Question 1: What are your views on our proposed late CATO build tender model? Including:

- the basis of bids:
- the use of cost sharing factors; and
- what risks, if any, it would not be efficient for a CATO to manage during construction.

We recognise that the late CATO build model is the most likely model to deploy in the short to medium term, given the proposed timeline for implementation and status of current projects in development. There are, however, a number of significant factors to consider in the features of the proposed model:

- The late CATO build model proposed in the consultation sets out the responsibilities and key stage activities for each party. We note that the initial checkpoint for tendering assesses the output from the NOA process. The role of the SO is therefore key to the decision making at this point ands we believe it reinforces the need to ensure separation between SO and TO within National Grid as discussed elsewhere;
- For the tendering process, there needs to be clear guidance on the information and documentation required to populate a data room for tenderers, to ensure bids are prepared on an equitable basis;
- We have reservations about the tender process and supply chain engagement working in parallel. Based on our experience, we believe that earlier supply chain engagement is necessary to support the consenting process and consideration of the design and constructability aspects of the project. While some of these aspects can be addressed by

engagement of independent third parties, the engagement of the actual party constructing the asset can be a critical factor in securing consents for the project. If this proved necessary, the SO would have to take on responsibility for managing this and it may compromise the process for supplier engagement and tendering options for the CATO later; and

• The model process dictates that the supply chain will have to engage with multiple parties during the procurement process. There is a risk that there is no appetite to engage in multiple tenders or that the supply chain seek recovery of additional tendering costs;

It must be that the CATOs, as transmission licensees, have to tender in the same way as existing licensees to ensure there is a level playing field for all participants. If there is any potential for this not to be the case, then the Electricity Act and/or the licences granted must ensure it. Further, It is our view that existing procurement arrangements for construction already compete in a global market and there are already challenges to supplying to the existing TOs and therefore the perceived additional benefits are not clear.

Under the proposed late model, the SO will have to pick up input into the development, preparation and submission of Environmental Assessments (EA) and Statements (ES) in support of a Section 37 or Planning application, in line with the requirement under the Environmental Impact Assessment (Scotland) Regulations 2000 (EIA). These are key documents in the consenting process and are supported by significant stakeholder engagement. More often, details of the construction processes and specific mitigation measures to be deployed on the project require to be included and the SO will have to work with existing knowledge or engage with the CATO/supplier to satisfy these needs, particularly with respect to an ES that, from experience, can be extensive. The consideration of such a document in the consenting process often drives the conditions that are then attached to any granted consent.

• The definition of "The project" under EIA is an important consideration in any ES. If scope is broken up to allow elements of competitive tendering along with some project scope remaining with the TO, how does the SO deal with this for any consent application supported by an ES?

Depending on the project phase, not all consents may be secured before the CATO is appointed. In the event that a Public Inquiry is called or a compulsory wayleave hearing is requested to determine the outcome of a consent decision, the responsibilities of parties will have to be clearly defined. It is likely that under the late model, both the SO and CATO will have to cooperate and both be represented to cover the various aspects of challenge. Depending on the status, it is likely the SO will play a larger part in this given its role in justifying the Need and also the design solution.

Commitments to stakeholders and landowners, including any pre-agreed terms, are often discussed and agreed at various stages through the consultation and negotiation process for site selection, cable and overhead line routeing and consents. In the proposed late model, the SO will have to pick up these negotiations and any agreed commitments and obligations will have to be transferred on to the delivery CATO to honour and enact. There is a risk that the SO may readily agree to demands to ease the consenting process however this could place onerous conditions on the delivery CATO, driving inefficiencies in delivery.

Similarly, consent obligations will have to be picked up by the CATO. Planning conditions can apply pre-construction, post-construction, post-commissioning and even enduring responsibilities (eg long term habitat management or mitigative planting and maintenance). The CATO will have to ensure any enduring responsibilities are accounted for and any pre-construction requirements potentially picked up by the SO. If the SO has secured planning, there will need to be clear demarcation of responsibilities of parties for the purification of any conditions.

In recent years, consenting authorities and key stakeholders have requested consideration of additional mitigation such as undergrounding for visual amenity concerns. An existing TO with multiple assets on the ground has the opportunity to consider cumulative effects and offset mitigation can be offered which can be a more cost effective solution in securing consent:

A good example of this is the Beauly Denny project, where undergrounding of lower voltage
lines in the National Park was deemed acceptable mitigation, rather than undergrounding
the proposed 400kV line which was significantly more expensive. It will be extremely difficult
for the SO in the planning stage, or the CATO (other than the existing TO's) to be able to offer
such efficient solutions where cumulative infrastructure effects need to be considered.

Often works carried out on different projects in the same area present opportunities for efficiencies. For example, the re-use of the Beauly Denny access routes for Melgarve substation and windfarm connection. While this drives efficiencies, often they require further negotiation and coordination with the planning authorities and landowners. There will need to be clear responsibility and accountability between SO and CATO for this coordination and negotiation.

Under the proposed late CATO model, roles under the Construction (Design and Management) Regulations 2015 (CDM) will require to be clearly defined and set out in any tendering exercise. Will the Client be the SO or Ofgem and who within these organisations will be responsible for discharging its relevant duties? The Client's duties are far reaching across the project lifecycle from development through to operations. Similarly the role of Principal Designer and Principal Contractor will need to be clearly agreed between SO and CATO.

In the early development phase of projects, network configurations and sequence of build are considered as part of the overall design. This is of particular importance where we have network constraints or reduced security circuits. In the proposed late model, the SO will have to take a view on the build sequence before the appointment of the CATO and ensure this is taken into account in the overall design. This may involve identifying and establishing temporary network configurations to ensure security of supply during construction and commissioning. During construction, the CATO will have to balance the security of the network with impacts on customers and generators during system outages. There will need to be clear accountability for decision making as to what optimum solution is agreed and deployed taking these factors into account, which can often be conflicting. Who agrees/accepts customer risk and who agrees/accepts system risk? Currently this is managed within the existing TO, in consultation with the SO.

The proposed approach to establishing a fixed price with limited re-openers and no sharing factor could drive an inefficient approach to risk management. It is our view that the approach to risk should be carefully considered and an appropriate mechanism agreed with regard to risk sharing, acceptable mitigation and potential adjustment to pricing on a transparent basis.

Question 2: What are your views on our proposed early CATO build tender model? Including:

- what tender specification would best facilitate innovative but deliverable bids; and
- how we can best manage cost uncertainty after the tender.

The early CATO build model may present the best opportunity for innovation and efficiency in design. The process, however, presents a number of challenges in being able to assess bids and also for the pricing of bids:

- With the output from the NOA being the trigger point for tendering, it is likely that any
 tender specification would be high level and functional. This presents some difficulty in
 assessing bids with potential different solutions and innovative solutions, and also large
 assumptions / caveats and risk provisions without any preliminary works or site investigation
 etc; and
- The criteria by which these tenders would be assessed will require detailed clarity and the basis of pricing of bids will need to be agreed. It will also be significantly challenging to fix costs early, so there will need to be a clear and defined process by which indicative bids are refined and on what basis this aligns with final tender selection.

As well as potential benefits, innovation is likely to bring different risks/challenges to projects. How will parties be expected to handle these through the development process and ensure the innovative solutions offered are deployable and meet the required standards and specification? The criteria for assessing and accepting these will have to be set out before appointment of the CATO and who will have responsibility for accepting the final solution?

In either model, the existing TO will have to accept assets connecting to its network, that could be integral to the Main Integrated Transmission System. It is assumed that any new build assets will have to be constructed to the same standards as the existing TOs' and meet Grid Code requirements, but how will this be assured at time of commissioning? The roles and responsibilities of parties will need to be clearly set out including the process for remedies if any shortcomings are raised.

For the purposes of tendering and ensuring quality and compliance with the Grid Code, we recommend that a common set of standards should be developed for technical specifications, as currently there are variances across the industry.

If the SO is required in the NOA to recommend a single option, then does this inherently limit the scope for innovation etc. during the tender process under the early model? It is important that the requirements of the NOA are aligned with the competitive regime and clarity provided on how this will be addressed for the tender process and subsequently fed back through the NOA process if different solutions are proposed.

Question 3: Do you have any views on the best way to tender projects using high voltage direct current (HVDC) technology?

We are not clear on why there would be a need to differentiate or tender HVDC projects differently. The arguments presented principally for consenting purposes, in our view, could apply to all large substations as well as tower designs and visual routeing. Direct recent experience has shown that statutory consultees and planning authorities required details of any large scale development, including building details as part of the consideration of sites and in support of planning applications.

The early procurement of the converter station design may also restrict the competition in cable design as the two aspects are so inter-related. While there is evidence to suggest they can be tendered separately, our experience suggests retaining an option for tendering both together, allowing the market to determine optimal design solution may open up what is already a constrained market; maintaining the procurement options could drive a more efficient solution.

A key consideration for HVDC systems is the assessment of designs for system integration eg effect of harmonics. The responsibilities for design and compliance need to be clearly set out and understood. This can often be an iterative process and filter requirements and designs can change and require tuning right up to and during commissioning. Who takes liability for background levels and for resolution if a long term problem is discovered requiring remedial intervention? The responsible party will also have to ensure details of any affected generators are taken onto account during the design phase. The potential impact on neighbouring networks will have to be assessed and the ongoing changes to the actual real-time system make it difficult to assess on a modelled basis. The SO, or existing TO, is probably best placed to assess and consider these aspects. However, the CATO will have a role to play during detailed design and commissioning. In the proposed late model, the SO may have to take this on in the event of the suggested early procurement of HVDC components prior to tendering for the build. This may be an influencing factor in determination of the optimum procurement strategy.

Question 4: Do you have any views on our proposal to prioritise late CATO build? Do you have any views on specific circumstances where early CATO build might lead to better outcomes than late CATO build?

Each model has its pros and cons, whilst the early CATO build model presents the best opportunity for innovation and efficiency in design, the process presents a number of challenges in being able to assess bids and also for the pricing of bids. In contrast, only the late CATO build model can be used for RIIO-T1 projects deemed suitable for competitive tendering; and is likely to be the most compelling model for potential new market entrants. On balance the late model will provide the best opportunity for developing competition in onshore transmission assets in the short to medium term.

Notwithstanding this, we remain concerned that Ofgem is pressing forward with its proposals for competitive tendering without fully quantifying the costs, benefits or risks and we believe it is essential that Ofgem updates its March 2015 Impact Assessment as its proposals mature to ensure there is enduring benefit to consumers.

Question 5: Do you have any views on how we could mitigate the risk of a CATO not being in place?

In our view a 'CATO of last resort' must be introduced to mitigate the risk of a CATO not being in place.

Potential CATOs of last resort must be identified and be suitably incentivised to come forward when needed. Hence it is essential that it is put in place at the start.

Question 6: What are your views on our proposed revenue package for CATOs? Including:

- the proposed duration of the revenue term, including how it links to the asset cost recovery period and whether operations and maintenance costs can be fixed over this period; and
- our proposed approach to indexation, refinancing and enabling new asset investment.

Financial regime design

We believe that the proposed financial regime design is overly simplistic and will result in an assessment framework where CATO bids will not be easily comparable. The assessment of a TRS approach as the only mechanism for determining the most financially beneficial CATO bid for customers removes the transparency around bids. The transparency in price controls enables a direct comparison with other Network Operators (NWOs) on all proposed financial parameters, thus ensuring a fair assessment can be undertaken. We believe that the use of a TRS approach has a number of flaws around potential unintended consequences and risks. For example, it may lead to obscure incentives that encourage CATOs to weight revenue streams to the latter part of the cost recovery period (thereby benefiting from the time value of money in any cost benefit analysis) which would have intergenerational equity implications between customer groups.

We believe the financial regime design should be focused on the building blocks of a regulatory model as applied under the current RIIO regulatory framework. The use of RIIO style financial parameters would result in application of a well understood and easily comparable framework as is the case for current regulated NWOs. The building blocks of any CATO bid should be comprised of the same parameters, namely:

- Cost of capital and gearing;
- Capital costs treated like 'totex';
- Operations and maintenance costs treated like 'totex';
- Capitalisation rates; and
- Impact of incentives/penalties and financial ring-fencing.

This would allow the revenue to be set within a pre-defined CATO Financial Model, not dissimilar to the current RIIO Price Control Financial Model. Again, we believe this enables a direct comparison between CATO bids, particularly as it would facilitate a common treatment of elements, such as tax and financing.

Duration of revenue term and residual value

We note that the proposed 25 year revenue recovery period against a 45 year asset life would give rise to a residual value. We do have concerns about how such a regime will work and believe that an expert industry working group must be set up to design and agree the detail of the regime. If a residual value is considered appropriate then this should be equal to the net book value of the Regulatory Asset Value (RAV) of the investment as opposed to any proposed 'bid' residual value. This would ensure a consistent application of costs to consumers over the life of the asset in line with current RIIO arrangements.

In addition, we note that although the proposal to retain a 45 year revenue recovery period is in line with the current RIIO framework for T1, the BGT appeal to the CMA and the subsequent final determination [insert reference] indicates that a review of the 45 year asset life come under review by Ofgem. In the event there is a revision to asset lives in advance of future price controls, there may be a need to revise the revenue recovery period to ensure the balance of charges is equitable between different generations of customers (thus ensuring intergenerational equity). We believe this uncertainty should be resolved prior to setting the financial parameters for cost recovery for CATOs particularly given the intergenerational implications.

We believe that Ofgem needs to consider the cost to customers that may arise as a result of an 'aged' asset (being 25 years old) requiring refinancing either by the owning CATO or a new CATO, and whether this may lead to increased financing costs and operational and maintenance costs. Ofgem's proposal to "decide what will happen with the assets at the end of the revenue term until nearer the time" provides uncertainty which accentuates the issue. This is likely to not be in the best interests of customers or the wider industry. We believe Ofgem should undertake analysis on a range of potential 'feasible' options and consult in sufficient detail to inform a wider discussion; otherwise this may become an issue for future customers.

Additionally, the 25 year break point may result in a substantial number of assets being transferred to the current regional TO as/or the CATO of last resort. Unintended consequences of a break point may result in poorly maintained assets being transferred to the regional TO along with the operational risk. Therefore a residual value is only appropriate on the basis that the underlying value of the asset is in the appropriate condition and no impairment of the RAV would be required. As Ofgem note, some form of guarantee (Ofgem state some form of a "performance bond") would be required to ensure customers were compensated for poorly maintained assets. Such a condition may constrain investment or increase the cost of financing due to the increased end of period risk associated with the asset condition. The type of protection must be further developed, particular to ensure consistency across CATO bids.

We believe that the risk management of these assets and their respective CATOs on behalf of customers is therefore critical to mitigate poorly managed assets being transferred to TOs. We also believe any risk of financial distress must be forefront of the framework similar to under RIIO. CATOs will be of a similar scale and size to fully regulated NWOs in their own right and owners/operators of critical UK infrastructure. As a minimum, we encourage Ofgem to adopt a regulatory framework for CATOs in line with the current obligations for existing TOs, whereby the licence obligations are consistent. This would include applying elements such as financial ring-

fencing, provision of regulatory information, data assurance requirements, and required to maintain investment grade credit rating (addressed below).

Determining operation and maintenance costs

We agree that operational and maintenance costs should be proposed as part of the CATO bids with limited scope for reopeners. However, a robust, consistent and transparent cost assessment process would mitigate the risk of unreasonable bids. CATOs will be required to fully justify their cost submission to ensure they are assessed based on technical requirements and value for money as opposed to the least cost solution. There may be a requirement for some form of uncertainty mechanism as suggested by Ofgem on the basis that new assets may be required at some point during the 25 year revenue recovery period as a result of changing network demands or an unforeseen event outside the CATO's control. Ofgem need to further develop the framework for such a mechanism prior to the commencement of competitive delivery and will need careful consideration and consultation.

We believe adjustments should be made to targets for incentives/penalties whereby they are appropriately calibrated to reflect the proposed benefits that would be achieved for the bid operations and maintenance strategy. Any deviation in these costs must be fully justified and the opportunity for any re-assessment of this expenditure would need to be clearly defined with criteria and re-assessment (or reopener) threshold. This requires further development by Ofgem to avoid unique, opaque and untested incentive/penalty mechanisms and will require consultation.

With regards to revenue recovery of operation and maintenance costs, we believe the treatment and should be in line with the RIIO totex concept, potentially with some form of capitalisation proposal. This would allow consistent comparison of proposals instead of an assessment focused on a headline revenue stream such as TRS. This would allow assessment of costs and challenge those that are unrealistically high or low.

Approach to indexation

Our primary concern is surrounding the narrow approach Ofgem has adopted to determining an appropriate inflation indices or indexation measure. At the moment, we would like to highlight that Ofgem have just closed a consultation on the use of RPI and CPI for new interconnectors and OFTOs and intimated this will be used when considering the indexation approach for RIIO-2. In this consultation, Ofgem state that "We will use the views expressed in response to our open letter to consider which index is most appropriate for future CATO projects". We believe this process is irregular with previous consultation approaches and at odds with regulatory best practice. We believe the narrow audience the open letter was addressed to and lack of workshops or any future timetable for consideration make the reliance on this work inappropriate. The absence of broad consultation covering all parties affected means Ofgem are likely to omit relevant external evidence from the industry, the ONS, the IFS or any other regulator or public body. Given the complexity and materiality around this particular issue, we believe strongly that Ofgem must consult over a more prolonged and inclusive period.

The proposed 'bidding' of nominal revenue streams or partial indexation to a range of indices introduces a complication in the assessment of CATO bids. Ofgem would be required to estimate/forecast the outturns of each indexation approach for 25 years, and assume it would continue to be available throughout the life of the revenue recovery period. This would enable a comparison of the indexation proposals and is highly subjective and open to significant estimation risk. Again, the type of indexation that will be applied whether it is CPI, RPI or another variation of these measures needs to be defined in advance of CATO bids as does the process for assessing proportionate indexation if applied.

Financing and tax

The proposal to include some form of refinancing gain share, but limit a pain share, is asymmetric, particularly if there is a sizeable change in economic circumstances or the capital markets prior to completion of construction. The current RIIO framework uses the iBoxx A/BBB index to benchmark NWOs costs of financing, and cap the cost of debt allowance NWOs can recover from customers. This acts as an incentive to encourage efficient financing whereby inefficient financing is not rewarded. This would be an appropriate benchmark for setting the efficient costs of debt for a CATO while avoiding assessment of specific and individualistic financing arrangements. We believe to maintain the strength of any incentive, the ability to outperform this index should reside with the CATO similar to current RIIO arrangements. This approach would also encourage more efficient financing while removing the risk of financeability concerns without overburdening customers unfairly.

In the event that financing sharing factor was set for CATOs, we strongly advocate for an assessment of CATOs capital structures holistically, particularly for opaque or complex financing structures. This would remove the possibility of CATOs refinancing below the threshold set by Ofgem without sharing the benefits with customers. It also would enable comparability between CATO bids, whereby headline TRS may seem attractive but they are due to 'exotic' financing and taxation (see below) structures.

We also believe it is appropriate to follow the Interconnector cap and floor model, whereby an allowance is set for Interest During Construction (IDC) which will be higher than operational financing costs due to the construction risks. The IDC is added to the RAV and is recovered during the following 25 year asset life. Given the proposed 'payment on completion' incentive, the large proportion of equity or mezzanine financing would increase the cost of capital and should be considered as part of CATO bids as an appropriate proposal thereby spreading the cost of financing construction across customer groups (intergenerational equity).

The revenue recovery period of 25 years may restrict financing options given the residual value of the asset. The ability to circumvent a non-amortising bond for more efficient financing will be constrained therefore leading to potentially higher costs of finance. The uncertainty around the treatment of the asset, its underlying condition/value, and the recoverability of the remaining value increases the risk and therefore the cost of financing. For example, in the event of decommissioning of the asset, how would a CATO be made whole if that decommissioning was unexpected? The intention of the assets at the end of the revenue recovery period may be required to secure efficient financing for the relevant period, whereby Ofgem indicate that this would be decided until nearer

the end of the 25 year period. This is a substantial uncertainty and requires clarification, development and consultation as noted above. We also would like to emphasise the intergenerational issues that arise in the event cost of financing is substantially greater in 25 years time due to an 'aged' asset.

We believe the treatment of tax has been overlooked by Ofgem and must be considered a critical component of any regulatory framework. In RIIO, a tax allowance is provided based on a proxy calculation for tax charges. The introduction of any complex (offshore) tax structures to minimise the tax burden should be considered by Ofgem in their assessment of the CATO bids. For example, where a CATO is able to pay a significantly different corporation tax charge this would place them at a significant advantage potentially as a saving to customers but as a cost to the UK tax receipts. How tax structures impact a cost benefits analysis must be considered to ensure equal and fair assessment of CATO bids. Ofgem need to develop their thinking and framework for tax treatment under CATO and consult accordingly and consider a set of criteria for scoring responsible companies paying 'fair tax'.

Enabling new asset investment

We are supportive of a mechanism for enabling new asset investment during the 25 year revenue recovery period. This is required to allow CATOs to make any necessary investment over and above the original asset. This would be based on a new demand or a comprehensive needs case and would need to be integrated into the original asset ie not an adjacent, high value, separately identifiable asset which should be open to competition. The regulatory mechanism would be akin to an SWW arrangement but with a pre-defined criteria and threshold with the aim of avoiding investment delays or inefficient investment.

Licence obligations and ring-fencing

As noted, the application of a consistent, robust, and fair regulatory framework should be in place for all CATOs. This will ensure that all CATOs fall within the regulatory oversight and apply the same regulatory practices as required by all regulated networks. This will provide Ofgem with the necessary regulatory oversight to mitigate the adverse impact of financial failure or mismanagement of network assets. It also aligns new CATOs with the existing TOs and the transparency that will provide. All obligations must be considered including but not limited to the following:

- Provision of regulatory financial and cost information through the regulatory reporting framework:
- Compliance with Data Assurance obligations;
- Financial ring-fencing and indebtedness;
- Investment grade credit rating;
- Sufficiently independent non-executive directors;
- Compliance with relevant codes of conduct and practice; and
- Compliance with regulatory corporate governance.

This would enable direct comparison between CATOs and minimise the risk of default or information mismanagement. The appetite for such obligations needs to be core to any regulatory framework

and the 'watering down' of conditions is not appropriate given the potential scale and size of CATOs who in their own right will own critical UK infrastructure.

Question 7: What are your views on our proposed package of financial incentives for CATOs? Including:

- how we could structure an availability-based incentive to ensure CATOs operate their assets with a 'whole network' view:
- the proportion of a CATO's annual revenue that should be at risk; and
- whether there are circumstances under which 'payment on completion' would not be appropriate to incentivise timely asset delivery.

It will be essential to ensure that all onshore transmission owners' (TO or CATO) incentives are aligned; without this there is a risk of different behaviours and responses. Commercial behaviours cannot be allowed to take precedent over system requirements or this will adversely impact security of supply.

Following on from this, any availability incentive/penalty will need to be strong enough to ensure CATOs operate their assets in the same manner as an onshore TO. Additionally, information provided to Ofgem should help it judge the behaviour of a CATO in ensuring assets are operated accordingly. This may increase the regulatory burden but in the absence of ongoing price control reviews, it is needed to ensure value for money is being obtained for customers.

The proportion of a CATO's revenue should be similar across bids in accordance with a standard framework. The incentives/penalties must be proportionate to the risk of the investment and the strong enough to derive the correct behaviour. Under RIIO there are several incentives, with levels set based on the strength required to encourage the right behaviour while also being calibrated to customer's willingness to pay. A full assessment of the appropriateness of thresholds should be developed to ensure a robust and consistent framework is in place across the UK.

Payment on completion is an asymmetrical incentive on CATOs and may result in unintended consequences of lower quality thresholds, compromised safety practices or financial distress. We recognise that Ofgem indicate that this will be considered on a case by case basis and that it may be more appropriate to have revenue during construction. We do not believe the current framework for RIIO-T1 results in adverse behaviour regarding delivery due to their being adequate protections in place to penalise TOs for failure to delivery outputs on both baseline and strategic wider works. The implementation of robust licence obligations and financial ring-fencing in line with current RIIO arrangements would mitigate the risk of incomplete assets being partially remunerated without a right of recourse for customers. Earnings during construction are likely to reduce the size of the equity injection required and maintain a reasonable debt proportion in line with investment grade credit rating thereby securing the most efficient cost of capital.

Question 8: Are there other types of incentives not covered in this chapter that you think should apply to CATOs?

Other incentives should be considered such as appropriate levels of stakeholder engagement, either through the existing TO or a consortium of CATOs. This would ensure customers are treated alike regardless of owner and operator of assets within regions.

CHAPTER: Four

Question 1: Are there any risks or conflicts of interest arising from the SO's role that we haven't identified?

We are comfortable that the main risks and conflicts of interest have been identified. In this response, we have discussed the need for a fully independent system operator and believe that Ofgem should make a clear statement on the establishment of such a body.

Question 2: Are there any risks or conflicts of interest arising from the participation of existing onshore TOs that we haven't identified?

We welcome the decision that existing TOs will able to compete for onshore assets as long as any conflicts of interest or risks arising from their participation are appropriately addressed. We are keen to work with Ofgem and industry to ensure that the regulatory regimes are aligned and avoid undue discrimination between customers of different licence types. It will also be important to ensure that the TOs licences are amended to allow such participation.

Given our concerns around the blurring of statutory obligations under the Electricity Act 1989 and our preference that the existing TOs maintain responsibility for system design in their geographic areas, it will be important to ensure that there is full transparency and management of information flows for projects that are to be competitively tendered.

Question 3: Are there any additional conflicts of interest that we haven't identified?

CATOs that are part of a wider group of companies may have direct access to suppliers/contracting entities that provide tenders for design and construction of assets. These companies may gain a commercial advantage over others as bids may be favoured for inter-group partners over bids provided to other parties. Appropriate measures should therefore apply to CATOs to mitigate this conflict.

It must be that the CATOs, as transmission licensees, have to tender in the same way as existing licensees to ensure there is a level playing field for all participants. If there is any potential for this not to be the case, then the Electricity Act and/or the licences granted must ensure it.

Question 4: What measures do you think would be appropriate to mitigate the risks and conflicts of interest? What additional conflict mitigation measures would be needed if the SO takes on a broader role in supporting competition?

Our concerns around the blurring of statutory obligations when taken alongside the need to mitigate conflicts of interest between the SO & TO roles, indicates that the establishment of an ISO should be further considered.