James Norman Transmission Competition Policy 9 Millbank London SW1P 3GE

11th January 2015

Dear James,

Extending competition in electricity transmission: arrangements to introduce onshore tenders

Transmission Capital Partners manages one of the largest offshore electricity transmission portfolios in terms of the capacity of offshore wind connected. Our managed portfolio of Offshore Transmission Owner (OFTO) assets includes the connections to the Robin Rigg, Gunfleet Sands, Barrow, Ormonde and Lincs offshore wind farms - a portfolio of over 800MW (circa £600m in capital employed). We will also shortly be taking over the connections to the 205 MW Westermost Rough offshore wind farm.

We have long been advocates of introducing competition into the delivery of onshore transmission and we welcome the government commitment and the steps being taken by Ofgem to bring this forward.

We recognise that the introduction of competition into the delivery of onshore transmission requires primary legislation which is scheduled to be presented in 2016. It is important that the powers enabled by this legislation provide the Secretary of State for Energy and Climate Change and Ofgem with the powers they need to ensure that timely and fair tender processes can be run and that any assets, rights and consents can be transferred from the existing transmission licensees to the successful bidder.

We also note that the government is reviewing the role of the System Operator and whether greater independence in that role is required. Whilst we would not want the tender processes for the delivery of onshore transmission to be delayed by this review, we do continue to believe that in the longer-term the System Operator not only needs to be independent it also needs to be seen to be independent, and that the only clear way to achieve this is through separation in ownership terms from any party taking part in a competitive transmission activity (which would include interconnector development as well as OFTOs and CATOs).

Our response to your specific questions is attached as Annex 1.

Yours sincerely,

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Chris Veal

Annex 1 – Responses to specific questions

QUESTION	TCP RESPONSE
CHAPTER: Two	
CHAPTER: Two Question 1: What are your views on the proposed detailed interpretations of new, separable and high value (the 'criteria')?	 <u>High value</u> We agree with the threshold of £100m capital expenditure as the initial hurdle value. It will ensure that the benefits of competition outweigh the transaction costs and also minimise the number of interfaces likely to be generated by the competitive process. We also agree that this value is kept under review as Ofgem proposes in Appendix 2 (para 1.7) as we would consider that competition could be extended to below this level in due course once the tendering process has bedded down and the potential project pipeline is better defined. The analysis in Appendix 2 clearly demonstrates that competition should result in further savings to the consumer at a £50m threshold if there is a pipeline of projects to be tendered and not only one. Whilst in theory whole life costs are probably a better measure of the potential value to consumers of competition, we agree with the use of capital expenditure for simplicity and it should be a reasonable
	 proxy. <u>New</u> We still agree with Jacobs' view that it would be preferable to transfer a small (up to 15%) of existing assets where appropriate, for example to simplify interfaces. However, we would agree that the "entirely new" proposal could also be made to work. We do however recommend that the Secretary of State or Ofgem in any event obtains the powers to be able to require the transfer of assets from an existing TO to a CATO should the circumstances require this.
	<u>Electrical separability and contiguity</u> We agree with Ofgem's proposals on both of these. In particular we already manage assets that do not have circuit breakers at the ownership boundary, and onshore TOs and DNOs have managed similar interfaces for many years both in construction and operational phases. We have not, and we believe neither the system operator nor the other network owner has not, experienced any difficulties at all with these arrangements.
Question 2: Under what circumstances do you think	As set out in para 2.8, there will clearly be the need for assets such as land rights (obtained by the incumbent TO in RIIO-T1 or the SO thereafter) to be transferred to the CATO. It would seem sensible

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asset transfer from an existing asset owner to a CATO would be required, recognising the principle that projects identified for tendering should be new?	 that this also should extend to some physical assets (for example any equipment in a spare bay at a substation) if the best solution for consumers is to be facilitated. Again we recommend that the Secretary of State or Ofgem obtains the powers to be able to require the transfer of assets from an existing TO to a CATO should the circumstances require this. It could also include out-of-commission equipment that could be brought back into service by the
	CATO (for example disconnected sections of overhead line and associated land rights). It is not possible to foresee precisely all the circumstances which may require the transfer of assets and therefore flexibility in the powers obtained by the Secretary of State or Ofgem would be helpful.
Question 3: What are your views on our proposal that electrical separability should not be required at each	As noted above (and as Ofgem notes in para 2.9) ownership boundaries without electrical separability exist already on the system, can be dealt with on a commercial basis and do not give rise to any particular issues.
interface, but that the SO can propose it to us if it thinks there is a cost-benefit justification based on system operability?	We do not currently see any circumstances under which additional separability should be required as a result of the separate ownership arrangements which will result from the CATO regime. The operation of the system should be carried out independently of who owns it and therefore separability should only affect maintenance outages. However, it will be important to incentivise appropriately all TOs to maintain the availability of their assets (and therefore to minimise maintenance outages).
	If it is necessary to introduce greater separability then it will be important to ensure that this does not favour the existing TO (i.e. that the separability requirement is only on non-incumbent TO bidders). Allowing the SO to make the case for the additional assets highlights that the SO needs to be completely independent of any CATO bidder if this could have any impact on the tendering process and bidders' relative competitiveness within it.
 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 	 We broadly support the process for identifying projects that should be tendered. However in particular we should note that: It is not appropriate for existing TOs to have a role at all in this process (whether or not they are allowed to tender). This is because they have a commercial/financial incentive to influence whether projects within their area are tendered or not. Essentially this means that the planning of the development all TO systems should be undertaken by the SO and not the TOs. It is important that the SO is seen to be independent (which ultimately means it needs to be separately owned) – in the meantime their needs to be strong regulatory oversight of the SO

 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? 	activities to ensure that it is acting independently. In respect of considering the widest range of network options the most important aspect is to ensure the party responsible for this is correctly incentivised. In practice this means that: • The SO should be responsible for considering all options; • The SO should be entirely independent; and • The SO should be correctly incentivised. Whilst we also agree that all stakeholders should have the opportunity to provide their views in to the NOA process (para 2.18), we do not expect any stakeholders (perhaps other than the incumbent TOs or Ofgem) to have access to the necessary information, or for it to be commercially attractive for them, to replicate the necessary studies undertaken by the SO. We do however think that it will be important that Ofgem does undertake this role, particularly until ownership separation of the SO, as a counter to the lobbying that will undoubtedly come from the incumbent TOs.
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?	 We would recommend three incentives: i) An incentive to ensure that the site investigations carried out had provided the necessary information for bidders to be able to provide competitive fixed price quotes during the tender process (i.e. lower contingency); ii) An incentive for ensuring that the acquisition of land rights and consents provide the necessary rights for bidders to propose competitive solutions; and iii) An incentive for timely delivery of all consents and land rights. It is difficult to think of any other form that these incentives could take than financial (i.e. a success fee) and we agree with the "balanced scorecard" approach (if kept relatively simple).
Question 6: Should CATOs pay for the preliminary works at the point of transfer?	We are not sure to what extent the consumer will have already funded the preliminary development works (it presumably depends on whether these are treated as opex or capex). In any event we agree that any payment for these works received by a TO or the SO for works already funded by the consumer should be returned to the consumer. If fully funded by the consumer it may be simpler for the CATO not to pay the TO or SO for these works (the amounts will be relatively small and so the issue of current consumers paying for works which have economic life of 45 years should be neglected).
	If they have been treated as capex by the TO or SO (and therefore not fully funded by the consumer) then we think the CATO should pay for them for two reasons:i) We would expect the CATO's cost of capital to be less than the SO or TO's; and

	ii) It may provide an incentive on the SO or TO to progress the preliminary works (particularly if also linked to a success fee paid at the same time).
	We assume that the price paid by CATOs for the preliminary works would be determined by Ofgem.
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. 	 Basis of bids We agree that bids should be fixed price for the duration of the construction and operations stage (Appendix 3, para 1.91). Use of cost sharing factors We agree that in general there should not a be a need for sharing factors given the incentives of the competitive process (Appendix 3, para 1.94) <u>Risks</u> There are three stages in which prices bid at ITT stage may need to be adjusted: i) between PB award and licence grant; ii) post-licence award but prior to operations; iii) during operations. There is a case for a limited number of allowed bid adjustments during the first stage (between PB award and licence grant) which could include: movements in base rates (as in the OFTO regime); movements in metal prices (this will depend on the project but it is common in submarine cable projects in which a significant proportion of the cost is in the cost of copper/aluminium and lead used in submarine cables) movement in exchange rates. It should be possible to fix/hedge all of the above at license award. During the second stage there may be a limited number of construction risks which may be more efficiently dealt with through some degree of re-opening of the tender revenue stream: Unexpected ground conditions; and
	 Extreme adverse weather conditions (in particular for offshore projects).

	During the operational stage the re-openers would be the same as for the OFTO regime (business rates, Crown Estate fees, change in decomm law etc.). <u>Bid cost recovery</u> In general we consider that Ofgem's position in Appendix 3 para 1.96 with respect to bidders' cost recovery looks reasonable. We also note though that Ofgem intends to consult further on this and we will respond in more detail at that time.
 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. 	 Tender specification There are several considerations here: Bidders will need to be able to fully assess how different bids will be compared and ranked; Bidders will need to have access to all the information they need to carry out the assessment above; Ofgem (perhaps in conjunction with an independent SO) will need to be able to assess how each bid compares and to be able to rank them; The tender specification could be at several levels: Solution level: it could specify a problem and be open to a range of possible solutions (within constraints such as STC compliance etc.); Boundary level/functional: it could for example: specify a boundary across which a certain additional MW capacity is required and seek schemes that reinforce the boundary capability (this would probably require the SO to provide details of the generation and demand scenarios for which compliance is required); or specify the requirement to connect a specific generator to one or more zones Point-to-point(-to-point): it could specify the start and end points of a scheme and the capacity the scheme is required to deliver; More detailed: it could specify more detail such as voltage to be used, overhead or underground etc.

	 <u>Cost uncertainty</u> We agree that bidding fixed unit costs, a fixed cost of equity and at a fixed gearing level, coupled with a debt funding competition, is about the best in terms of price certainty that could be expected to be achieved if a tender process is run at an early stage. We do however note that gearing may need to be adjusted in order to reflect the final risks of the project, including those in the construction phase, which may not be fully understood at this early stage. It is not clear to us to what extent manufacturers will be willing to fix unit costs several years ahead of notice-to-proceed and for some items (e.g. cables, there would certainly be a need to have a linkage to metals prices). We would recommend that to protect consumers' interests some incentives are kept on the CATO prior to determining the outturn cost and therefore fixing the revenue stream, for example the rate of return on equity could to some extent be linked to cost (as Ofgem notes in para 1.130). It would also be preferable to ensure that bidders did not bid low cost but undeliverable schemes by for example having a threshold of cost increase above which a project would be retendered.
Question 3: Do you have any views on the best way to tender projects using high voltage direct current (HVDC) technology?	We fully support Ofgem's assessment of the pros and cons of tendering HVDC projects (Appendix 3, paras 1.97-1.99). We would however note that we think the norm should be for it to be unnecessary to specify the converter station manufacturer at time of consents application and that consents envelopes should allow for all manufacturers. This is the approach that TCP consortium member Transmission Investment is taking in developing the France-Alderney-Britain Interconnector project along with its partner in France (RTE) in seeking consent at each of the converter station locations. Whilst the bidding strategy of the equipment suppliers in a project which requires HVDC technology will be important in determining bidding consortia make-up, we do not at this stage believe that there is any reason to have a different process for HVDC projects to AC projects.
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	We fully agree with this proposal. There are clearly those who do not support the introduction of competition into the delivery of onshore transmission and therefore it is important that its potential to reduce costs for consumers is demonstrated at an early stage. It is also a new process within Europe and lessons learned from extending competition into procurement, construction and operation can be gained before extending competition into development also.

to better outcomes than late CATO build?	We do however, support the continuing development of the early CATO build tender design as if this model can also be made to work it should result in even greater benefits for consumers because it should give greater scope for innovation in design and delivery.
Question 5: Do you have any views on how we could mitigate the risk of a CATO not being in place?	We believe there will be very significant interest in the CATO process as there has been in the OFTO process. We would consider therefore that the risk of not having sufficient interest in the CATO process for a CATO to be appointed is very small. If this were to occur though the tender could be rerun (if sufficient time) or presumably the incumbent TO could be asked to deliver the project under a RIIO type regulatory framework.
	We agree though that the risk of an appointed CATO failing to deliver is one that also needs to be addressed. The best way of addressing this is to have a robust PQQ and ITT stage to ensure that bidders (and their contractors) are qualified and have robust and deliverable proposals. Ofgem should ensure that these measures are sufficiently stringent to make the likelihood of a failure during construction remote – as the consequences of this could be to prejudice the regime as a whole thereby losing the potential benefits for consumers. We would expect that Ofgem would give consideration for example to the weighting to different factors when evaluating tenders (at both QTT and ITT stage) including the deliverability of the proposed construction as well as deliverability of financing and price.
	In the unlikely event that a CATO fails during construction (after lenders have stepped in and used their rights to remediate any project failure or default) then a CATO of last resort process would be needed. This is likely to need to be an entity which has access to balance sheet financing and could step into a part constructed project in a timely fashion.
Question 6: What are your views on our proposed revenue package for CATOs?	In general we support the proposed revenue package for CATOs, noting that it builds strongly on the OFTO revenue package.
 Including: the proposed duration of the revenue term, 	We agree with a fixed revenue entitlement subject only to defined re-openers, indexation and incentives.
including how it links to the asset cost recovery period and whether operations and	A 25 year term initial revenue period is capable of attracting efficient debt and equity finance. We understand the current preference is for the revenue period to commence on construction completion. The length of the construction period will dictate the efficiency of this approach, however it does raise a number of points:

maintenance costs can be fixed over this period; and As we are sure you will be aware, if there is no revenue received during construction then the interest payments for debt (and potentially equity) will be required to be capitalised, i.e. the our proposed approach to debt and equity will need to be over-sized in order to pay the interest over the construction indexation, refinancing and enabling new asset period. The extent of the over-sizing will depend on the level funding costs and length of construction period, but it may increase the project funding requirement by c.10%. investment. The greatest credit risk to an SPV for any construction asset is insufficient liquidity to cater for cost overruns and /or delays. Liquidity is required to fund the SPV's additional costs which include construction and associated costs, but also includes the additional debt and equity interest that is required to be incurred. Construction projects which allow a portion of revenue during the construction period (for example, Thames Tideway) will attract more competitive funding terms and more robust credit ratings than those that do not. If no revenue is received during the construction period, the additional liquidity will either have to be reserved at Financial Close (normally deemed to represent poor value for money), or as more commonly occurs in infrastructure limited recourse financings, require the contractor to incur the additional costs. These costs are likely to be significant and will require either a single credit-worthy contractor or a contractor JV to wrap the construction risks. Furthermore, we understand from the consultation that it is envisaged that the CATO may be required to post security in the same way as is required by OFTOs under the STC. To the extent that the CATO obtains and maintains an acceptable credit rating, then this additional security (which we presume is not intended to be accessible by lenders) is not required. However, construction projects will typically obtain a lower initial credit rating than an operational project (which may or may not be investment grade at the outset) and be subject to greater rating volatility until operations commencement. At Financial Close, the CATO will need to ensure that it has sufficient security in place to meet all possible outcomes, which will therefore need to satisfy both lenders and STC. Ofgem may wish to consider whether it is represents best value to the consumer to have a minimum 20% bonding requirement under the STC, as well as the additional contractor security requirements (which we estimate would be c.30% including an element of bonding) expected by the lenders/rating agencies. We believe that a contractor is unlikely to find a c. 50% liability cap with c.30% bonding an attractive proposition and that this may have an adverse impact on competition.

As a consequence, whilst we agree that commencement of the revenue on operations provides the correct incentive to the CATO to achieve a timely delivery and revenue during construction, we do believe that for projects that extend beyond say 3 years construction, it may be appropriate for Ofgem to consider whether some degree of revenue during construction may provide the best value for consumers. In addition some projects may lend themselves to staged completion and for those projects it may be appropriate for the commencement of revenue to also be staged across a number of construction milestones. It is important that the milestone for determining when the assets are available for use or when a stage revenue payment should be made is clear, unambiguous, can be independently verified and is entirely within the control of the CATO. It cannot for example be only when the SO has completed STC compliance tests and issued a compliance notification (which in our experience is often dictated by the availability of SO staff). As we understand from the consultation, the preference is for the asset to be depreciated over a 45 year term post construction to keep it in line with the current RIIO regime. Appendix 5, para 1.147 suggests there are 4 alternatives that could occur at the end of the 25 year initial revenue term (at which time the asset will only be partially depreciated) – retender, extend the revenue term, transfer or decommission. Debt and equity providers will need comfort that their investment is fully repaid irrespective of which option is selected and as a consequence there needs to be absolute clarity prior to Financial Close on:
We view that despite the 25-year revenue term, it will be possible for CATO bidders to bid fixed O&M and insurance costs over this period.

	Indexation We note that the proposal is to bid the linkage to RPI again similar to recent OFTO tenders. Ofgem have separately consulted on the use of RPI or CPI indexing and TCP has responded to this consultation in December 2015. As stated separately in that consultation response, we strongly support retaining the link to RPI and believe that it represents best value to the consumer.
	Refinancing Gain Share The requirement to share refinancing gains should depend upon the complexity of the construction and the method of financing. For example, bond investors do not traditionally embrace construction risk unless it is of a standard nature and is protected (either by a comprehensive contractor wrap or by alternative means). It may well be that the most appropriate form of financing is bank bridge finance for the construction period followed by a refinancing in the bond markets – such an approach has commonly been adopted in the infrastructure markets for many years. It is uncertain whether Ofgem would intend for a refinancing gain to apply in such circumstances. While we recognise that refinancing losses, as well as gains, would be shared between the CATO and consumers, it would nonetheless appear inappropriate to apply gain/loss sharing to a bridge financing structure.
	As mentioned above, at the end of the 25 years there are a range of options that are envisaged. In all circumstances, other than decommissioning, we assume new finance would need to be raised for the extended term. We presume refinancing gain share is not intended to apply in such circumstances, but clarity on this would be sensible.
	For the avoidance of doubt, in the instance where the full term refinancing has been put in place at Financial Close and an opportunistic refinancing has been undertaken due to an improvement in market conditions, then we fully support the refinancing gain principle with the consumer.
Question 7: What are your views on our proposed package of financial	In general we agree with an availability based incentive of operational performance subject to the points below:
 incentives for CATOs? Including: how we could structure an availability-based incentive to ensure CATOs 	i) It is important that the availability based incentive reflects as closely as possible the value to the consumer of availability – therefore, as with the OFTO regime, careful consideration should be given to the detail of the incentive. It is quite possible that different parameters will be required for each project (perhaps again similar to the OFTO regime under which weighting factors are chosen by the offshore wind farm owner).

 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. 	 ii) It may be appropriate to incentivise 'over performance' under certain circumstances (e.g. SO request), e.g. the use of short-term ratings to obtain higher ratings than name plate rating for a period of time – this is not generally necessary on OFTOs given the fixed capacity of the offshore wind farms which they connect (whether this is indeed 'over performance' or not depends on the original specification); iii) Consideration should be given as to whether other measures of performance capability are required upon completion of construction or whether these are only pass/fail criteria in receiving the revenue stream or catered for at the design stage in the tender assessment. For example: a. MVAr capability (rather than just MW); b. Short-term overload capability (see above); c. Harmonic performance; d. Ramp rates (for HVDC equipment); e. The ability to black start; f. Frequency Response (for HVDC equipment). iv) We agree with the 10% cap on lost revenue each year as this will facilitate the use of low cost debt financing. We would expect though as in the OFTO regime a single outage could lead to this revenue reduction cap being hit across several years. We agree with Ofgem that revenue commencing on operations is a sufficient incentive for timely completion of construction and that no penalties should be required. Subject to our comments in response to question 6 above, we prefer this option over the alternatives which involve payments during construction and penalties for late delivery as it is simpler and allows delay LDs from contractors purely to be used to service debt (and equity) costs.
Question 8: Are there other types of incentives not covered in this chapter that you think should apply to CATOs?	We agree that transmission losses should be largely determined by the design (although some operational decisions will also influence the level of losses experienced). It is certainly important that expected transmission losses are assessed as part of the tender process (and bidders should be provided with assumptions of expected MVA flows and the cost of losses as part of the tender process). See response to question 7 above for other items that may need to be considered at the design stage. Appendix 5 (para 1.167) notes that a CATO may be required to provide security for a proportion of construction costs. We should like to understand better the purpose of this construction security.

CHAPTER: Four	
Question 1: Are there any risks or conflicts of interest arising from the SO's role that we haven't identified?	The SO may deliver preliminary works to timescales and/or specifications that make the competitive process difficult and thereby seek to avoid it.
Question 2: Are there any risks or conflicts of interest arising from the participation of incumbent onshore TOs that we haven't identified?	In RIIO-T1 the onshore TOs may deliver preliminary works to timescales that make the competitive process difficult and thereby seek to avoid it.
Question 3: Are there any additional conflicts of interest that we haven't identified?	None in addition to those noted in questions 1 and 2 above.
Question 4: What measures do you think would be appropriate to mitigate the risks and conflicts of interest?	SO Ownership separation is not on this list of measures listed in Appendix 6 (paras 1.173 to 1.183) but remains, as we have stated above, the only real solution.
What additional conflict mitigation measures would be needed if the SO takes on a broader role in supporting competition?	<u>TO</u> Separate offices within a building is a weak measure if for example staff from an onshore TO then sit down to lunch with their CATO bidding affiliate. Separate buildings would seem to be the minimum requirement in this regard.
	Business separation for TOs clearly becomes less of an issue after RIIO-T1 when the SO is doing the preliminary works and assuming the SO is planning the development of the system (and is independent itself).

{End}