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Ref: 73/12

Direct Dial: 0141 331 6003
Email: cheryl.mundie@ofgem.gov.uk

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Dear Colleague

Consultation on proposed funding arrangements for the Western High Voltage Direct Current (HVDC) link ("Western Bootstrap")

The electricity transmission companies' strategic investment programme for accommodating the anticipated significant growth of renewable generation in Scotland includes a subsea "**bootstrap**" running down the west coast, referred to as the **Western High Voltage Direct Current (HVDC) link**. The Western HVDC link is being developed jointly by National Grid Electricity Transmission plc (NGET) and SP Transmission Ltd (SPTL) (referred to as "the TOs" in this letter).

As discussed in more detail below, the two licensees requested funding for the Western HVDC link under our Transmission Investment Incentives[1] (TII) framework. In August 2011 we consulted on our minded-to position, with its associated conditions (see the Appendix to this letter). We maintained this position in our November 2011 update, and our February 2012 update set out our approach to our work to consider the specifics of funding, both under the TII framework (which will run to 31 March 2013) and the next price control, RIIO-T1[2] (which will start on 1 April 2013). This work has included our further assessment of the TOs' final plans for the Western HVDC link, following award of contracts for the construction works, and ongoing monitoring of progress against the conditions attached to our minded-to position. Further, in our April 2012 Final Proposals for SPTL under RIIO-T1 we confirmed the Western HVDC link, while being treated as a baseline project, will be subject to re-opener provisions to allow revenues to be adjusted for certain pre-defined events. We will publish our Initial Proposals for NGET under RIIO-T1 in July 2012.

The purpose of this letter is to consult on the details of our proposed funding arrangements for the Western HVDC link for NGET and SPTL under both TII and RIIO-T1. We set out our proposals for the annual ex ante allowances for each of the TOs, the deliverables to be linked to those allowances and our approach to dealing with changes in costs and/or outputs. We set out the proposed basis of the efficiency incentive sharing factor for each TO, and more detail on the proposed re-opener provisions that will apply to the project taking into account its specific characteristics. We also set out our proposals for how we will deal with the situation if the Western HVDC link is not delivered as a consequence of the TOs not obtaining planning consents for the southern convertor station.

[1] See TII webpage, where all documents related to TII that are referred to in this letter can be found: http://www.ofgem.gov.uk/Networks/Trans/ElecTransPolicy/CriticalInvestments/InvestmentIncentives/Pages/InvestmentIncentives.aspx
[2] See RIIO-T1 webpage, where all documents related to RIIO-T1 that are referred to in this letter can be found: http://www.ofgem.gov.uk/Networks/Trans/PriceControls/RIIO-T1/ConRes/Pages/ConRes.aspx

In summary our proposed funding arrangements, which are discussed in more detail below, are:

- A total ex ante allowance of **£1050.7m** (2009-10 prices) with annual phasing in line with the latest cost profile provided by the TOs[3].
- All costs split 70:30 between NGET and SPTL respectively, both ex ante and ex post.
- Efficiency incentive sharing factors applying to this project, across both TII and RIIO-T1, will be specified for SPTL and NGET separately in line with their respective RIIO-T1 Final Proposals (taking the value 50% for SPTL, and yet to be determined for NGET).
- The same re-opener provisions will apply to both SPTL and NGET under RIIO-T1. These provisions are consistent with those set out for the Western HVDC link in SPTL's Final Proposals for RIIO-T1 and will:
    - (a) treat the project as a whole, and
    - (b) reflect allowances and expenditure both in the TII period (ie pre-RIIO-T1) and the RIIO-T1 period.
- The asset value adjusting event and output measures adjusting event provisions under TII will not apply.
- An option is retained to allow funding to be reviewed if the planning issue at the southern converter station has a material impact on cost or delivery of the project.

We discuss below how we have developed these proposed funding arrangements with reference to the TOs' final plans for the Western HVDC link and the current progress in relation to the minded-to conditions[4]. We also discuss how we have taken into account interactions with our work on RIIO-T1 and the fact that the Western HVDC link is being delivered jointly by two licensees, and explain why we think the Western HVDC link warrants a different approach to other projects funded under TII. We also set out how we have taken into account the planning issue for the southern convertor station and how our proposed funding arrangements seek to maintain the protection to consumers provided by the minded-to conditions. Finally, we set out the process for reaching a final decision on funding arrangements for the Western HVDC link under TII and RIIO-T1 and, where appropriate, reflecting that decision in the transmission licence.

Responses to this consultation should be submitted by **20 June 2012**.

Details of how to respond to this consultation are set out at the end of this letter, along with a summary of the specific issues on which we are inviting views. We also welcome views on any other issues that stakeholders believe to be relevant to our decision on the funding arrangements for the Western HVDC link.

Background

The TII framework was introduced in 2010 to provide project-specific, interim funding[5] for critical large-scale investments that the transmission companies identify are required to support achievement of the Government's 2020 renewable energy targets. The TII framework will be superseded in 1 April 2013 by the funding arrangements to apply under RIIO-T1.

In August 2010, NGET and SPTL requested funding under TII from 2011-12 for the Western HDVC link, specifically in relation to the construction of the HVDC cable and convertor stations. On 1 August 2011[6] we set out, for consultation (our **August 2011 consultation**), our **minded-to position** (see the Appendix of this letter) on funding of the Western HVDC link subject to certain conditions. We also identified a number of issues relevant to our

[3] All information provided by NGET and SPTL for the purposes of this assessment was in the form of a joint submission on behalf of both TOs.
[4] Based on the latest information as of April 2012.
[5] By "funding under TII" we mean to allow efficient cost recovery via a revenue stream calculated under the relevant provisions of the TII framework. The TII framework is set out in Special Condition D11 of NGET's licence and Special Condition J12 of the licences of SPTL and Scottish Hydro Electric Transmission Ltd (SHETL).
[6] Transmission Investment Incentives: consultation on minded-to position for the Western High Voltage Direct Current (HVDC) link ("Western Bootstrap"), Ref 94/11, Aug'11

ongoing project assessment towards a final decision on funding. We reached our minded-to position based on our initial assessment, taking into account the latest available Cost Benefit Analysis (CBA) and other relevant factors, that there was a strong case for enabling the TOs to maintain their planned programme for delivery of the Western HVDC link in 2015.

Following consideration of responses to our August 2011 consultation, we published an update on 10 November 2011[7] (our **November 2011 update**). We maintained our minded-to position, and the conditions associated with it. While noting we had insufficient information to conclude on all aspects of our project assessment, we took into account updated CBA[8] in reaching a positive conclusion on the case for delivering the link in line with the TOs' planned programme, ie that there is a consumer benefit from the project and that the proposed timing is appropriate. This timing is in line with the original target delivery timescales when this project was first put forward in 2009, and reflects the earliest possible delivery date taking lead times into account.

In a further update published on 10 February 2012[9] (our **February 2012 update**) we confirmed that the latest information from the TOs indicated no material escalation in costs, and as such we did not intend to revisit the needs case unless circumstances materially change. We also concluded that sufficient progress had been made in relation to the minded-to conditions that our ongoing work would focus on the specifics of funding, both under TII and RIIO-T1.

Our February 2012 update also set out our approach to the final stage of our assessment in the expectation that, subject to resolution of outstanding issues, all of the minded-to conditions would be satisfied. However, we stated that we would continue to monitor progress and that in order to maintain the protection to consumers provided by the minded-to conditions, we would retain flexibility to review our position on funding if circumstances materially change.

We recently published our RIIO-T1 **Final Proposals for SPTL**[10] which confirmed that, in SPTL's case, the Western HVDC link is to be treated as a baseline project with certain re-openers applying, but that the details of funding for this project will be subject to the outcome of this (TII) assessment process. We are continuing to assess NGET's business plan and intend to publish our Initial Proposals for NGET in July 2012.

Our assessment approach

As indicated in our February 2012 update, this final stage of our project assessment of the Western HVDC link has focussed on issues relevant to the specifics of funding, both under TII and RIIO-T1, based on the final TO plans for delivery of the link. We have also taken into account relevant past assessments under TII and the latest information from the TOs. There has been no material escalation in costs since our February 2012 update, and so we have not re-opened the needs case and we confirm that we have maintained our position on the case for delivering the link in line with the TOs' planned programme.

Following a high level review of the final stages of the TOs' process towards contract award, we have focussed on developing funding arrangements with reference to the successful bid, and taking into account costs and risks not included in the contract price. Our proposed funding arrangements, set out in this consultation, focus on the cost allowances that should apply in each year for each TO, deliverables associated with those allowances, and the risk sharing arrangements to apply between the TOs and consumers.

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[7] Transmission Investment Incentives: update on Western High Voltage Direct Current (HVDC) link ("Western Bootstrap"), Nov'11

[8] The updated CBA reflected latest costs for link capacities at the maximum and minimum of the range under consideration by the TOs, and used a range of assumptions to test the robustness of the need case and timing.

[9] Transmission Investment Incentives (TII): further update on Western High Voltage Direct Current (HVDC) link ("Western Bootstrap"), Feb'11

[10] RIIO-T1: Final Proposals for SP Transmission Ltd and Scottish Hydro Electric Transmission Ltd, Ref 58/12, Apr'12

In developing our proposed funding arrangements we have also taken into account the project-specific characteristics of the Western HVDC link, including:

- the contractual arrangements put in place for the delivery of the project, namely that NGET and SPTL have set up a joint venture which signed one contract with a consortium of contractors,
- the materiality of the project, both in terms of cost and capacity provided,
- the risk profile associated with HVDC projects and offshore installations, with an asymmetric risk distribution due to very high impact, low likelihood events,
- the fact that our minded-to position is subject to a number of conditions some of which remain outstanding, and
- the fact that our proposed funding arrangements apply to expenditure[11] on the relevant works both in the TII period (specifically for the years 2011-12 and 2012-13) and the RIIO-T1 period (from 2013-14 onwards), with the majority of planned expenditure falling into the latter period.

We note that all funding under TII to date has been consistent with other capex funded within the prevailing price control. However, in developing the TII framework we reserved the flexibility to vary our approach when funding projects of materially different characteristics. We consider that, in recognition of the above issues, the Western HVDC link may warrant a different treatment under TII compared to other works funded to date.

We have sought to ensure that our proposed funding arrangements for the Western HVDC link are compatible with the RIIO-T1 arrangements for each licensee, taking into account the different timescales in which those arrangements would be determined. In doing so, we have built upon the general policy on risk sharing arrangements including uncertainty mechanisms for wider works, as applicable to all TOs, which we set out in our RIIO-T1 strategy document in March 2011[12].

We have also reflected the specific risk sharing arrangements for SPTL, including the efficiency incentive sharing factor and specific re-openers applying to the Western HVDC link. Those were set out in our RIIO-T1 Final Proposals for SPTL following our consultation on Initial Proposals[13] in February 2012. Specifically, we have considered how the adoption of those arrangements for SPTL, and the fact that this project is being developed jointly by two licensees under a joint venture, could affect the options for this specific project's funding arrangements for each TO under TII and RIIO-T1.

With this in mind, **our assessment underpinning the proposed funding arrangements set out in this consultation is based on the following principles:**

- The project will be treated as a whole, with a pre-defined approach for allocating costs between the TOs for the purposes of the funding arrangements[14]. In practice, we propose that this approach be based on fixed allocation ratios applied to all costs both ex ante and ex post[15].
- Re-openers applying to this project for SPTL under RIIO-T1 would also apply to NGET, and take into account allowances and expenditure on the relevant works under TII.
- The efficiency incentive sharing factor applying to the Western HVDC link under RIIO-T1 may potentially differ between NGET and SPTL. This is consistent with the policy under RIIO-T1 that this factor will be determined for each TO separately and apply to all of its projects (including the Western HVDC link). This is to ensure that the TOs do not have undesirable incentives to reallocate expenditure between activities.

[11] Our proposed ex ante allowances cover some costs which have already been incurred.
[12] Decision on strategy for the next transmission price control - RIIO-T1, Ref 46/11, Mar'11
[13] RIIO-T1: Initial Proposals for SP Transmission Ltd and Scottish Hydro Electric Transmission Ltd, Ref 16/12, Feb'12
[14] We expect that where the resulting allocation does not reflect the actual incidence of costs then this can be dealt with via a commercial arrangement between the TOs.
[15] We have received no alternative proposal from the TOs for ex post allocation of cost variations.

Basis for proposed funding arrangements

Final TO plans

The joint venture set up by NGET and SPTL awarded the contract to Siemens-Prysmian in February 2012. The contract is for the manufacture and installation of the HVDC cable and two convertor stations, for delivery in late 2015. Based on Current Source Converter (CSC) technology and adopting a bi-pole configuration to allow power flows to operate in either direction, the chosen design includes advanced cable insulation[16] enabling the link to operate at 600kV.

The planned 600kV design would provide a continuous capacity rating of 2.25GW and a short-term (6 hour) rating of 2.4GW, with the latter corresponding to the maximum link capacity considered in the CBA referred to above. However, the achievement of this voltage and in turn the full potential benefits of the Western HVDC link is subject to the outcome of testing once it is physically in place. While the TOs expect those tests to be successful, if the outcome of those tests is that the Western HVDC link must be operated at a lower voltage then this will reduce the capacity provided. For example, if it operates at its minimum expected level of 500kV then the capacity achieved would be consistent with the minimum link capacity (2.0GW) considered in the CBA.

The proposed route of the HVDC cable runs via an undersea corridor from Hunterston in Ayrshire, to Kelsterton in Deeside, with the convertor stations at either end to convert the power from Direct Current (DC) as used in the HVDC cable to Alternating Current (AC) as used in the synchronous transmission system. The convertor stations, which would be located close to the respective onshore landing points proposed for the HVDC cable, are planned to connect into neighbouring substations being constructed at Hunterston East in SPTL's area and Connah's Quay in NGET's area. The neighbouring substations have been the subject of separate funding decisions[17] under TII and as such are out of scope of this consultation. **Our proposed funding arrangements set out in this consultation relate to the costs associated with construction of the HVDC cable and convertor stations, including costs and risks which are not reflected in the contract price**.

Current status of minded-to conditions

Our February 2012 update reviewed the status of the minded-to conditions and set out our expectation that, subject to resolution of outstanding issues, all of the conditions would be satisfied. In particular, we noted some outstanding issues to be resolved by the TOs in relation to **condition d** (successful resolution by the TOs of any licensing issues with the relevant authorities of Northern Ireland and Isle of Man, and any planning consents). We further noted that the latest information from the TOs in February indicated that these issues were manageable and should not necessarily delay their programme.

We note that, as discussed in more detail below, condition d remains outstanding following rejection of the request for planning consents for the proposed southern convertor station, at Kelsterton in Wales, by the Flintshire County Council Planning Committee in February 2012. The remaining minded-to conditions are either now satisfied (in the case of **conditions a and c**) or are consequential to the conclusions from this consultation on the specifics of funding and any subsequent licence modifications to that are necessary to reflect our final decision (in the case of **conditions b and e** respectively).

Consultant findings

Our assessment has been informed by an independent review by Pöyry. A public version[18] of Pöyry's report[19] is published alongside this letter.

[16] Based on Mass Impregnated (MI) Polypropylene Laminate (PPL) insulated cable, which is more advanced than conventional mass impregnated paper insulation enabling a higher voltage to be achieved.
[17] Transmission Investment Incentives (TII): decision on requests for funding in 2012-13, Ref 13/12, Jan'12
[18] Given the confidential and commercially sensitive nature of certain material reviewed by Poyry, the public version omits some of the content set out in the full report to Ofgem.

From its review of the final stages of the TOs' process towards contract award, Pöyry concluded that the TOs had designed a procurement process that was as effective as possible in the constrained market, and that they followed the planned procurement process to arrive at an efficient outcome. While noting some slippage in the original planned timetable in light of delays in relation to achieving planning consents, Pöyry agreed that the timing of contract award was appropriate in order to secure manufacturing slots and maintain the achievability of the planned delivery programme. Overall, Pöyry concluded that the TOs had negotiated effectively with the objective of ensuring that risks fall to the party best placed to manage them and total costs are minimised, and that the TOs took a reasonable and balanced approach in identifying their preferred solution, given the potential benefits of operating the link at a higher voltage which were considered to outweigh the additional risks posed by the technology adopted to achieve this. However, Pöyry also identified the planning issue for the southern convertor station as the key outstanding delivery risk with the potential to impact upon the delivery date of the project if it is not resolved within 9 months of February 2012.

We agree with these findings and therefore asked Pöyry to develop its recommendations on risk sharing arrangements, funding allowances and deliverables with reference to the successful bid, and to focus its detailed review on the latest information from the TOs on costs and risks not reflected in the contract price. For the purposes of making recommendations on risk sharing arrangements, we also asked Pöyry to work within a framework consistent with the principles set out above (see page 4) while leaving it open to Pöyry to include alternative recommendations where they could justify doing so.

We note that Pöyry's recommendations, which are set out below alongside our proposed funding arrangements, are based upon its review of information received from the TOs up to 14 March 2012, this being the data cut-off date adopted by Pöyry for the purposes of its report. While identifying certain gaps within that data (including further detail on the TO's assessment of the expected impact of the planning issue), Pöyry concluded that none of these gaps had a material impact upon its ability to reach conclusions, nor on the validity of the methodology it used to derive ex ante allowances.

Proposed funding arrangements

Our proposed funding arrangements take into account Pöyry's recommendations and differ from, or further develop, those recommendations in the following respects:

- Our proposed total ex ante allowances, while consistent with Pöyry's recommended methodology, reflect updated information including final contract costs and the latest TO estimates of the impact of the planning issue referred to above.
- We do not propose that the efficiency incentive sharing factor for NGET will necessarily be the same as that for SPTL. We propose to use the same sharing factor for NGET as its other RIIO-T1 projects which will be set separately.
- We provide more detail on how we propose to treat the project in the provisions for adjustment to funding ex post, and on our proposed approach to defining deliverables to be linked to the ex ante allowances under TII.
- We propose to include additional safeguards to protect consumers in the event that the project is severely affected by those key risks that the TOs have highlighted.

We believe that our proposed funding arrangements strike the correct balance between providing certainty to the TOs with sufficient funding to cover the efficient costs of delivering the project in line with their latest plans, and providing incentives on the TOs to manage cost variations and project risks on behalf of consumers.

[19] Western HVDC Final Funding Review: a report to Ofgem, Pöyry, April 2012

Proposed ex ante allowances

Table 1 below shows our **proposed ex ante allowance** for the project as a whole and for each TO, for each year of expenditure. Our approach to deriving these allowances is set out below.

Table 1: Proposed annual ex ante allowance for whole project and for each TO

Ex ante allowance (£m)	**TII**		**RIIO-T1**				**Total**
	2011-12	**2012-13**	**2013-14**	**2014-15**	**2015-16**	**2016-17**	
NGET (70%)	15.9	84.8	165.2	235.5	213.5	20.6	735.5
SPTL (30%)	6.8	36.4	70.8	100.9	91.5	8.8	315.2
TOTAL	**22.7**	**121.2**	**236.0**	**336.4**	**305.0**	**29.4**	**1050.7**

Table 2 below summarises the basis of the cost submissions provided by the TOs in August 2011 and January 2012, together with Pöyry's recommendation and our proposal for the total ex ante allowance to apply to this project (across both funding periods) taking into account supplementary information provided by the TOs since January 2012. Our proposed allowance is consistent with the methodology underpinning Pöyry's recommendation while updating this for new information.

Table 2: Basis of total ex ante allowance

	TO requested allowance		**Pöyry recommended allowance**	**Ofgem proposed allowance**
	Aug11 submission[20]	**Jan12 submission**		
Contract costs	Latest tender prices *(Assessment Round 2)*	Final offer *(standstill)*	Final offer *(standstill)*	Final contract costs *(including adjustments for metal prices etc)*
Non-contract costs	TO latest estimate	TO latest estimate	TO latest estimate	TO latest estimate
Risk allowance	P80[21] of residual risks Based on Aug-11 analysis *(reflects latest negotiated position on risk allocation, includes weather/ seabed risks)*	P80 of residual risks Based on Jan-12 analysis *(excludes risks re-allocated to supplier)*	P50[22] of residual risks Based on Feb-12 analysis, less £2m adjustment *(reflects updates for Pöyry audit, but excludes impact of planning issue)*	P50 of residual risks Based on Mar-12 analysis, less £2m adjustment *(includes impact of planning issue)*

As indicated in Table 2, the total ex ante allowance covers all costs associated with the construction of the HVDC cable and convertor stations, including:

- the **contract costs** reflected in the contract price for the HVDC cable and convertor stations,
- the **non-contract costs** which are additional costs to the TOs for items not part of the contract (such as project management, land purchase and marine licences), and
- a **risk allowance**, representing a contingency for further costs to the TOs which may arise in relation to residual risks not borne by the supplier.

Our review of the contract and non-contract costs submitted by the TOs has not revealed any inefficiencies in these. We therefore propose to set allowances in line with the TOs' submissions.

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[20] Based on the option providing the highest link capacity and which ultimately corresponded to the successful bid.
[21] P80 value corresponds to an 80% likelihood of exceeding the outturn value.
[22] P50 value corresponds to a 50% likelihood of exceeding the outturn value.

The TOs proposed that the risk allowance be derived from the results of a Monte Carlo simulation model of the residual risks (the risk model) provided by the TOs. The TOs' proposal was to set the allowance at the 80th percentile (P80) which provides an 80% likelihood of the allowance exceeding the outturn cost for the modelled risks. In line with Pöyry's recommendation, we consider that it would be appropriate to instead adopt the P50 value (which has a 50% likelihood of exceeding the outturn cost), on the basis that:

- The risk allowance only captures residual risks not included in the contract and consumers are already protecting the TOs against risks reflected in the contract price, including those which have been taken on by the supplier (eg some of the risk in relation to adverse weather) through the final stage of negotiations.
- We think that the sharing factor and re-opener provisions discussed below provide sufficient protection to the TOs.
- Setting the risk allowance based on P80 would in this case likely lead to consumers funding allowances that are larger than actual expenditure.

Pöyry's recommended value for the risk allowance is based on applying the above approach to the results of the February 2012 version of the risk model, less a £2m adjustment to correct an error identified by Pöyry. Since then, the TOs have updated the risk model to reflect the TOs' estimates of the impact of the planning issue. The value of the risk allowance included in our total ex ante allowance is based on applying Pöyry's methodology to the results of this updated risk model as provided to Ofgem in March 2012.

Based on the above, **our proposed total ex ante allowance is £1050.7m**, of which £872.5m relates to the final contract costs and the remainder[23] covers the non-contract costs and risk allowance. Our proposed total ex ante allowance is **4% lower** than that requested by the TOs in their August 2011 submission, while incorporating provision for risks which have subsequently been identified or evaluated in more detail. This includes the planning issue which was not accounted for in the January 2012 submission.

We derived **annual phasing** of our proposed total ex ante allowance by applying the assumptions adopted by the TOs for the annual phasing of contract costs, non-contract costs and risk allowance respectively. The resulting annual totals were then **allocated between the TOs** in line with Pöyry's recommended ratio of 70% to NGET and 30% to SPTL. This allocation was derived by Pöyry from its analysis of the detailed split provided by the TOs for various individual cost items. Consistent with treating the project as a whole, we agree with Pöyry's recommendation to apply this ratio to all cost items both ex ante (for setting allowances) and ex post (in the application of the efficiency incentive mechanism and re-openers referred to below).

Efficiency incentive sharing factor

Under the **efficiency incentive mechanism**, over and under spends against the ex ante allowances will be shared between TOs and consumers based on a given sharing factor. In line with the treatment of other capex under TPCR4 and the TPCR4 rollover, our standard approach under TII is to apply a sharing factor of 25%, such that the relevant TO is exposed to 25% of the over or under spend, with the remainder passed to consumers. As set out above, the sharing factor to apply to a given TO under RIIO-T1 (for all its projects) will be determined through its respective price control review process, at somewhere in the range of 40%-50%, thereby representing a higher level of incentivisation than under TII.

Our proposal regarding the **sharing factor** for this project is summarised in **Table 3** overleaf. In light of the matters listed above, **we propose, for each TO, to align the sharing factor to apply to the Western HVDC link under TII with that adopted under RIIO-T1** to avoid undesirable incentives to move expenditure between the two periods.

[23] The detailed cost breakdown remains commercially sensitive.

Table 3: Proposed sharing factor for efficiency incentive mechanism

Sharing factor	TII	RIIO-T1
NGET	The value adopted for NGET under RIIO-T1	The value to be determined for all other NGET projects under its RIIO-T1 Final Proposals
SPTL	**50%** *(ie the value adopted for SPTL under RIIO-T1)*	**50%** *(ie the value determined for all other SPTL projects under its RIIO-T1 Final Proposals)*

Our proposal does not align with Pöyry's recommendation that the same sharing factor be used for both TOs (ie 50% in line with RIIO-T1 Final Proposals for SPTL), irrespective of any differences in the sharing factor determined for other projects under the TOs' respective price control review process. The rationale for Pöyry's view is that applying different sharing factors to each TO for this project would result in each TO individually having a different exposure to the risks faced by the joint venture, without necessarily differing in their ability to manage this risk. However we remain of the view (as reflected in the principles set out on page 4) that from the perspective of the RIIO-T1 arrangements it is more important, for a given TO, that the same sharing factor apply to all its projects than it is, for a given joint venture project, that the same sharing factor apply to both parties in that joint venture. We also consider that Pöyry's concerns with our preferred approach are addressed by our proposal to treat this project as a whole within our proposed funding arrangements and to adopt a fixed ratio for allocating all costs between the TOs, both ex ante and ex post. We will also take our assessment of the Western HVDC link into account in determining the sharing factor to apply to NGET under RIIO-T1.

Provisions for adjustment to funding ex post

The TII framework includes limited flexibility for adjustment to funding ex post via the asset value adjusting event and output measures adjusting event mechanism. The framework for Strategic Wider Works (SWW) under RIIO-T1 includes re-opener provisions via the Cost and Output Adjusting Event (COAE) mechanism which is triggered when a given pre-defined event leads to a change in costs above a specified threshold, and does not apply to baseline projects.

While treating the Western HVDC link as a baseline project, our RIIO-T1 Final Proposals for SPTL included specific re-opener provisions to apply to this project, in light of its specific risk characteristics. These re-opener provisions, while specific to the Western HVDC link, are based on the COAE mechanism for SWW. They are based on a 10% threshold and triggered by any one of the following three pre-defined events:

- adverse weather,
- unforeseen ground or seabed conditions, and
- the terms and conditions for any statutory consent, approval or permission.

We note that the third of these events is similar to that reflected in the two adjusting event mechanisms under TII referred to above. It may be argued that, under the TOs' current planned programme, relevant circumstances which are in scope of such an event may be more likely to arise in the TII period; while the relevant circumstances in scope of the other two events may be more likely to arise in the RIIO-T1 period, when the cable installation is planned to take place. However, the incidence of the change in costs associated with a given event may not necessarily fall neatly into one period or the other. Given that our proposed funding arrangements cover both the TII and RIIO-T1 periods, we think it appropriate that changes in costs associated with the above events should be taken into account within a single mechanism.

In light of these factors and the other matters referred to above justifying different treatment for this project under TII, **we propose that the asset value adjusting event and output measures adjusting event provisions under the TII framework will not apply to this project.**

We also propose that the re-opener provisions specific to the Western HVDC link set out in our RIIO-T1 Final Proposals for SPTL will:

- apply to the project as a whole, based on a joint submission from the TOs and a fixed allocation of costs between the TOs (see above) irrespective of the actual incidence of costs,
- apply to a threshold of 10% of the total ex ante allowance (see Table 1) for the project as a whole, over both the TII and RIIO-T1 periods, and
- take into account costs incurred in both the TII and RIIO-T1 periods in determining whether the threshold has been triggered.

Approach to dealing with the planning issue for the southern convertor station

As noted above, there remains a planning issue with the southern convertor station. Given that the Western HVDC link is not an SWW project **we propose that, where relevant, additional costs arising in the event that it is necessary for the TOs to progress an alternative site will be taken into account in our consideration of whether the above re-opener has been triggered** under the pre-defined event relating to the terms and conditions for any statutory consent, approval or permission.

We anticipate that minded-to condition d may remain outstanding at the time we currently intend to make our final funding decision on the Western HVDC link. We remain of the view that it is appropriate to enable the TOs' to maintain their planned delivery programme so that the expected benefits can be realised. We note that cancelling the contract at this stage would result in a delay of at least two years while the TOs re-tender. Based on the CBA taken into account for reaching our minded-to position, this delay could lead to around £0.2bn[24] of lost benefits to consumers (due to less savings in constraints costs). While we do not consider it appropriate to defer our funding decision until condition d is satisfied, our proposed funding arrangements seek to maintain the protection to consumers provided by this condition.

We have based our proposed funding arrangements on the latest information from the TOs, which is consistent with the assumption that minded-to condition d will be satisfied in a timely manner such that the planning issue does not have a material impact on the delivery of the link. **We do not propose to further update our proposed total ex ante allowance for any further cost updates from the TOs prior to our final funding decision**, as we consider that these can be dealt with through the efficiency incentive mechanism and provisions for adjustment to funding ex post as described above.

We expect the TOs to work effectively with stakeholders where applicable to address planning issues and reach a solution in a timely manner. However, we need to take into account the possibility that the TOs do not obtain planning permission for any suitable site and are unable to deliver the project such that minded-to condition d is not satisfied. While we do not expect this situation to arise, **we propose to retain the option to make an ex post adjustment to allowances if the project is not delivered, so as to ensure that only efficiently incurred costs are recovered**. This additional safeguard is intended to protect consumers in the event that the project is severely affected by those key risks that the TOs have highlighted.

Deliverables

For works funded under TII to date, the ex ante allowances specified for each year have been linked to key project milestones reflecting the activities planned by the given TO in that year. Given that our funding proposals include the RIIO-T1 period and the mechanisms referred to above will apply to the project as a whole, over both funding periods, **we do not propose to define annual key project milestones for the period of TII funding** (ie prior to RIIO-T1). However, we still expect the TOs to report on progress through the

[24] This is based on the TO's estimate, as set out in our August 2011 consultation, that delaying delivery of the Western HVDC link to 2017/18 would reduce the net lifetime benefits by £165m under the Gone Green scenario. This analysis does not take into account any impact on the costs to deliver the Western HVDC link.

annual reporting under TII and the TOs will similarly be required to report on progress annually during RIIO-T1.

For all construction works funded under TII, we have also defined forecast output measures which are expected to be delivered on completion of the planned construction works (including where those works are ongoing at the end of the TII period). Under RIIO-T1, we will define and specify technical output measures in TOs' licences for wider works funded through ex ante allowances or through a revenue adjustment determined within the price control period. **We propose that the relevant output measures for the Western HVDC link will be based on the TOs' current plans (ie those forming the basis for our proposed funding arrangements set out in this consultation)** in terms of the capability provided across relevant boundaries and the completion timescales. That is, we propose that they will be set consistent with the assumptions underpinning our proposed total ex ante allowance, including the TOs' current expectation that:

- the link is delivered at 600kV (achieving a boundary capability increase across Boundaries B6[25], B7 and B7a consistent with a continuous rating of 2.25GW and short-term (6 hour) rating of 2.4GW), and
- the planning issue does not have a material impact on the TOs' ability to maintain their current planned programme (for delivery in 2015-16).

We note that as part of the next price control the Authority will monitor and review the TOs' performance in terms of delivering the RIIO-T1 outputs specified in the licence. Deviations from agreed completion timescales will be reviewed by the Authority to determine whether these constitute a contravention of the TOs' licence conditions. In such circumstances, the Authority will consider on a case by case basis whether late delivery constitutes a failure by the TO in relation to the timely delivery requirements specified in the licence. In considering whether this is the case or not, the Authority would look at the factors leading to the late delivery, the amount of consumer detriment caused and the extent to which the TO could be held responsible for events as well as whether or not it took reasonable steps to mitigate the impact of such events where it could do so efficiently. If the Authority is satisfied that the late delivery constitutes a contravention, TOs could be subject to a financial penalty which would be determined under the Authority's Statement of Policy with respect to Financial Penalties. In the case where the TOs under deliver in terms of capacity relative to the specified output, the Authority may also determine whether the TO has underperformed against their licence requirements and, if necessary, make an ex post adjustment so as to ensure that only efficiently incurred costs are recovered. We expect that these arrangements, in combination with the above provisions for adjustment to funding ex post, will be sufficient to deal with any changes in the TOs' plans in terms of timing of delivery or capability provided.

Way forward

We are allowing a period of four weeks for parties to respond to this consultation. We think that this timescale is appropriate given that this consultation follows on from previous consultations on the funding of the Western HVDC link and is narrowly focussed on the specifics of funding.

Following consideration of responses to this consultation we currently intend to issue our final funding decision on the Western HVDC link in late July 2012. However, this depends on the volume of responses received and the materiality of issues raised by respondents.

We will also progress any licence changes that are necessary to reflect our final funding decision. We note that this may require some interactivity between the respective licence conditions of NGET and SPTL, consistent with the treatment of the project as a whole. We will work with the TOs in developing our proposed approach to licence drafting.

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[25] The value of 2200MW set out in SPTL's Final Proposals under RIIO-T1 for the increased boundary capacity across Boundary B6 was in line with SPTL's business plan submission and based on the central value within the capacity range for the Western HVDC link considered in the CBA.

Views invited

We welcome views from all interested parties regarding the issues raised in this letter. In particular, we invite views on the details of our proposed funding arrangements for the Western HVDC link for NGET and SPTL under both TII and RIIO-T1, specifically in relation to:

- the annual ex ante allowances for each TO,
- the relevant efficiency incentive sharing factor to apply to this project,
- the application of the provisions for adjustment to funding ex post,
- our approach to dealing with the planning issue for the southern convertor station, and
- the appropriate deliverables to be linked to the ex ante allowances.

We also invite views on our process and timetable for reaching a final funding decision following conclusion of this consultation, and for taking forward any licence changes that are necessary to reflect that decision.

Responses to this consultation should be sent to Ofgem by **20 June 2012**. They should be sent to Cheryl Mundie, preferably in electronic format by e-mail to cheryl.mundie@ofgem.gov.uk. Alternatively, they may be sent by post to:

Cheryl Mundie
Senior Manager, Transmission Policy
Ofgem
Cornerstone
107 West Regent Street
Glasgow
G2 2BA.

All responses will normally be published on Ofgem's website www.ofgem.gov.uk and held in the Research and Information Centre. Ofgem prefers to receive responses in an electronic form so that they can be placed easily on the Ofgem website.

Respondents may request that their response is kept confidential. Ofgem shall respect such requests subject to any obligations to disclose information, for example, under the Freedom of Information Act 2000 or the Environmental Information Regulations 2004. Any respondent who wishes their response to remain confidential should clearly mark their response to that effect and give their reasons for confidentiality.

Any questions on this document should be directed, in the first instance, to Cheryl Mundie (e-mail: cheryl.mundie@ofgem.gov.uk, tel: 0141 331 6003) or to Simon Cran-McGreehin (e-mail: simon.cran-mcgreehin@ofgem.gov.uk, tel: 020 7901 7440).

Yours faithfully,

Ian Marlee
Senior Partner – Smarter Grids & Governance: Transmission

Appendix: Our minded-to position

Our minded-to position, as previously set out in our August 2011 consultation, our November 2011 update and our February 2012 update, remains **to allow efficient cost recovery under TII for construction works on the Western HVDC link from 2011-12, 'in principle', subject to the following conditions**:

a) consideration of responses to our August 2011 consultation
b) a positive conclusion from our ongoing project assessment
c) successful resolution of relevant licensing issues
d) successful resolution by the TOs of any licensing issues with the relevant authorities of Northern Ireland and Isle of Man, and any planning consents
e) statutory consultation on the relevant licence modifications to give effect to the Authority's final decision.

As set out in our August 2011 consultation, satisfaction of condition b is subject to:

- our final assessment of the case for delivering the Western HVDC link in 2015, following an updated review of need case, scope and timing of the overall project[26],
- no material escalation in expected costs of the specific construction works[27] to which the funding request relates,
- confirmation by the TOs of firm plans for those works and demonstration of their readiness to proceed with those plans in 2011-12,
- determination of annual ex-ante funding allowances for 2011-12 and 2012-13, in line with our view of efficient costs of those works, which (a) take account of planned expenditure, and (b) can be linked to deliverables which reflect planned milestones and forecast output measures, and
- consideration of appropriate risk sharing arrangements between the TOs and consumers.

As discussed in more detail on page 5 of this letter, **condition d** is currently outstanding, while the remaining conditions are either now satisfied (**conditions a and c**) or consequential to the conclusions from this consultation (**condition b**) and any subsequent licence modifications that are necessary to reflect our final funding decision (**condition e**).

[26] We concluded on this issue in our November 2011 update. As set out in our February 2012 update, we do not expect to revisit this conclusion unless circumstances materially change.
[27] These relate to the HVDC component of the link, identified as item a in paragraph 1.4 of Annex 1 of our August 2011 consultation.