

## Transmission Investment Incentives: funding requests and extension of funding framework to 2012/13

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**Target audience:** Electricity transmission licensees, conventional and renewable generators, renewable energy interest groups, distribution network operators, suppliers and customers

### Overview:

Ofgem is committed to playing a full role in helping to reduce carbon emissions to tackle climate change. Earlier this year we implemented our Transmission Investment Incentives (TII) framework for funding critical investments by the electricity transmission owners (TOs) within the current transmission price control period (TPCR4).

We funded an initial tranche (worth over £300 million), covering pre-construction work and urgent construction work, up to end 2011/12 when TPCR4 expires. We introduced a process for considering further funding requests from the TOs.

We are currently assessing a number of requests under our TII framework for funding from 2011/12. This document provides an update on our assessment and seeks views on our proposed approach and timetable for reaching a decision.

We plan to extend the TII framework to 2012/13 under the one-year adapted rollover of TPCR4 (TPCR4 rollover). This document consults on the details of our proposed approach for extending the TII framework.

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## Context

Energy plays a critical role in the continued economic prosperity of Great Britain. Increasing the contribution that renewable generation makes to meeting electricity demand is a critical part of Government's energy policy goals. The Transmission Owners (TOs) have identified a considerable amount of further system reinforcement in the run up to 2020, to facilitate delivery of the Government's climate change target. We have been working with the TOs to establish funding arrangements to facilitate this programme of investment. Our work on "Transmission Investment Incentives (TII)" (previously referred to as "TO incentives" in earlier documents) focuses on providing an appropriate funding framework in the form of enhancements to the existing price control provisions.

In January 2010 we published Final Proposals setting out our TII framework and process for funding critical investments in tranches within the current price control period (TPCR4). These proposals were implemented in April 2010 and included TII funding for an initial tranche (worth over £300 million), and a process for considering funding requests from the TO for the remainder of the investment planned within TPCR4. In June 2010 we confirmed our intention to extend the TII framework to 2012/13 under the one-year adapted rollover (TPCR4 rollover). Future funding arrangements for these projects, from 2013/14 onwards, will be addressed through the next full price control review, RIIO-T1. The RIIO-T1 arrangements will reflect the new regulatory framework (RIIO) resulting from our RPI-X@20 review.

This document consults on our proposed approach and timetable for reaching a decision on TII funding requests currently under consideration and on our proposed approach to extending the TII framework to 2012/13 under the TPCR4 rollover.

## Associated Documents

Documents relating to Transmission Price Control Review 4 (TPCR4):

<http://www.ofgem.gov.uk/Networks/Trans/Archive/TPCR4/Pages/TPCR4.aspx>

Documents relating to Transmission Investment Incentives (TII):

<http://www.ofgem.gov.uk/Networks/Trans/ElecTransPolicy/tar/Pages/Traccrw.aspx>

Documents relating to one-year adapted rollover of TPCR4 (TPCR4 Rollover):

<http://www.ofgem.gov.uk/Networks/Trans/PriceControls/TPCR4Roll-over/Pages/TPCR4Roll-over.aspx>

Documents relating to RPI-X@20 project / RIIO:

<http://www.ofgem.gov.uk/Networks/rpix20/Pages/RPIX20.aspx>

Documents relating to first transmission price control review under the new RIIO model (RIIO-T1):

<http://www.ofgem.gov.uk/Networks/Trans/PriceControls/RIIO-T1/Pages/RIIO-T1.aspx>

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## Summary

### Background

Earlier this year, we implemented our Final Proposals under our Transmission Investment Incentives (TII) work. This introduced a framework for providing interim funding, within the current transmission price control period (TPCR4), for the critical large-scale investments that the Transmission Owners (TOs) (National Grid Electricity Transmission (NGET), Scottish Power Transmission (SPTL) and Scottish Hydro-Electric Transmission Ltd (SHETL)) identified are required to support achievement of the Government's 2020 renewable energy targets.

In August 2009 the TOs put forward a £5 billion investment plan for funding consideration through TII. This plan built upon an earlier study which sought to identify investment scenarios that would be capable of supporting the 2020 targets. Our January 2010 Final Proposals set out our assessment of the TO's investment plans (our 2009 assessment) and confirmed our TII funding framework. Taking into account the fact that different projects were at different stages of development, we decided to phase our work on funding the investment raised by the TOs. We provided the first tranche of funding (worth over £300m) in April this year and introduced a process for considering funding requests for further investment planned by the TOs. This process was further confirmed in our March 2010 open letter.

We have funded pre-construction work across the full range of projects put forward by the TOs last year. By ensuring that the projects can be developed in more detail this has maintained feasibility of target delivery timescales while keeping future options open. We have also funded construction work on projects (or components of projects) on a case by case basis. We have done so where we consider that there is a sufficiently clear justification for proceeding with the investment at this stage and where the TO is ready to take forward the planned work.

Our TII framework currently applies up to end 2011/12 when TPCR4 expires. We plan to extend our TII framework to 2012/13 under the one-year adapted rollover of TPCR4 (TPCR4 rollover). Funding arrangements beyond this are being addressed through the next full transmission price control review, RIIO-T1, in line with our new regulatory framework, the RIIO model.

### Funding requests

This document provides an update on our assessment of TII funding requests to date and seeks views on our proposed approach and timetable for reaching a decision on the requests currently under consideration for funding from 2011/12. This includes requests for *construction funding* on the **Western HVDC link** and **incremental onshore reinforcements** to the Anglo-Scottish Boundary by both NGET and SPTL. NGET has also requested *additional construction funding* for **Deesside substation** to reflect advancement of construction programme, and *additional pre-construction funding* for **planning works** on a number of existing schemes involving overhead lines in England & Wales. We are also assessing two new projects which were not put forward by the TOs in their 2009 submissions: SHETL has requested *construction funding* on **Beauly-Mossford** and NGET has requested *pre-construction funding* on a new **HVDC link from Wylfa to Pembroke**.

We have appointed KEMA to support our assessment of the above requests. We are adopting the same criteria underpinning our 2009 assessment and updating any previous assessment taking into account the latest available information. This will inform our view of the case for investment in 2011/12, the TOs' readiness to take forward planned work and detailed funding provisions that may be appropriate. We are also considering whether projects requiring construction funding have materially different characteristics (e.g. with respect to utilisation, cost or deliverability risk) to projects funded under TII to date. This will inform our view of whether to make any adjustments to our TII framework when funding individual projects.

From our assessment so far we currently consider that each request merits detailed consideration of funding, which will include full project assessment and review of interactions with existing funding provisions. In most cases we expect to be able to confirm funding proposals in January 2011, taking into account KEMA's final findings. However, our process for the Western HVDC link may take longer, recognising the materiality of the funding request, the lack of firm cost information and the need to address other project-specific issues including consideration of licensing provisions. This document discusses potential impacts of a delay in confirming funding proposals and seeks views on how we propose to deal with them.

We previously received funding requests from SHETL for the Western Isles link and associated Lewis Infrastructure works. We appointed TNEI/PPA to support our assessment. As SHETL has withdrawn these requests we cannot reach a funding decision at this stage. However we are publishing TNEI/PPA's final report alongside this document and where relevant will take it into account in future work.

### **2012/13 arrangements**

This document also sets out, for consultation, our detailed proposals for the extension of our TII framework to 2012/13. Our proposal to defer our review of the efficiency of the TOs' capex programmes under TPCR4 means that all works with TII funding to end 2011/12 will continue to be funded in 2012/13 and this will extend to costs and activities for that year. We propose that, unless circumstances have materially changed, the 2012/13 provisions should adopt the same assumptions underpinning the relevant TII funding decision.

### **Next steps**

Subject to responses to this consultation, we expect to publish our next TII document in January 2011 with our conclusions on the 2012/13 arrangements and funding proposals for those requests for which we have completed our assessment. This timing may enable us to provide additional funding from April 2011 and for this to be reflected in transmission charges through which the revenue is recovered.

While noting that we have provided a relatively short period for responses to this consultation, which spans the Christmas period, we explain why we think it is appropriate in this case, and invite views on our proposed process and timetable. Where appropriate we may decide to consult further before the Authority reaches a final decision on whether to fund a given project or determines the appropriate level of such funding. For example, this may apply where there are outstanding issues to address or where material issues that require further consideration are identified through consultation responses or in KEMA's final report.

## 1. Introduction

### Chapter summary

This chapter sets out the background to this document and explains its structure.

### Question box

There are no questions in this chapter.

## Transmission investment incentives (TII)

### Introduction

1.1. Following publication of the Transmission Access Review (TAR) Final Report in June 2008, we initiated two work strands to identify and fund future investments that are likely to be needed to facilitate achievement of the Government's 2020 targets:

1. The 2020 Transmission System Study (**ENSG study**)<sup>1</sup>, produced jointly by the three transmission owners (TOs) under the auspices of the Electricity Networks Strategy Group (ENSG) and jointly chaired by Ofgem and DECC, sought to identify investment scenarios that would be capable of supporting the 2020 targets.
2. Our work on enhanced transmission investment incentives (**TII**)<sup>2</sup>, aims to facilitate the timely delivery of critical investments by providing an appropriate funding framework in the form of enhancements to the existing price control provisions (TPCR4).

1.2. Following on from the ENSG study the TOs have been taking forward work to move forward from the high level vision set out in the ENSG report, towards taking forward a £5 billion<sup>3</sup> investment plan covering a range of transmission reinforcement projects to deliver this vision in practice. Our TII work (discussed in more detail below) seeks to provide appropriate incentives on TOs to anticipate future demand and to invest efficiently to meet that demand. We have focussed on transmission investment projects of an anticipatory nature which were not adequately covered by existing funding provisions. The additional funding we have provided through TII has enabled all the projects identified by the TOs to be developed in more detail and facilitated commencement of urgent construction work. Over £0.3 billion of funding

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<sup>1</sup> ENSG 'Our Electricity Transmission Network: A Vision for 2020' Full Report available at the following link: <http://www.ensg.gov.uk/index.php?article=126> .

<sup>2</sup> Previously referred to as "TO incentives" in earlier documents. We have introduced an abbreviated form in this document for ease of reference.

<sup>3</sup> Based on the TOs' investment plans submitted in August 2009 for funding consideration under TII.

has been provided to date and we have introduced a process for through which further investment may be funded within TPCR4.

1.3. The simple and pragmatic funding approach adopted under our TII framework takes into account the prevailing investment climate and interactions with funding arrangements beyond TPCR4. The interim funding provided has kept the investment programme on track while keeping future options open. Our targeted funding of construction work following detailed scrutiny of the TO submissions<sup>4</sup>, seeks to balance the risks of customers funding projects that turn out to be unnecessary with the need to anticipate investment to ensure security of supply and timely achievement of environmental targets.

### **Process to date**

1.4. In April 2009, as a short term measure, our TII work provided initial pre-construction funding worth £12.5 million to enable the TOs to develop the full range of ENSG projects in more detail. We adopted this approach as a low cost way of maintaining feasibility of target delivery timescales while keeping future options open.

1.5. Following on from the ENSG study the TOs developed a 10-year programme of investment worth over £5 billion (including links to the Scottish Islands), which they put forward for further funding consideration under TII in August 2009. The TOs set out their view that this investment, which is in addition to the £4 billion of investment in new capacity and asset replacement allowed in the current electricity transmission price control (TPCR4), which runs from 2007 to 2012, is required to accommodate new generation connections in the period up to 2020. For a significant proportion of the investment put forward, the TOs proposed to commence construction within TPCR4.

1.6. In January 2010 we published our Final Proposals confirming our TII framework for funding critical investments in tranches within TPCR4 and setting out our assessment of the TOs' investment plans (discussed in more detail below). We announced over £300 million of funding under our TII arrangements as the first tranche in a potential £1 billion<sup>5</sup> package of additional investment planned up to the end of 2011/12, when TPCR4 expires, and included a process for considering funding requests for the remainder of the planned investment over this period.

### **TII funding framework**

1.7. Our TII funding framework is based on the following **principles**:

- Ensuring that funding arrangements do not create a barrier to the investment needed to accommodate future generation, while ensuring adequate

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<sup>4</sup> We identified eligible projects taking into account need case and readiness of TO to take forward planned work.

<sup>5</sup> Based on the TOs' investment plans submitted in August 2009 for funding consideration under TII.

protection to consumers where that investment is undertaken on an anticipatory basis

- Ensuring critical investment is not delayed, while keeping future options open so far as possible in recognition of uncertainty as to future investment requirements and interactions with ongoing development of future funding arrangements.

1.8. We applied these principles to identify transmission reinforcement **projects** to be provided funding and the scope of that funding:

- For pre-construction work: funded across the full range of projects
- For construction work: funding for specific projects (or components of projects) identified based on our assessment against criteria including need case and readiness of the TOs to take forward the planned work.

1.9. Our TII funding framework takes the following **form**:

- Treating both pre-construction and construction costs as capex, with annual revenue allowances up to the end of financial year 2011/12 set on an ex ante basis and linked to defined deliverables<sup>6</sup>
- Allowing for adjustments in funding in specific unplanned events
- Adopting the same cost of capital assumptions as for TPCR4
- Adopting a 75:25 ratio of pass-through to incentivised costs (consistent with TPCR4) and depreciation period of 20 years commencing in the year following expenditure unless we see good reason to change this approach for a given project.

## **2009 assessment and phasing of work**

1.10. We appointed consultants to support our assessment (our 2009 assessment) of the TOs' investment plans: KEMA, focussing on the overall robustness of the transmission investment plan proposed by the TOs; and Parsons Brinckerhoff (PB), conducting a detailed review of individual projects. Our consultants' review, and its role in our 2009 assessment, is discussed in more detail in our January 2010 Final Proposals. Their final reports<sup>7</sup> are published alongside that document.

1.11. Having initially focussed on funding needs of projects which the TOs planned to commence construction in 2010/11 we found that, at the time of finalising our Final Proposals, only some of the projects nominated by the TOs were sufficiently well

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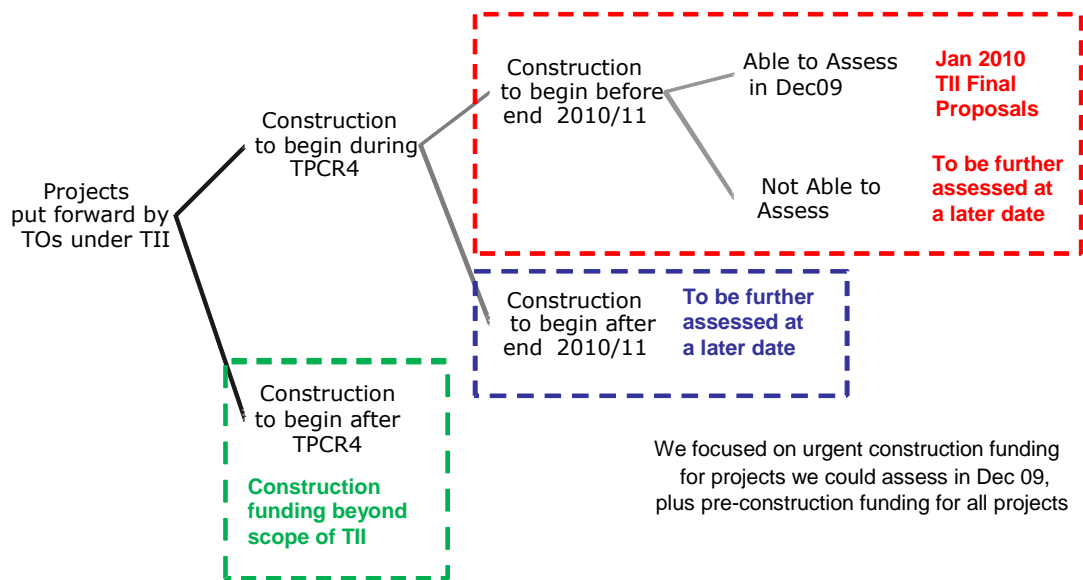
<sup>6</sup> Key programme milestones for all funded works and technical output measures for funded construction works, set with reference to an agreed baseline

<sup>7</sup> "Assessment of overall robustness of the transmission investment proposed for additional funding by the three GB Electricity Transmission Owners", KEMA Consulting. January 2010  
"Transmission Investment Project Appraisal", Parsons Brinckerhoff. January 2010



progressed for a detailed assessment of funding consideration. We therefore decided to phase our work on funding the investment raised by the TOs, as illustrated in **Figure 1** below.

**Figure 1 - Phasing of funding decisions under TII**



1.12. Our Final Proposals funded a tranche of investment, valued at £319m<sup>8</sup>, up the end of 2011/12, when TPCR4 expires. This includes £78m of pre-construction work across all projects and £241m of construction work on specific projects planned to commence by the end of 2010/11.

1.13. We introduced a process, triggered by a funding request by the TO, for giving further consideration to funding the remaining investment planned by the TOs in the current price control period.

### March 2010 open letter

1.14. An open letter<sup>9</sup> published in March 2010 discussed this process in more detail. It set out the approach we expect to adopt in assessing additional funding requests in relation to construction works commencing in 2011/12, in relation to:

<sup>8</sup> In 2008/09 prices

<sup>9</sup> Our March 2010 open letter is available at:

<http://www.ofgem.gov.uk/Pages/MoreInformation.aspx?docid=5&refer=Networks/Trans/ElectransPolicy/tar>

- Assessment criteria
- Information requirements
- Funding framework
- Process and timescales for our assessment.

1.15. The assessment criteria we identified as relevant to our consideration of funding requests are as used in our 2009 assessment: **need case, scope, timing, planning consent** and **technical readiness**. Our March 2010 open letter further noted we may also consider the appropriateness, in the interests of current and future consumers and sustainability, of funding projects with uncertain need case.

1.16. In terms of the funding framework we noted our expectation to adopt our existing TII funding framework, with same assumptions as to the level of incentivisation and depreciation adopted above, unless we see reasons to differ from this approach, e.g. where projects have materially different characteristics to those already funded under TPCR4.

1.17. Funding requests under our TII framework may be submitted to us at any time. Noting that individual projects are at varying stages of development, we highlighted that it is for the TO to decide when to submit such a request taking into account: (a) our assessment criteria, and (b) the minimum information we will require to be able to reach a view on funding needs and, where appropriate, determine funding proposals. We gave an indicative minimum timescale of 6 months for processing a funding request. We identified a “planned window” for considering, in parallel, requests received by 1 August 2010 with a view to delivering funding, where appropriate, by April 2011 for construction works commencing by end 2011/12.

1.18. We noted our ability to reach a funding decision on a given funding request would be subject to receipt of the necessary information from the TOs in a timely manner for us to be able to complete our assessment. Our actual timescales for processing a request may depend on a range of factors including the nature of any project-specific issues and the extent of industry consultation undertaken. The indicative timescales set out above assume that projects are sufficiently far advanced to meet our criteria of TO readiness and do not have materially different characteristics, e.g. in terms of risk profile, than other investments funded under TPCR4.

## Licensing issues

1.19. As we have discussed in previous documents, some projects may require construction in areas which lie outside the authorised areas of a given transmission licensee. For example, links that are likely to extend into territorial waters and beyond into the Renewable Energy Zone (“REZ”). It will be necessary to consider the licensing provisions for projects that fall into this category.

## TPCR4 rollover

1.20. TPCR4 took effect on 1 April 2007 and is due to expire on 31 March 2012. To ensure that Ofgem can reflect the final conclusions of the RPI-X@20 review (which was to implement the RIIO model for network regulation, discussed below) the Authority decided to delay the next full transmission price control review by one year and to implement a one-year adapted rollover of TPCR4 (the TPCR4 rollover) from 1 April 2012.

1.21. In June 2010 we confirmed that we plan to extend the TII framework to 2012/13 under TPCR4 rollover. We also stated our intention to consult on the details of our proposed approach. We address these matters in this document.

## Next full transmission price control review (RIIO-T1)

1.22. RIIO-T1 (formerly known as TPCR5) will be the first transmission price control review to reflect the new regulatory framework resulting from our RPI-X@20 review. The RIIO model (Revenue=Incentives+Innovation+Outputs) builds on the success of the previous RPI-X regime, but better meets the investment and innovation challenge by placing much more emphasis on incentives to drive the innovation needed to deliver a sustainable energy network at value for money to existing and future consumers.

1.23. For all investments funded under our TII framework the future funding arrangements, from 2013/14 onwards, will be addressed through RIIO-T1.

## Other related policy work

1.24. Under the Connect and Manage grid access model being implemented by Government<sup>10</sup>, a new generator seeking to connect to and use the transmission system will be able to gain full access to the transmission system once all the “enabling works” are completed. This could lead to earlier revelation of the need for some wider infrastructure. Furthermore, this regime could also give rise higher and earlier need for building or reinforcing networks local to the generators without the need to align with the completion of wider works.

1.25. In September this year, Ofgem launched Project TransmiT<sup>11</sup>, which is a comprehensive and independent review of the charging and connection arrangements for gas and electricity transmission. The objective of the review is to ensure that we have in place relevant arrangements that facilitate the timely move to a low carbon energy sector whilst continuing to provide safe, secure, high quality network services at value for money to existing and future consumers.

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<sup>10</sup> See documents available at the following link:

[http://www.decc.gov.uk/en/content/cms/consultations/improving\\_grid/improving\\_grid.aspx](http://www.decc.gov.uk/en/content/cms/consultations/improving_grid/improving_grid.aspx)

<sup>11</sup> See documents available at the following link:

<http://www.ofgem.gov.uk/Networks/Trans/PT/Pages/ProjectTransmiT.aspx>

1.26. The current plan under Project TransmiT is to consult in Spring 2011 on options identified through the process of consulting with stakeholders and our own analysis, and publish in Summer 2011 our recommendations on steps forward. This project could result in changes in the time, location and amount of new generators seeking connection on the GB transmission system, as well as their operational behaviour. These can in turn give rise to changes in the investment needed on the transmission network, and the nature of signals for such investment needs.

1.27. However, the effect of both Connect and Manage and Project TransmiT is likely to become significant when the TII framework is subsumed in the RIIO-T1, under which regulatory arrangement fit for purpose under the new circumstances will be developed. In the meantime, we will be assessing case-by-case funding request to ensure that transmission investments are carried out in a timely and efficient manner.

### **Structure of this document**

1.28. The remainder of this document is structured as follows: chapter 2 consults on our proposed detailed approach to extending the TII framework to 2012.13, in line with the key principles underpinning past policy decisions on TII and TPCR4 rollover; chapter 3 discusses the TII funding requests received to date and seeks views on the issues we propose to consider in reaching a decision; chapter 4 discusses our proposed way forward and seeks views on our approach and timetable.

## 2. Key principles and application to 2012/13 arrangements

### Chapter summary

This chapter discusses key principles underpinning our proposed approach with respect to TII funding requests and the extension of our TII framework to 2012/13. These principles are consistent with past policy decisions on the design of our TII framework and the scope of our work on TPCR4 rollover. In this chapter we apply these principles in setting out our detailed proposals for the extension of our TII framework to 2012/13, with reference to a generic model for funding in stages. We also discuss interactions with future treatment under RIIO-T1.

### Question box

**Question 1:** Do respondents have any comments on our detailed proposals for the extension of our TII framework to 2012/13?

**Question 2:** Do respondents have any comments on the interactions with development of future arrangements under RIIO-T1?

## Key principles

2.1. In developing our approach to dealing with TII funding requests and the extension of our framework to 2012/13 we considered it appropriate to:

- be consistent with the general principles of our **TII framework**, which seek to balance the risks of customers funding projects that turn out to be unnecessary with the need to anticipate investment to ensure security of supply and timely achievement of environmental targets
- continue to use our TII mechanism and adopt the same **assumptions** regarding level of incentivisation and depreciation as for existing TII funding, unless we see good reason to change for a given project
- retain flexibility to **adapt** our assessment or funding approach where necessary to deal with projects with materially different characteristics to projects funded under TII to date, for example in terms of risk
- be consistent with the principles agreed for treatment of capex under the **TPCR4 rollover** arrangements, by adopting the prevailing cost of capital assumptions, deferring full assessment of historical capex until the next full price control review (RIIO-T1), and adopting an approach which is proportionate to a one year review in determining 2012/13 arrangements
- where appropriate, keep **future options open** with respect to the ongoing treatment of projects under RIIO-T1.

2.2. These principles are consistent with past policy decisions on the design of our TII framework (discussed in chapter 1) and the scope of our work on TPCR4 rollover.

2.3. With this in mind, we are adopting a staged approach to our consideration of TII funding requests:

- where appropriate, we will update any **previous assessment** taking into account the latest information from the TOs
- we will seek to identify the extent to which the planned works for a given project can be divided into **components** for the purposes of funding consideration under TII
- we will give detailed consideration to **construction funding** for components which have reached a sufficiently advanced stage of development such that the TO is expected to be ready to commence construction within one year of funding proposals being implemented.

2.4. At this stage our focus is on components of works for which TII funding is requested from 2011/12. Further works planned by the TOs up to end 2012/13 may be considered at a later stage in the context of a TII funding request.

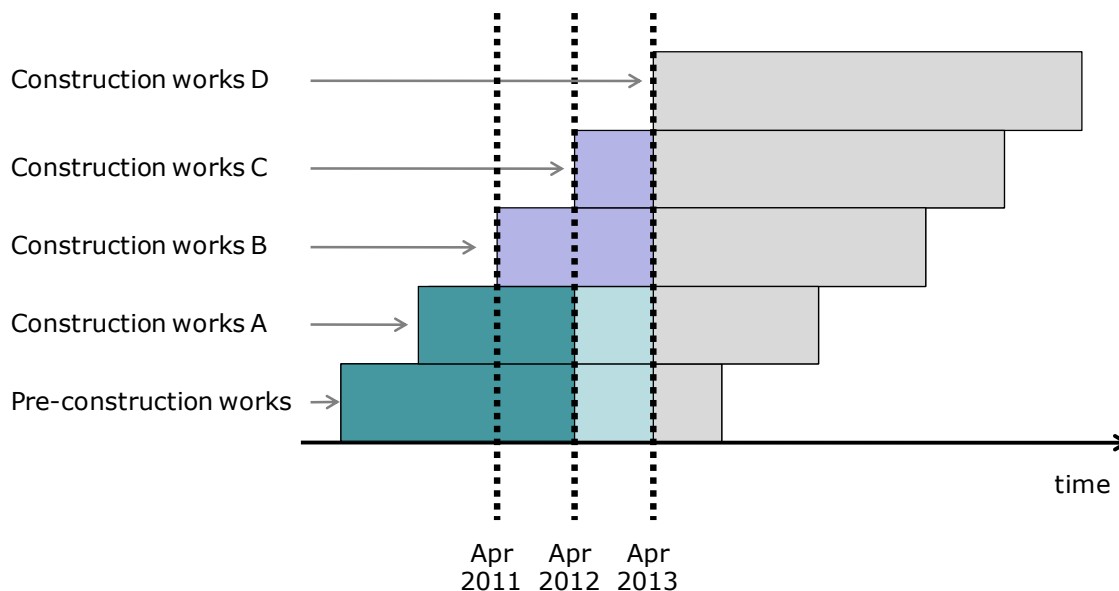
2.5. We set out below how we have applied these principles with reference to a generic model for “funding in stages”, illustrated in **Figure 2** below. We identify specific issues to address with respect to extending our TII framework to 2012/13 in the context of both existing TII funding and our assessment of TII funding requests.

### **Generic model for funding in stages**

2.6. Under this model, a large scale project receives incremental tranches of funding over time as funding decisions are made at different points in time to fund a defined sub-component (or “stage”) of the overall works taking into account the prevailing justification for the investment and the readiness of the TO to commence work.

2.7. In the case of the generic project illustrated in **Figure 2**, all pre-construction work and some components of construction work have existing TII funding up to end 2011/12. We are also currently considering requests for further funding from 2011/12. In respect to the 2012/13 framework, we need to address the ongoing treatment into 2012/13 of works with existing TII funding, as well as 2012/13 funding for works on which we have yet to reach a funding decision but may do by the end of 2012/13.

2.8. Our generic project is subdivided into separable components of works, each represented as a horizontal building block. In this example there are four components of construction works (A, B, C, D) each with different commencement dates and current funding status. For simplicity the block representing pre-construction works relates to the project as a whole which includes all components.

**Figure 2 - Funding in stages**

2.9. This project has **existing TII funding** up to end 2011/12, for pre-construction works and for construction works A (the areas shown in **dark teal**, to the left of the second vertical line). This funding is based on given baseline assumptions which were current at the time the TII funding decision was made. These assumptions include the design, total cost, programme and spend profile for the component as a whole. The funding provisions translate this into forecast costs and milestones for each year up to a cut-off point at April 2012. For construction works A, the provisions also specify output measures that would be expected if the planned programme were maintained until completion. In this case that programme extends beyond the period of existing TII funding (ie into the area to the right of the second vertical line).

2.10. In addition, the TO has submitted a **TII funding request** for construction works it is planning to commence in 2011/12 (construction works B, to the right of the first vertical line). Supporting this funding request the TO has provided the latest project information to be taken into account in our further assessment against the relevant criteria.

2.11. Further works are planned for construction in the **TPCR4 Rollover** period (construction works C, to the right of the second vertical line) and **RIIO-T1** period (construction works D, to the right of the third vertical line). These components are continuing to be developed in more detail through ongoing pre-construction work.

2.12. **Table 1** below sets out the issues we will need to address under TII for each component of works under TII, and how we propose to address these issues in the context of reaching a decision on TII funding requests and determining appropriate arrangements to apply in 2012/13. These are further discussed below with reference to the proposals set out in the next section.

## Proposals for 2012/13 arrangements

2.13. In line with the principles for treatment of capex under TPCR4 highlighted above, in determining funding to be provided for 2012/13 we do not think it would be appropriate to revisit funding decisions already made. We therefore propose that the capex efficiency review for TII funding should be deferred by one year. This means that all works with existing funding up to end 2011/12 will continue to be funded in 2012/13, and that the funding in 2012/13 will also cover costs incurred and activities undertaken in that year in respect to ongoing works. Similarly, for any funding decisions made under TII before April 2012 we propose to continue to provide funding in 2012/13. All funding provided in 2012/13 under TII will be based on the cost of capital assumptions as determined for TPCR4 rollover.

2.14. We will also adopt an approach proportionate to a one-year review in determining the 2012/13 funding of individual projects. For existing TII funding we propose that, unless circumstances have materially changed since the relevant TII funding decision was made, the baseline assumptions<sup>12</sup> underpinning that decision would form the basis for the forecast costs and milestones associated with the 2012/13 funding. Where appropriate we will further review the project taking into account the latest available information before determining 2012/13 funding. For example, this may apply where we have received a TII funding request with respect to a component of works for which we have previously provided TII funding.

2.15. We propose that any future TII funding will be extended to end 2012/13 without further review of baseline assumptions. This means that in setting out our funding proposals with respect to TII funding requests we will include proposals for the ongoing treatment in 2012/13 of the relevant works. Our proposals for 2012/13 funding will be based on the same baseline assumptions underpinning our decision on the TII funding request.

2.16. These proposals, on which we invite views, are illustrated in **Table 1** with reference to the generic project shown in **Figure 2**. Our proposals are that:

- For works with existing TII funding, i.e. **pre-construction works** and **construction works A** we may, where appropriate, further review the project taking into account the latest available information before determining 2012/13 funding (the areas shown in **light teal** in **Figure 2**).
- For further works commencing before April 2013, i.e. **construction works B and C**, the proposed funding provisions to apply in the period to end 2012/13 (the areas shown in **lilac** in **Figure 2**) would be determined at the time the funding decision is made.
- The treatment of all components of works from April 2013 onwards (the area of each block shaded in **grey** to the right of the third vertical line in **Figure 2**) will be considered under RIIO-T1.

<sup>12</sup> Total cost, annual spend profile, programme and (in case of construction funding) technical output measures for the planned component of works.



**Table 1 – Application of proposals to generic project shown in Figure 1**

Component	Timing	Current funding status	What funding issues need to be addressed under TII?	Proposed baseline for 2012/13 funding
<b>Pre-construction works</b>	pre-2011/12	Existing TII funding to end 2011/12	Ongoing treatment in 2012/13	As per decision on existing TII funding, unless circumstances materially changed
<b>Construction works A</b>				
<b>Construction works B</b>	2011/12	Unfunded	Decision on TII funding request for 2011/12 & Ongoing treatment in 2012/13	As per decision on TII funding request (no further review for 2012/13)
<b>Construction works C</b>	2012/13	Unfunded	Decision on TII funding request for 2012/13	As per decision on TII funding request
<b>Construction works D</b>	post-2012/13	Unfunded	n/a	n/a

## Future treatment under RIIO-T1

2.17. The TII arrangements, including the extension under TPCR4 rollover, will be superseded in 2013/14 by the approach to be agreed under RIIO-T1. As part of the RIIO-T1 consultation in December 2010, we will set out proposals and options for the treatment of network reinforcement projects from 2013/2014. This will include consideration of the extent to which there is scope to build on the work undertaken under TII to date, e.g. by including some of the features of the current TII funding provisions, while adapting this for an outputs-led and longer-term framework in the context of the RIIO model.

2.18. In line with the RIIO decision, we will be taking forward work to develop a framework that may allow us to run a competitive process for the development and ownership of onshore transmission assets, for potential adoption in RIIO-T1. In taking this work forward we will consider how a project that has received TII funding would be treated under RIIO-T1.

2.19. We note that for any price control review, the TO may have concerns as to whether funded works which are ongoing at the end of a price control period would continue receive funding into the next price control period. We further note that the RIIO decision to create the option of a competitive approach to the provision of transmission investment may cause the TOs concerns as to whether they will retain responsibility for delivery of works on the given project going forward.

2.20. Our previous decisions on existing TII funding made clear that the provision of such funding does not create any expectation of the way in which such assets might be treated under RIIO-T1. We note that those statements, which preceded the RIIO decision document, were made in the context of funding of up to three years<sup>13</sup>. The TOs have expressed concern that where future TII funding decisions only provide certainty for a one year period<sup>14</sup> then this may not give sufficient confidence to investors, particularly where they may perceive the planned introduction of a framework for competition as creating additional risk as to the future treatment of the relevant works.

2.21. We have recognised these concerns in setting out our proposed approach to the extension of our TII framework under the TPCR4 rollover, through which we will cover 2012/13 when setting out any funding proposals in relation to TII funding requests. We would, however, make clear that the provision of TII funding to end 2012/13 for a given transmission investment project should not be regarded as creating any particular expectation as to the future treatment of the project under RIIO-T1.

2.22. We note that our RIIO decision document set out our view that competition would be an option for inclusion in the toolkit under our new regulatory framework. It also described the criteria<sup>15</sup> that would influence a decision to adopt a competitive approach. We will consider these issues in more detail through our ongoing work to develop a framework for competition.

2.23. We invite views on the interactions between our work on TII and the development of future arrangements under RIIO-T1.

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<sup>13</sup> Some existing funding, e.g. for Knocknagael, applies to the years 2009/10, 2010/11 and 2011/12.

<sup>14</sup> Under our existing TII framework future funding decisions cover up to 2011/12 only. The extension of that framework to the rollover year covers the single year 2012/13.

<sup>15</sup> See RIIO Handbook, chapter 13, page 116:

<http://www.ofgem.gov.uk/Networks/rpix20/ConsultDocs/Documents1/RIIO%20handbook.pdf>

### 3. Update on assessment of TII funding requests

#### Chapter summary

This chapter provides an update on the TII funding requests received to date and consults on our proposed approach to assessing them, in line with the principles discussed in chapter 2. We provide our initial views on the requests currently under consideration, and seek views on the issues to be considered before reaching funding decisions. We highlight the potential need to adapt our TII funding framework or take a longer process in some cases depending on project characteristics and the nature of issues to consider. We also discuss other work including our next steps for the Western Isles project following SHETL's withdrawal of its funding request.

#### Question box

**Question 1:** Do respondents consider that we have identified the relevant issues to consider in our assessment of TII funding requests, both in general and in the specific context of the TII funding requests currently under consideration?

**Question 2:** Do respondents have any comments on our initial views on the TII funding requests currently under consideration or on our proposed approach to assessing these requests?

#### Approach to previous assessment

3.1. As discussed in chapter 1, in August 2009 the TOs put forward investment proposals for funding consideration under TII. We developed our January 2010 Final Proposals document taking into account our assessment of the TOs' proposals. This assessment (our 2009 assessment) was informed by two complementary pieces of consultancy work, which reviewed the TOs' submissions from two different directions: KEMA Consulting (KEMA) focussed on the overall robustness of the system-wide development plan while Parsons Brinckerhoff (PB) conducted a detailed review of individual projects.

3.2. We considered each project against identified criteria in order to reach a view on immediate funding needs and, where appropriate, determined project-specific funding allowances following assessment of efficient costs. Where relevant, we also considered interactions with existing funding provisions in determining the extent of any additional funding required. We had identified five criteria relevant to our assessment of funding needs: need case, scope, timing, planning consent and technical readiness. These criteria are discussed in more detail in our November 2009 Initial Proposals document.

3.3. Having initially focussed on funding needs of projects for which the TOs planned to commence construction in 2010/11 we found that only some of the projects nominated by the TOs were sufficiently well progressed for detailed assessment for

construction funding consideration. We therefore decided to phase our work on funding the investment raised by the TOs.

3.4. Based on our 2009 assessment, we reached funding decisions on an initial tranche of investment. This funding covered pre-construction work across the full range of projects and construction work on specific projects. We noted that our process for giving further funding consideration to the remaining planned investment would be triggered by TII funding requests from the TOs.

### **Approach to assessment of TII funding requests**

3.5. Our general approach to assessing TII funding requests is based on the principles discussed in chapter 2 and in line with our March 2010 open letter discussed in chapter 1.

3.6. In considering funding needs we will review the projects against the same criteria adopted in our 2009 assessment, although we may also consider the appropriateness, in the interests of current and future consumers and sustainability, of funding projects with uncertain need case. These considerations will inform our view of the case for investment in 2011/12 and the TO readiness to take forward planned work.

3.7. We will also consider whether projects requiring construction funding have materially different characteristics (e.g. utilisation, cost or deliverability risk) to projects funded under TII to date. This will inform our view of whether to make any adjustments to our TII framework when funding individual projects.

3.8. Where appropriate, our assessment will build upon and update relevant previous assessment taking into account the latest available information. In cases where we propose to provide TII funding, we will determine detailed funding provisions consistent with the relevant baseline assumptions.

3.9. We will consider interactions with existing funding provisions in identifying the planned works and associated costs requiring detailed funding consideration through TII and in determining our proposed funding allowances based on our view of efficient costs.

3.10. We further note that in some cases there may be a need to consider the licensing provisions. Where this applies we will take this forward as a separate workstream.

3.11. We invite views on whether there are any other issues we should consider as part of our assessment of TII funding requests in general.

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## TII funding requests currently under consideration

3.12. We are currently assessing a number of requests from the TOs for TII funding from 2011/12. These requests can be broadly grouped into three categories:

1. additional funding for a component of works with existing TII funding
2. new funding for a component of works which has previously been put forward under TII but for which we did not reach a funding decision
3. new funding for a component of works which has not been previously put forward under TII.

3.13. In category 1, NGET has requested *additional construction funding* for **Deesside substation**<sup>16</sup>, this reflects advancement of construction programme and increase in overall costs following further design work. NGET has also requested *additional pre-construction funding* for further **planning work** on a number of existing schemes involving overhead lines in England & Wales, in the light of further experience of the requirements under the Planning Act 2008.

3.14. In category 2, both NGET and SPTL have requested *new construction funding* for the **Western HVDC link**, being taken forward as a joint NGET/SPTL project, and for their respective projects<sup>17,18</sup> which provide **onshore reinforcement** to the Anglo-Scottish Boundary.

3.15. In category 3, SHETL has requested *new construction funding* on its proposed **Beauly-Mossford** project and NGET has requested *new pre-construction funding* on a proposed **HVDC link from Wylfa to Pembroke**.

3.16. We have appointed KEMA to support our assessment of the above requests. From our assessment so far we currently consider that each request merits detailed funding consideration in line with the approach set out above. We have also identified below some key issues we have identified as requiring consideration as part of our assessment of each individual request.

3.17. Subject to completion of our assessment and responses to this consultation, in most cases we currently expect to be able to confirm funding proposals in January 2011 for works we propose to fund under TII from April 2011. However, we currently anticipate that our process for the Western HVDC link may take longer, recognising the materiality of the funding request, the lack of firm cost information and the need to address other project-specific issues including consideration of licensing provisions.

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<sup>16</sup> This is a component of the Western HVDC link scheme. We have provided construction funding to NGET for the Deesside substation without making a decision on other construction works in this scheme.

<sup>17</sup> The SPTL projects are SPTL-NGET Interconnection and East-West upgrade, now repackaged as the Incremental Reinforcements scheme. We have provided construction funding to SPTL for preparatory works on the SPTL-NGET Interconnection project without making a decision on other construction works.

<sup>18</sup> The NGET project is Anglo-Scottish Reinforcements. This scheme has been re-optimised since our 2009 assessment, and now includes shunt compensation.

3.18. The following section provides further detail on the TII funding requests discussed above and our views at this stage.

3.19. We invite views on whether there are any further specific issues we should consider in our assessment of these requests. We will set out our further views in our January 2011 document.

## Initial views

3.20. The TII funding requests currently under consideration are discussed in more detail below.

3.21. The requests with respect to **construction** works are summarised in **Table 2** below, indicating the specific components of works for which funding is requested from 2011/12 and the level of existing TII funding (if any) up to end 2011/12. The table also shows the TOs' estimates of the costs for these components in 2012/13. This illustrates that our decisions on these requests could potentially provide up to £148.2m of additional TII funding up to end 2011/12 (£413.4m if extended to end 2012/13). By far the largest element of these costs is the Western HVDC link.

3.22. We are also considering additional **pre-construction** funding requests from NGET, totalling £11.7m for 2011/12. Of this, £11.2m relates to additional planning works on existing schemes involving overhead lines, the remaining £0.5m is for pre-construction work on a new project. Overall, these projects are estimated to cost £8.5m in 2012/13. Our decisions on these requests could potentially provide up to £20.2m of additional TII funding if extended to 2012/13.

3.23. It should be noted that the TOs have drawn up cost estimates for 2012/13 for other projects, but these are not reflected in the above cost calculations for the requests for additional TII funding from 2011/12.

### *Pre-construction funding*

3.24. **NGET: IPC costs for various projects.** NGET has requested additional pre-construction funding, totalling £11.2m in 2011/12, for a number of existing schemes with respect to additional planning work needed to the requirements of the Infrastructure Planning Commission (IPC) in relation to the Planning Act 2008. Most of these schemes involve overhead lines. There appears to be genuine need for the cost increases resulting from more stringent stipulations by the IPC. We have asked KEMA to consider the detailed justification of the increased cost forecast and any interaction with costs funded based on last year's submissions.

3.25. **NGET: Wylfa-Pembroke.** This is a new NGET submission, and would be worth £0.5m in 2011/12. NGET has considered the scenario in which new nuclear plants at Wylfa increase the required export capacity by 2GW above its current level. NGET points out that the only route for this output is through North Wales and into the North West of England, an area that is already constrained. The situation would be

exacerbated by significant levels of wind generation in the Irish Sea. NGET has proposed a solution of building an offshore HVDC link from Wylfa to Pembroke in South Wales. This would achieve the objective of by-passing the increasingly-constrained North West of England. However, the value of this scheme must be assessed in conjunction with other proposed projects that could impact upon the area. These include the Western HVDC link, and the North Wales projects.

### Construction funding

**Table 2 - TII funding requests for construction funding from 2011/12**

TO	Project / scheme	Component of construction works	Existing TII funding to end 2011/12	TII funding requested for 2011/12	Cost estimate for 2012/13
NGET	Anglo-Scottish Reinforcements	Shunt compensation	None	£32.4m	£6.4m
		Deeside substation	£18.1m	£41.4m	£19.9m
	Western HVDC	Link and converter station	None	£35.0m	£124.0m
SPTL		Link and substation	None	£35.1m	£64.0m
SPTL	Incremental upgrade	SPT-NGET Interconnection	£5.5m	£1.2m	£25.7m
		East - West Upgrade	None	£0.8m	£16.0m
SHETL	Beaully-Mossford	Mossford substation	None	£2.5m	£9.0m
<b>Totals</b>			£23.6m	<b>£148.4m</b>	£265.0m

3.26. **NGET: Deeside substation.** NGET has been granted funding of £18.1m up to the end of 2011/12. It is now requesting additional funding (£41.4m for 2011/12) which is partly due to re-profiling of the scheme's capital expenditure to reflect upfront payment for items of equipment, and partly due to increases in the scheme's costs in the light of detailed design work. Again, our assessment of this request will consider the justification for the increased costs and interactions with existing funding provisions.

3.27. **NGET and SPTL: Onshore incremental reinforcements to Anglo-Scottish boundary.** NGET and SPTL are both working on projects to reinforce the Anglo-Scottish Boundary, using a combination of engineering solutions<sup>19</sup>: reconductoring, series compensation, and shunt compensation. Both TOs have introduced changes to the engineering proposals<sup>20</sup> since last year's submissions, and the costs have increased. For 2011/12 NGET now seeks £32m, and SPTL seeks £2m. Before we

<sup>19</sup> Compensation equipment provides voltage support, and can be connected in parallel ("shunt") with the transmission lines or in series, relatively newer technology to the GB transmission system.

<sup>20</sup> NGET now proposes to include some shunt compensation to complement the series compensation solution set out previously, and has in turn reduced the number of series compensation units. SPTL has also included some updates to its design proposal.

reach a final view of funding these works, we need confirmation of their robustness, particularly in terms of the coherence of the system-wide solution through joint working by NGET and SPT. KEMA has raised initial issues with the level of some individual cost elements and is carrying out further assessment.

**3.28. NGET and SPTL: Western HVDC link.** NGET and SPTL are undertaking a joint venture to build a 2GW undersea HVDC link from Hunterston to Deesside. The proposed route for this link goes through territorial waters of Great Britain, Northern Ireland and Isle of Man where currently neither NGET nor SPT is licensed to carry out transmission. Therefore there are licensing issues to address.

3.29. The Western HVDC link and incremental onshore reinforcements were previously considered as a wider suite of reinforcements options to the Anglo-Scottish Boundary, which also include an Eastern HVDC link. Our previous assessment identified uncertainties as to the need, order and timing of individual elements, and strong dependence on assumptions used in the CBA underpinning the overall investment plan. In the latest submission, NGET provided an updated CBA which considers the reinforcements against a wider range of generation scenarios. NGET's analysis suggests that both HVDC links could be needed by 2018 and that one of them will be needed by 2015. Further, NGET believes that only the Western link is sufficiently advanced to be completed by 2015. KEMA is assessing the need case, scope and timing of each reinforcement, taking into account NGET's updated CBA. KEMA is investigating the arguments around transmission losses in the CBA. KEMA is also seeking fuller justification for why this link is considered necessary by 2015 (as opposed to aligning with related upstream works currently planned to complete in 2017), as well as the why this link is preferable to the Eastern HVDC link. Finally, KEMA is examining the merit of the proposed link as part of a system-wide solution, in particular the impact on network congestion further downstream.

3.30. The final point to note about this project is that both TOs have indicated that the cost estimate especially that associated with the undersea cable is subject to significant uncertainty at this stage. They expect to be firm up their estimate after they have received tenders from the suppliers, currently planned to be after summer 2011. Therefore, even if we are to be convinced of the need for the TOs to progress the construction works from 2011/12, there may be need to consider some refinement of our funding approach.

**3.31. SHETL: Beaulay-Mossford.** This is a new project to upgrade the Mossford substation and the Beaulay-Mossford overhead line, although at this stage SHETL has requested construction funding for the substation only. The project will provide additional capacity to accommodate new generation and also allow several existing wind farms and hydro plants to export onto the grid without constraints on the local network. The substation will also provide for connection of a wind farm under a Connect and Manage agreement, ahead of completion of the overhead line works. Whilst KEMA is content with the merit of the works from a local focus, it has raised issues about speeding up local works whilst wider transmission system is still under constraints. However, we recognise that the enduring Connect and Manage regime does not provide for alignment of local and wider works. We are also considering the extent to which the project is covered by existing funding provisions, including the local revenue driver.



## Update on other funding requests

3.32. We previously received TII funding requests from SHETL for the Western Isles link and associated Lewis Infrastructure works, which together form the Western Isles project. We appointed TNEI/PPA to support our assessment. As SHETL has withdrawn these requests we cannot reach a funding decision at this stage. We note that it is open to SHETL to put forward either or both components of the Western Isles project for further funding consideration at any time by submitting a TII funding request.

3.33. We are publishing TNEI/PPA's final report alongside this document and we welcome comments on TNEI/PPA's findings. Where relevant we will take this into account in further work, for example in the context of a future TII funding request for the Western Isles project. We also welcome views on whether TNEI/PPA's report raises any issues which are relevant to our assessment of TII funding requests more generally.

3.34. All three TOs have submitted, or have indicated an intention to submit, further TII funding requests for construction works on projects (or components of projects) planned to commence in 2012/13. We will take forward our assessment of these requests at a later stage, subject to confirmation of our detailed policy for extension of our TII framework to 2012/13. We will also consider whether to provide further guidance to the TOs as to the timing and content of their submissions in relation to future TII funding requests.

3.35. There are some further projects put forward by NGET for funding consideration via its TII submissions. For these projects, which were not previously put forward under TII, we consider that the TII mechanism is not the most appropriate route for funding consideration and we have advised NGET of how we intend to consider these projects. One of these projects is the Humber SmartZone project, which we have concluded is in scope of the existing Innovation Funding Incentive (IFI) mechanism given that it is R&D in nature. As this project is covered by an existing funding mechanism and does not involve transmission reinforcement works we consider that it is out of scope of our work under TII. The other project is NGET's System Operator Capability project. We consider that this project is in scope of the existing SO internal capex mechanism given that it relates to capital expenditure associated with NGET's role as NETS SO rather than its TO function. While we consider that the funding of both these projects is out of scope of our work under TII, we will keep under review whether there is a need for enhancements to the relevant existing provisions to ensure that necessary and efficient investments are appropriately funded.

## 4. Way forward

### Chapter summary

This chapter discusses our process and timetable for extending our TII framework to 2012/13 as discussed in chapter 2 and for reaching a decision on the TII funding requests discussed in chapter 3.

### Question box

**Question 1:** Do respondents have any views on our proposed process and timetable for reaching a decision on the TII funding requests currently under consideration?

**Question 2:** Do respondents consider that there are any material issues that require further consultation before the Authority reaches a decision on these TII funding requests?

**Question 3:** Do respondents have any views on our proposed process and timetable for extending our TII framework to 2012/13?

**Question 4:** Do respondents have any views on interactions with parallel work?

### Next steps

4.1. Subject to responses to this December consultation, we currently intend to publish our next TII document in January 2011.

4.2. Our January document will set out our funding proposals for any 2011/12 funding requests for which we are able to complete our assessment this year. To implement those funding proposals, it is necessary to publish a statutory consultation on the proposed modifications to electricity transmission licences pursuant to section 11 and 11A of the Electricity Act 1989. We intend to publish the statutory consultation in February with a view to implementing our funding proposals by 1 April 2011. We expect that this may provide appropriate certainty to the TOs for our funding proposals to be taken into account in the process for setting 2011/12 Transmission Network Use of System (TNUoS) tariffs. It is through TNUoS tariffs, due to be published at the end of January, that the additional revenue allowed to the TOs through TII funding is recovered from users of the transmission system.

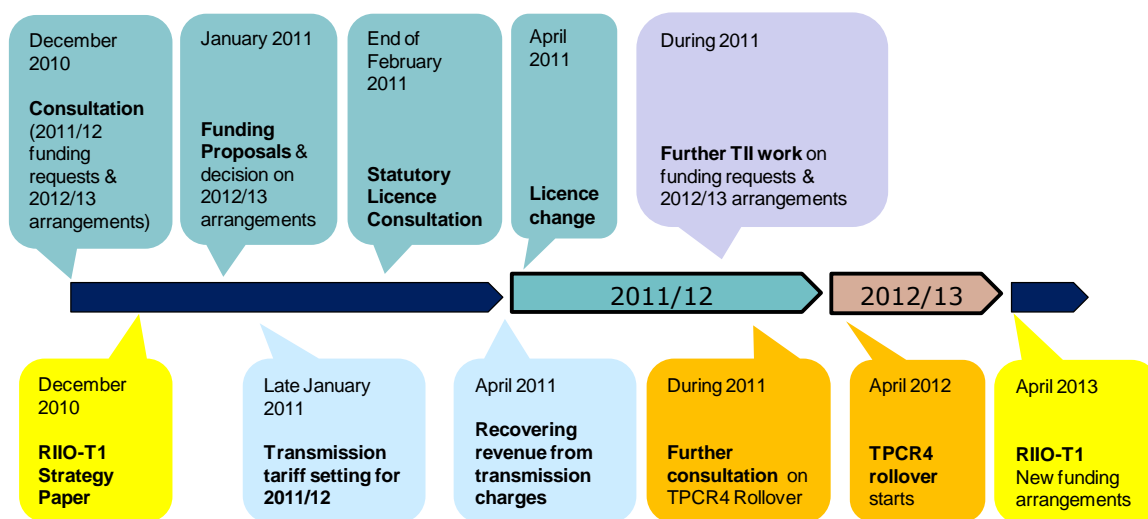
4.3. Our January document will also confirm our detailed policy for extension of our TII framework to 2012/13 under TPCR4 rollover. This will enable us to provide some clarity as to the ongoing treatment in 2012/13 of any works we propose to fund under TII from 2011/12.

4.4. In order to achieve these timescales we are allowing a period of four weeks for responses to this consultation<sup>21</sup>. We think that this is justified in the circumstances given that they are necessary to put us in a position to provide funding from April 2011 and the issues for consultation are not material policy issues in their own right rather they build upon existing policy. Specifically, in respect to the funding requests we are seeking to apply and clarify the framework previously confirmed in our TII Final Proposals document of January 2010. In respect to the 2012/13 arrangements we are covering implementation of policy previously confirmed under the TPCR4 rollover. However, we may decide to consult further in certain circumstances, as discussed below.

4.5. Following confirmation of the 2012/13 arrangements in the January document, later in 2011 we will set out detailed project-specific proposals for ongoing treatment in 2012/13 of works with existing TII funding.

4.6. Our proposed way forward set out above is illustrated in **Figure 3** below. We invite views on our proposed process and timetable.

**Figure 3 – TII timeline**



### Circumstances in which we may consult further

4.7. We anticipate that in some cases our work to consider TII funding requests may be ongoing in January or that there may be outstanding issues to be addressed before the Authority will be in a position to make a final decision on whether to fund a given project or to determine the appropriate level of such funding.

<sup>21</sup> Ofgem would generally consult for 6 weeks as set out in its Consultation and Decision Good Practice Guide, and in some cases the issue warrants longer than that. Our consultation period for this document allows 28 working days plus 4 Bank Holidays noting it spans the Christmas holiday period.

4.8. For example this may apply where material issues arise, e.g. through responses to the December consultation or in KEMA's final report, which need further consideration. We may decide to consult further in such circumstances, in which case we may need to make retrospective licence changes to implement any subsequent funding decisions. In such cases we will consider whether there is a need to make appropriate provisions to ensure that we do not penalise the TOs for material differences between their revenue forecast assumed for TNUoS-setting purposes and the actual revenue allowances for 2011/12 in cases where we have not confirmed our funding decision in January 2011. We welcome views on these matters.

4.9. For TII funding requests subject to ongoing consideration, our January document will confirm our proposed way forward on any outstanding issues. At this stage we anticipate that our work to consider the Western HVDC link may require a longer timeframe such that we are unlikely to be in a position to reach a decision on funding in January 2011.

### **Interactions with parallel work**

4.10. Our work on establishing TII funding provisions for 2012/13 will be appropriately aligned with parallel work on TPCR4 rollover. There will be degree of interaction between the two projects in terms of assessment, policy work and implementation, e.g. in the assessment of the totality of the capex programme for 2012/13 from both a deliverability and financeability perspective, in the determination and application of cost of capital assumptions for the TPCR4 rollover, and in the timing of policy documents and statutory consultations on licence changes.

4.11. Our proposal to confirm the 2012/13 arrangements under TII in January 2011 for TII works which we have funded or propose to fund up to 2011/12 means we will be able to consider the TPCR4 rollover settlement against this context. However, there will remain some uncertainty as to the appropriate assumptions for TII works planned to commence in 2012/13 to the extent that we have not reached a funding decision on those works. We will consider whether to provide further guidance to the TOs as to the timing and content of 2012/13 funding requests under TII so that their investment plans can be appropriately taken into account in the work on TPCR4 rollover.

4.12. As discussed in chapter 2, our RIIO-T1 consultation in December 2010 will include proposals and options for the treatment of network reinforcement projects from 2013/2014. These arrangements will supersede the TII framework, as extended under the TPCR4 rollover.

4.13. As discussed in Chapter 3, we are taking forward a separate work stream to consider licensing issues. Where such licensing issues apply we will consider the appropriate timing of our funding proposals and licence changes.

## Responding to this document

4.14. We invite your comments on the questions we posed in this document. We also welcome views on any of the issues discussed in this document. Details on how to respond to this consultation document are set out in **Appendix 1**.

4.15. **We have requested responses to this consultation by 6 January 2011.**

## Appendices

**Table A. 1: Appendices Index**

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## Appendix 1 - Consultation response and questions

1.1. Ofgem would like to hear the views of interested parties in relation to any of the issues set out in this document.

1.2. We would especially welcome responses to the specific questions which we have set out at the beginning of each chapter heading and which are replicated below.

**4.16. Responses to this consultation should be received by 6 January 2011**

and should be sent, preferably in electronic format by e-mail to

[transmissionaccessreview@ofgem.gov.uk](mailto:transmissionaccessreview@ofgem.gov.uk)

or alternatively by post to:

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

1.3. Unless marked confidential, all responses will be published by placing them in Ofgem's library and on its website [www.ofgem.gov.uk](http://www.ofgem.gov.uk). Respondents may request that their response is kept confidential. Ofgem shall respect this request, subject to any obligations to disclose information, for example, under the Freedom of Information Act 2000 or the Environmental Information Regulations 2004.

1.4. Respondents who wish to have their responses remain confidential should clearly mark the document/s to that effect and include the reasons for confidentiality. Respondents are asked to put any confidential material in the appendices to their responses.

1.5. 1.6. Any questions on this document should, in the first instance, be directed to Cheryl Mundie (e-mail: [cheryl.mundie@ofgem.gov.uk](mailto:cheryl.mundie@ofgem.gov.uk), tel: 0141 331 6003) or Min Zhu (e-mail: [min.zhu@ofgem.gov.uk](mailto:min.zhu@ofgem.gov.uk), tel: 020 7901 7060).

**CHAPTER: One**

There are no questions in this chapter.

**CHAPTER: Two**

**Question 1:** Do respondents have any comments on our detailed proposals for the extension of our TII framework to 2012/13?

**Question 2:** Do respondents have any comments on the interactions with development of future arrangements under RIIO-T1?

**CHAPTER: Three**

**Question 1:** Do respondents consider that we have identified the relevant issues to consider in our assessment of TII funding requests, both in general and in the specific context of the TII funding requests currently under consideration?

**Question 2:** Do respondents have any comments on our initial views on the TII funding requests currently under consideration or on our proposed approach to assessing these requests?

**CHAPTER: Four**

**Question 1:** Do respondents have any views on our proposed process and timetable for reaching a decision on the TII funding requests currently under consideration?

**Question 2:** Do respondents consider that there are any material issues that require further consultation before the Authority reaches a decision on these TII funding requests?

**Question 3:** Do respondents have any views on our proposed process and timetable for extending our TII framework to 2012/13

**Question 4:** Do respondents have any views on interactions with parallel work?



## Appendix 2 – The Authority’s powers and duties

1.1. Ofgem is the Office of Gas and Electricity Markets which supports the Gas and Electricity Markets Authority (“the Authority”), the regulator of the gas and electricity industries in Great Britain. This appendix summarises the primary powers and duties of the Authority. It is not comprehensive and is not a substitute to reference to the relevant legal instruments (including, but not limited to, those referred to below).

1.2. The Authority’s powers and duties are largely provided for in statute (such as the Gas Act 1986, the Electricity Act 1989, the Utilities Act 2000, the Competition Act 1998, the Enterprise Act 2002 and the Energy Acts of 2004, 2008 and 2010) as well as arising from directly effective European Community legislation.

1.3. References to the Gas Act and the Electricity Act in this appendix are to Part 1 of those Acts.<sup>22</sup> Duties and functions relating to gas are set out in the Gas Act and those relating to electricity are set out in the Electricity Act. This appendix must be read accordingly.<sup>23</sup>

1.4. The Authority’s principal objective is to protect the interests of existing and future consumers in relation to gas conveyed through pipes and electricity conveyed by distribution or transmission systems. The interests of such consumers are their interests taken as a whole, including their interests in the reduction of greenhouse gases and in the security of the supply of gas and electricity to them.

1.5. The Authority is generally required to carry out its functions in the manner it considers is best calculated to further the principal objective, wherever appropriate by promoting effective competition between persons engaged in, or commercial activities connected with,

- the shipping, transportation or supply of gas conveyed through pipes;
- the generation, transmission, distribution or supply of electricity;
- the provision or use of electricity interconnectors.

1.6. Before deciding to carry out its functions in a particular manner with a view to promoting competition, the Authority will have to consider the extent to which the interests of consumers would be protected by that manner of carrying out those functions and whether there is any other manner (whether or not it would promote competition) in which the Authority could carry out those functions which would better protect those interests.

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<sup>22</sup> Entitled “Gas Supply” and “Electricity Supply” respectively.

<sup>23</sup> However, in exercising a function under the Electricity Act the Authority may have regard to the interests of consumers in relation to gas conveyed through pipes and vice versa in the case of it exercising a function under the Gas Act.

1.7. In performing these duties, the Authority must have regard to:

- the need to secure that, so far as it is economical to meet them, all reasonable demands in Great Britain for gas conveyed through pipes are met;
- the need to secure that all reasonable demands for electricity are met;
- the need to secure that licence holders are able to finance the activities which are the subject of obligations on them<sup>24</sup>; and
- the need to contribute to the achievement of sustainable development.

1.8. In performing these duties, the Authority must have regard to the interests of individuals who are disabled or chronically sick, of pensionable age, with low incomes, or residing in rural areas.<sup>25</sup>

1.9. Subject to the above, the Authority is required to carry out the functions referred to in the manner which it considers is best calculated to:

- promote efficiency and economy on the part of those licensed<sup>26</sup> under the relevant Act and the efficient use of gas conveyed through pipes and electricity conveyed by distribution systems or transmission systems; protect the public from dangers arising from the conveyance of gas through pipes or the use of gas conveyed through pipes and from the generation, transmission, distribution or supply of electricity; and secure a diverse and viable long-term energy supply, and shall, in carrying out those functions, have regard to the effect on the environment.

1.10. In carrying out these functions the Authority must also have regard to:

- the principles under which regulatory activities should be transparent, accountable, proportionate, consistent and targeted only at cases in which action is needed and any other principles that appear to it to represent the best regulatory practice; and
- certain statutory guidance on social and environmental matters issued by the Secretary of State.

1.11. The Authority may, in carrying out a function under the Gas Act and the Electricity Act, have regard to any interests of consumers in relation to communications services and electronic communications apparatus or to water or sewerage services (within the meaning of the Water Industry Act 1991), which are affected by the carrying out of that function.

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<sup>24</sup> Under the Gas Act and the Utilities Act, in the case of Gas Act functions, or the Electricity Act, the Utilities Act and certain parts of the Energy Acts in the case of Electricity Act functions.

<sup>25</sup> The Authority may have regard to other descriptions of consumers.

<sup>26</sup> Or persons authorised by exemptions to carry on any activity.

1.12. The Authority has powers under the Competition Act to investigate suspected anti-competitive activity and take action for breaches of the prohibitions in the legislation in respect of the gas and electricity sectors in Great Britain and is a designated National Competition Authority under the EC Modernisation Regulation<sup>27</sup> and therefore part of the European Competition Network. The Authority also has concurrent powers with the Office of Fair Trading in respect of market investigation references to the Competition Commission.

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<sup>27</sup> Council Regulation (EC) 1/2003.

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## Appendix 3 - Glossary

### A

#### Access Rights

The rights to flow specified volume of electricity, usually from a specified location (node or zone) to an explicitly or implicitly defined destination (e.g. market hub), and for a defined period. For firm access rights, a failure to deliver access due to insufficient network capacity is associated with financial compensation. For non-firm access rights, the flow is terminated without compensation when capacity is unavailable.

#### The Authority/ Ofgem

Ofgem is the Office of the Gas and Electricity Markets, which supports the Gas and Electricity Markets Authority (GEMA), the body established by section 1 of the Utilities Act 2000 to regulate the gas and electricity markets in GB.

### B

#### Baseline

Baselines define the reference levels of capacity that the transmission licensee is to release. Baselines also determine the levels above (or below) which incremental capacity is defined.

#### Baseline Capital Expenditure

Baseline capital expenditure is the total amount of capex required in association with the baseline. It includes both load related capex and non-related capex.

#### British Electricity Trading and Transmission Arrangements (BETTA)

The arrangements for the trading and transmission of electricity across Great Britain which are provided for by Chapter 1 of Part 3 of the Energy Act 2004, which have replaced the separate trading and transmission arrangements which existed prior to 1 April 2005 in Scotland and in England and Wales. BETTA introduced a single GB-wide set of arrangements for trading energy and for access to and use of the transmission system which came fully into effect at BETTA go-live (1 April 2005).

### C

#### Capital Expenditure (Capex)

Expenditure on investment in long-lived transmission assets, such as gas pipelines or electricity overhead lines.

#### Connection Entry Capacity (CEC)

A measure of the maximum capability, expressed in MW, of a connection site and the associated generation units' connection to the transmission system.

#### Connection and Use of System Code (CUSC)

Multi-party document creating contractual obligations among and between all users of the GB transmission system, parties connected to the GB transmission system and National Grid in relation to their connection to and use of the transmission system.

#### Consents

The process of obtaining Consents for the construction of a new overhead line to serve, for example, a wind farm can essentially be broken down into two distinct areas. Consents to be obtained from the Secretary of State/ Planning authorities etc in relation to permission allowing a line to be built and secondly, and more practically, consents from landowners who will be affected by the construction of the new line. For a new line consent under section 37 of the 1989 Act will be required.

In addition to section 37 consent, the DNO/TO must also obtain consent from the landowners over whose land the line will run. If a voluntary agreement cannot be struck, then either the land will have to be compulsorily purchased, under the provisions of section 10 and Schedule 3 (which is usually used for substations), or a Necessary Wayleave obtained over it, under the provisions of section 10 (Schedule 4 paragraphs 6-8).

#### Constraints

In the event that the pattern of generation may exceed the safe operational limits of a particular line or transmission system equipment, the GBSO will take actions to reduce the output of generators at specific locations on the system. At present these actions are taken in the Balancing Mechanism in the form of bids, and also via ancillary services, such as Pre-Gate Closure Balancing Mechanism Unit Transactions (PGBTs). Where a user's output is constrained down at a point on the system, the overall balance of energy will need to be retained, and costs will be incurred by the GBSO in bringing replacement energy onto the system.

#### Contracted background

This is the planning background against which National Grid assesses applications for connection and use of system. The contracted background includes all users that have entered into an (ongoing) agreement with National Grid for connection or use of system.

#### **D**

#### Deep reinforcement

Deep reinforcement refers to the works conducted on the wider transmission system in order to accommodate a change in the generation and demand pattern.

#### **G**

### National Electricity Transmission System Operator (NETSO)

The entity responsible for operating the GB transmission system, onshore and offshore, and for entering into contracts with those who want to connect to and/or use the GB transmission system. National Grid is the NETSO.

### GB Transmission System

The system of high voltage electric lines providing for the bulk transfer of electricity across Great Britain.

## K

### Kilowatt (kW)/Megawatt (MW)/Gigawatt (GW)

A kW is the standard unit of electricity, roughly equivalent to the power output of a one-bar electric fire. A MW is a thousand kilowatts. A GW is a thousand megawatts.

### Kilowatt hour (kWh)/Megawatt hour (MWh)/Gigawatt hour (GWh)

One kilowatt hour is the amount of electricity expended by a one kilowatt watt load drawing power for one hour. A MWh is a thousand kilowatt hours. A GWh is a thousand megawatt hours.

## L

### Load Related Capex

The installation of new assets to accommodate changes in the level or pattern of electricity or gas supply and demand.

### Long-run marginal costs (LRMC)

In the context of electricity transmission, long-run marginal costs are the marginal costs of establishing and using network capacity. They include, for example, marginal costs for network reinforcement, as well as resulting network losses and residual congestion costs.

### Local works

Those works required to provide a generator with a connection to the transmission network that would enable it to export power.

## N

### National Grid Electricity Transmission (NGET)

The electricity transmission licensee in England & Wales.

### Non-Load Related Capex

The replacement or refurbishment of assets which are either at the end of their useful life due to their age or condition, or need to be replaced on safety or environmental grounds.

### O

#### Operating Expenditure (Opex)

The costs of the day to day operation of the network such as staff costs, repairs and maintenance expenditures, and overhead.

### R

#### Regulatory Asset Value (RAV)

The value ascribed by Ofgem to the capital employed in the licensee's regulated transmission or (as the case may be) distribution business (the 'regulated asset base'). The RAV is calculated by summing an estimate of the initial market value of each licensee's regulated asset base at privatisation and all subsequent allowed additions to it at historical cost, and deducting annual depreciation amounts calculated in accordance with established regulatory methods. These vary between classes of licensee. A deduction is also made in certain cases to reflect the value realised from the disposal of assets comprised in the regulatory asset base. The RAV is indexed to RPI in order to allow for the effects of inflation on the licensee's capital stock. The revenues licensees are allowed to earn under their price controls include allowances for the regulatory depreciation and also for the return investors are estimated to require to provide the capital.

#### RPI-X

The form of price control currently applied to network monopolies. Each company is given a revenue allowance in the first year of each control period. The price control then specifies that in each subsequent year the allowance will move by 'X' per cent in real terms.

#### Re-openers

A process undertaken by Ofgem to re-set the revenue allowances (or the parameters that give rise to revenue allowances) under a price control before the scheduled next formal review date for the relevant price control.

#### Revenue Driver

A means of linking revenue allowances under a price control to specific measurable events which are considered to influence costs. An example might be to allow a specified additional revenue allowance for each MW of new generation connecting to the network. Revenue drivers are used by Ofgem to increase the accuracy of the revenue allowances.

**S****Safety net**

A mechanism that would trigger a review of allowances in the event of a major shortfall of investment relative to allowances.

**Security and Quality of Supply Standard (SQSS)**

As referred to in the electricity Transmission Licence Standard Conditions C17 and D3, this is the standard in accordance with which the electricity transmission licensees shall plan, develop and operate the transmission system.

**Scottish Hydro-Electric Transmission Limited (SHETL)**

The electricity transmission licensee in northern Scotland.

**Scottish Power Transmission Limited (SPTL)**

The electricity transmission licensee in southern Scotland.

**Sliding scale**

This term is used generically to describe incentive schemes which involve profit (and loss) sharing around a fixed target costs, such as the current form of SO incentives in gas and electricity.

**T****Transmission Asset Owner (TO)**

There are three separate transmission systems in Great Britain, owned by three Transmission Asset Owners, National Grid Electricity Transmission plc, Scottish Hydro Electric Transmission Ltd and Scottish Power Transmission Ltd. National Grid also has the role of system across the whole of Great Britain.

**Transmission Entry Capacity (TEC)**

Defines a generator's maximum allowed export capacity onto the GB transmission system. The holder of the TEC has the right to export the specified number of megawatts onto the transmission system at any one time, and is eligible for compensation if NGET cannot accommodate this export on the network.

**Transmission Investment for Renewable Generation (TIRG)**

In the context of this document, this means the regulatory mechanisms developed before the start of the next main price control in 2007, to fund a number of specific network enhancement projects required to provide transmission capacity for new renewable generation plants.

**Transmission Owners (TO)**



Companies which hold transmission owner licenses. Currently there are three electricity TOs; NGET, SPTL and SHETL. NGG NTS is the gas TO.

#### Transmission Price Control Review (TPCR)

The TPCR will establish the price controls for the transmission licensees which will take effect in April 2007 for a 5-year period. The review applies to the three electricity transmission licensees, NGET, SPTL, SHETL and to the licensed gas transporter responsible for the gas transmission system, NGG NTS

#### Transmission Network Use of System (TNUoS) charges

Charges that allow National Grid to recover the costs of providing and maintaining the assets that constitute the GB transmission system.

### **U**

#### Unit Cost Allowance (UCA)

A parameter of the revenue drivers for the three TOs. For SHETL and SP Transmission the local works revenue drivers uses a £ per MW funding allowance, and for NGET both the local and deep revenue drivers use a £ per MW funding allowance. Funding allowances that increase or decrease expenditure entitlements by a set amount for each MW above or below baseline assumptions are UCAs.

### **W**

#### Weighted Average Cost of Capital (WACC)

The weighted average of the expected cost of equity and the expected cost of debt.

#### Wider Works (WW)

The transmission works identified for a given generator which comprise deep reinforcement works required to provide capacity to support the additional generation coming online.

## Appendix 4 - Feedback questionnaire

1.1. Ofgem considers that consultation is at the heart of good policy development. We are keen to consider any comments or complaints about the manner in which this consultation has been conducted. In any case we would be keen to get your answers to the following questions:

1. Do you have any comments about the overall process, which was adopted for this consultation?
2. Do you have any comments about the overall tone and content of the report?
3. Was the report easy to read and understand, could it have been better written?
4. To what extent did the report's conclusions provide a balanced view?
5. To what extent did the report make reasoned recommendations for improvement?
6. Please add any further comments?

1.2. Please send your comments to:

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