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for all gas and electricity customers

RIIO-T1: Final Proposals for SP Transmission Ltd and Scottish Hydro Electric Transmission Ltd

Final decision - Supporting document

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Overview:

This Supporting Document sets out our further detail on our Final Proposals for the transmission price controls for SP Transmission Ltd (SPTL) and Scottish Hydro Electric Transmission Ltd (SHETL) from 1 April 2013 to 31 March 2021.

Following our assessment of their business plans and in light of responses to our consultation on Initial Proposals we consider that the plans of SPTL and SHETL are suitable for fast-tracking. This means reaching early conclusion of the price control nearly 12 months before implementation. It also means that SPTL's and SHETL's business plans form the basis of these Final Proposals.

This document includes further detail on the Final Proposals in relation to outputs, innovation, efficient costs, the financial parameters and uncertainty mechanisms.

The document is aimed at those seeking a detailed understanding of the Final Proposals. Stakeholders wanting a more accessible overview should refer to the Final Proposals Overview document.

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1. Introduction

Chapter Summary

This chapter explains the structure and purpose of this document.

Purpose of this document

1.1. This document sets out further detail on our “fast-track” Final Proposals for SP Transmission Ltd (SPTL) and Scottish Hydro Electric Transmission Ltd (SHETL) for the next transmission price control, RIIO-T1. This price control will cover the eight-year period from 1 April 2013 to 31 March 2021.

1.2. The document sets out detail on each of the key elements of the price control packages for SPTL and SHETL. It is aimed at network companies, investors and those who require a more in-depth understanding of the proposals. We are publishing this document alongside the Final Proposals Overview document (“Overview document”)¹ which provides a more accessible overview of the package of Final Proposals for SPTL and SHETL.

1.3. As noted in the Overview document these Final Proposals are different from those we have set out in previous price control processes as they build on the regulatory framework for RIIO-T1 set out in our March 2011 Strategy Decision document (“Strategy Decision document”)² and are based directly on the updated RIIO-T1 business plans developed by SPTL and SHETL. At the end of each of the following chapters of this paper we set out where to find additional information on each element of these Final Proposals from both the companies’ business plans and from our Strategy Decision document.

Structure of this document

1.4. The remaining chapters provide further detail on the individual elements of the price control package for both companies. The document is structured as follows:

- Chapter 2 outlines the outputs SPTL and SHETL will be required to deliver over RIIO-T1 and the basis of the incentive mechanisms to encourage efficient delivery.
- Chapter 3 sets out the arrangements that will apply to encourage SPTL and SHETL to innovate and to meet the requirement of their innovation strategies.
- Chapter 4 presents our Final Proposals for an efficient level of expenditure.
- Chapter 5 outlines the basis of the financial settlement for both companies.
- Chapter 6 sets out the mechanisms that will be included in SPTL’s and SHETL’s price control to manage uncertainty and risk in RIIO-T1.

¹ RIIO-T1: Final Proposals for SP Transmission Ltd and Scottish Hydro Electric Transmission Ltd
<http://www.ofgem.gov.uk/Networks/Trans/PriceControls/RIIO-T1/ConRes/Documents1/SPTSHETLFP.pdf>

² Decision on strategy for the next transmission price control - RIIO-T1
<http://www.ofgem.gov.uk/Networks/Trans/PriceControls/RIIO-T1/ConRes/Documents1/T1decision.pdf>

2. Outputs and incentives

Chapter Summary

This chapter outlines the outputs SPTL and SHETL will be required to deliver over RIIO-T1 and the basis of the incentive mechanisms to encourage efficient delivery.

Introduction

2.1. RIIO is an outputs-led framework. It is important that throughout the RIIO-T1 period, the transmission owners (TOs) understand what they are expected to deliver and are held to account for delivery. This chapter sets out the outputs that SPTL and SHETL will be required to deliver over RIIO-T1 and the incentives that will apply around delivery.

2.2. In this chapter we set out each output and the associated incentives in turn for SPTL and then for SHETL.

Setting the level of incentives

2.3. Under RIIO it is not possible to set out the actual level and profile of annual allowed revenue that SPTL and SHETL can collect. This is due, in part, to within period revenue flexing mechanisms that will add to the opening base revenue allowances. Examples of mechanisms that flex allowed revenue over the price control period include the uncertainty mechanisms, the Strategic Wider Works (SWW) mechanism and the efficiency incentive rate.

2.4. In order to maintain strong output incentives we need to make sure that the caps and collars on these do not just reflect the opening base revenue allowance. They will need to adjust in response to ongoing, but uncertain, changes in revenue in order to better reflect the true change in network totex and other in-period adjustments over the price control period.

2.5. To do this the maximum caps and collars will be linked to a combination of the opening base revenue allowance plus within period adjustments captured through annual iteration of the financial model and the revenue from Transmission Investment in Renewable Generation (TIRG). This will include all additional totex that is triggered during price control.

What we set out in our Initial Proposals

2.6. In the Initial Proposals we set out the outputs and associated incentives that both SPTL and SHETL would be expected to deliver in RIIO-T1. These reflected the proposals set out in their RIIO-T1 business plans which, in turn, largely reflected

those set out in our Strategy Decision document. The main exceptions were in SHETL's plan where it proposed variations to the reliability and connections incentives.

2.7. We also identified a number of areas where we required the companies to undertake further work and to provide us with an update for Final Proposals. These areas were:

- Network Availability – To continue developing a Network Availability Policy (NAP)³ that details how the TOs plan and manage maintenance and explores options that are as a whole beneficial taking into account both System Operator (SO) constraint costs and TO costs and benefits.
- Customer satisfaction – To provide more detail on the processes they would follow to develop and finalise customer satisfaction surveys and related information.
- Environmental outputs – To firm up the performance levels they will deliver in SPTL's case in relation to its Business Carbon Footprint (BCF) and losses and in SHETL's case in relation to its BCF and its Sulphur hexafluoride (SF₆) emissions. We also set out that SHETL should undertake further work in relation to visual amenity.

Summary of responses and our views

Safety and reliability

2.8. SPTL and SHETL supported the Initial Proposals in relation to safety and reliability.

2.9. SPTL also supported the methodology for the measurement of secondary outputs set out by Ofgem as being a fair way to assess the delivery of investment plans. However, it noted that there needed to be some refinement to take account of asset replacement activities that result in a change to the volume of assets and noted that it had recommended a solution as part of the Network Output Measures (NOMs) review.

2.10. SHETL considered that Ofgem should confirm in the Final Proposals how it will undertake the assessment of secondary deliverables at the end of RIIO-T1/beginning of RIIO-T2 to ensure there is no misunderstanding of the required deliverables.

Our views

2.11. We welcome the comments from both SPTL and SHETL. As stated in our Strategy Decision document, we will assess performance against the NOMs in RIIO-T1 as part of the RIIO-T2 price control process. The agreed level of outputs at the

³ Reflecting the coverage of the document, all parties have agreed that this should now more accurately be referred to as the Network Access Policy

end of RIIO-T1 will form the starting point for RIIO-T2. As part of this process the TOs will review their NOMs, providing evidence that any over or under-delivery of outputs is efficient and provides value to customers.

2.12. We will continue to work with SPTL and SHETL to refine our assessment process, including the trade-offs in delivery between asset classes and the application of rewards for efficient over or under-delivery and penalties for unjustified variances.

Connections

2.13. SPTL stressed the role of National Grid Electricity Transmission plc (NGET) in the connections process and noted that it was important that the introduction of penalties for non-compliance does not either compromise its working relationship with NGET or result in one party being penalised as a result of the actions of the other.

2.14. SHETL stated its commitment to a connections process that is accessible to all. It intends to consult on a Connections Guide in its summer 2012 Stakeholder Consultation.

Our views

2.15. We agree with SPTL that it would be undesirable for any proposed output to compromise existing positive working relationships or to result in a party being penalised for actions beyond its control. We do not consider that any of the proposed outputs, including those proposed in relation to connections should have this effect.

2.16. We welcome SHETL's acceptance of the proposed output and also its intention to consult in further detail on its proposed Connections Guide. This should ensure its arrangements best reflect the interests of its stakeholders.

Network Availability

2.17. One respondent said the incentives on network availability should be strengthened from a reputational incentive to a financial incentive. They argued that a reputational incentive was too weak as stakeholder awareness of the activities the TOs can undertake to make the most of existing capacity, such as implementing dynamic line ratings, was limited. The respondent thought there was a strong case in terms of consumer benefits for SPTL and SHETL to adopt dynamic line ratings and that this should be advanced through the innovation package.

Our views

2.18. We note the point the respondent is making in relation to financial incentives. Originally we had considered the introduction of financial incentives in relation to network availability. We moved away from this approach for a number of reasons:

- (1) any financial incentive would need to apply in relation to a baseline level of performance. The NAP does not lend itself to a simple baseline. The NAP is a more complex document specifying possible scenarios and describing ways the TOs react or plan for them. Without a baseline it can be a much more useful, transparent document
- (2) we saw evidence of all of the TOs working very constructively together eg already identifying information that might be usefully shared from TO to SO and vice versa, without the requirement for financial incentives to drive this behaviour
- (3) it is important that a company has information on and control over what it is being incentivised to deliver.

2.19. However, we note that it is important that all the outputs drive the right behaviours. We will monitor performance against this output and will consider whether stronger incentives are required at a later stage when we have better information on the interactions between the companies in this area.

2.20. We are also working with the companies to make sure the NAP principles are followed and that the NAP is maintained as a living document.

Customer satisfaction

2.21. SPTL and SHETL noted that the arrangements should recognise that all connected and connecting parties are first and foremost NGET's customers.

Our views

2.22. We have always suggested that this output might be different for SPTL and SHETL compared to NGET. We agree that parties connecting to the transmission network are first and foremost customers of NGET. SPTL and SHETL have undertaken work to inform this and we are working with them to make sure that the incentive arrangements properly reflect the different industry roles.

Environmental outputs

2.23. SPTL considered that the visual amenity allowance to mitigate the impacts of existing transmission infrastructure on the visual amenity of National Parks and Areas of Natural Beauty (AONB) should be extended as it did not reflect equivalent protected designations in Scotland.

2.24. SHETL welcomed the opportunity to be able to demonstrate and receive recognition for efforts to minimise the environmental impact of its activities. However, it considered this should be dealt with outside of RIIO-T1 rather than as an add-on to the proposals.

2.25. Another respondent considered that there was a lack of new incentives in RIIO-T1 for the delivery of outputs. It welcomed the Environmental Discretionary Reward (EDR) in this regard, but also noted that as the scope is only discretionary it may lack sufficient strength to build an investment case.

Our views

2.26. In relation to SPTL's proposal that the allowance to mitigate the impact of existing transmission infrastructure on the visual amenity of protected landscapes be extended to include additional protected designations in Scotland we do not consider SPTL has provided sufficient justification. Without evidence to show that consumers are willing to pay for improvements in areas over and above landscapes designated national parks and AONBs we do not consider it would be in consumers' interest to extend the scheme at this time.

2.27. A proportion of both SPTL's and SHETL's transmission system is located in landscapes designated as National Parks. Therefore, both SPTL and SHETL would be eligible under the scheme, subject to demonstrating that they have taken account of the requirements of planning bodies and advice from local environmental groups and other relevant parties in deciding how best to prioritise any expenditure, to address the impacts of its existing infrastructure on visual amenity in National Parks.

2.28. We disagree with the view that there is a lack of new incentives for delivery in RIIO-T1. The package of measures put forward includes a range of output measures and incentives specifically focussed on the delivery of outcomes that are in the interests of consumers. This includes output measures for safety, reliability, customer satisfaction and stakeholder engagement, with strong incentives for efficient delivery. Taken together these result in a far more comprehensive package of measures than has been in place for any previous transmission price control.

2.29. We welcome the support for the proposed EDR. We do not agree that, by nature of being discretionary, this measure may lack strength. It is worth noting that the purpose of the EDR is to complement the existing RIIO-T1 package. We are proposing a suite of measures to promote timely connection of new sources of energy, reduce greenhouse gas emissions, reduce the visual impact of the networks, and reduce the network companies' own BCFs. These will be worth around £360m over the control period across the transmission sectors. The EDR will further promote consumer interests by focusing on aspects of the TO's role which do not feature explicitly in the proposed RIIO incentives. We did consider the case for an automatic incentive but recognised that this raised concerns in relation to both the scope for double rewards against the RIIO package and the fact that TOs have a lack of direct control over various factors that impact the growth in low carbon energy which would make it difficult to gauge TOs' contribution for an automatic incentive.

Timely delivery incentive for wider works outputs

2.30. Both SPTL and SHETL responded to the Initial Proposals that a penalty collar (up to 10% of allowed revenue) for the late delivery of wider works outputs is disproportionate. SPTL proposed reducing the proportional penalty collar with a nominal figure of £10m (circa 3% of allowed revenue). SHETL proposed a collar of 5% of base revenue in the year that the construction of the project commenced suggesting that it gave greater certainty as to the consequences of late delivery.

2.31. SHETL also requested Ofgem provide a set of transparent guidelines for how a penalty for late delivery would be determined and the timetable for that process as part of the Final Proposals.

Our views

2.32. The late delivery of wider system reinforcements ('wider works outputs') could potentially have a large negative impact on consumers and users of the transmission system over RIIO-T1. This could include additional costs associated with compensating low carbon generators to forego producing electricity at certain times because system bottlenecks mean the output cannot be accommodated. Consequently, we want companies to face a strong incentive to do what they reasonably can to ensure the timely delivery of wider works outputs.

2.33. As part of RIIO-T1, wider works outputs that are funded through ex ante (baseline wider works outputs) allowances or through a revenue adjustment determined within the price control period (strategic wider works outputs) will be specified in the TO's licence with an agreed delivery date. The delivery date will correspond to the point in time at which the wider works outputs are deemed optimal to minimise system costs and to comply with security standards.

2.34. Failure by the TO to deliver a wider works output by the time specified in the licence could potentially constitute a contravention of the licence condition. However, because of the factors that could influence the delivery timing, many of which are outside the immediate control of the TO, we consider it will be necessary to consider on a case by case basis whether the late delivery constitutes a failure by the TO in relation to the timely delivery standards.

2.35. In considering whether this is the case or not, the Authority would look at the factors leading to the late delivery including 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. Consistent with our decision in our Strategy Decision document we will address late delivery in RIIO-T1 through the imposition of a financial penalty. If the Authority is satisfied that the late delivery constitutes a contravention the TO could potentially be subject to financial penalty determined under the Authority's 'Statement of Policy with Respect to

Financial Penalties⁴ rather than a fixed ex ante incentive rate within the RIIO-T1 package. The penalty determined by the Authority in such cases will be no more than the statutory limit of 10% of the licensee's turnover but the precise level in a particular case will be determined in line with our enforcement penalty guidelines.

2.36. In considering any such penalty the Authority would have regard to relevant factors including the consumer detriment arising from the late delivery of the wider works output based on the actual market background.

2.37. In view of the potential impacts on consumers of late delivery, as well as the due process the Authority would take to establish a contravention of the timely delivery licence standards, we do not agree with SHETL or SPTL that a penalty collar of 10% of turnover would result in TOs incurring disproportionate penalties.

2.38. To provide further certainty to the TOs about what may constitute potential licence contravention in relation to late delivery we intend to amend the Statement of Policy with Respect to Financial Penalties. This amendment will outline the relevant factors that the Authority would consider in deciding whether or not a breach of the timely delivery standards had occurred and also whether or not it is appropriate to take enforcement action and impose a financial penalty and at what level. In line with statutory requirements this is likely to include consideration of the following:

- Has the TO taken all reasonable steps to manage/mitigate the risk?
- What detriment have consumers suffered and, to what extent, was this foreseeable?
- What steps has the TO taken to complete the project/prevent any further detriment?

2.39. We intend to consult on the amendment to the Statement of Policy with Respect to Financial Penalties at the same time as we consult on licence drafting.

Progress on areas for further work and our views

Network Availability

2.40. Both SPTL and SHETL set out their commitment to continue to work to develop a NAP through the joint Ofgem-TOs Working Group. SHETL noted the importance of a viable outage programme to deliver its capital programme with minimal impact on constraint costs.

2.41. SPTL along with SHETL and NGET have been very constructive in progressing work in this area and have met on numerous occasions since the publication of the Initial Proposals. While there are still issues to resolve, significant progress has been

⁴ <http://www.ofgem.gov.uk/About%20us/Documents1/Utilities%20Act%20-%20Statement%20of%20policy%20with%20respect%20to%20financial%20penalties.pdf>

made in developing aspects of the proposals that will be formalised in the new arrangements. In particular, we note that significant progress has been made in relation to the issues of transparency and the sharing of information which will be an important element of the new arrangements.

Our views

2.42. We are very encouraged by the progress that has been made by the TOs, including NGET, in this area. As noted, there has been ongoing constructive engagement between the companies. We note the progress that has been made in relation to the sharing of information. We are therefore confident that robust NAPs can be put in place for 1 April 2013 and that the principles will reflect actual policy (including as these develop over time). We have more work to do particularly on aspects where the TO can change from normal practice to assist the SO and provide an overall net benefit to consumers. This will need a transparent methodology for understanding the cost impact to the TO.

Customer satisfaction

2.43. Both SPTL and SHETL have demonstrated how they are continuing to progress work in this area alongside NGET. Both noted their plans for developing their surveys. SPTL noted its intention to complete and agree a survey pro-forma with a view to implementing a survey later this year. SHETL noted its intention to carry out a dry-run of the survey over the summer and to feed results into the finalised incentive mechanism. SHETL also noted that, in parallel, it intends to continue to seek to develop objective KPIs that measure the quality of the service it offers along with terms of reference for the assessment of its stakeholder engagement to further substantiate the survey results. Both SPTL and SHETL are also considering whether an audit of stakeholder engagement can play a useful role in informing the output.

Our views

2.44. We note that further progress has been made in this area. We continue to recognise the different roles of SPTL and SHETL from NGET and the impact this has on this output. We also recognise the impact of the different population sizes responding to the surveys by SPTL and SHETL relative to NGET. We welcome the plans set out by both SPTL and SHETL to develop and test their surveys during 2012/13. This reflects the significant progress made by both companies in recent months as well as the constructive interactions they have had with each other and with NGET in developing their thinking on these surveys.

2.45. We also note SHETL's continuing work to develop KPIs and work on the role of an audit. We welcome the additional focus on this area. To the extent to which these measures can be demonstrated to be objective then we would be happy for such measures to be reflected in the assessment of their survey results.

2.46. Overall, we note that the proposals the companies are putting forward are consistent with our Strategy Decision document and will encourage network companies to be more outward focused and to be better at providing products and services that reflect what customers value.

Environmental outputs

2.47. SPTL has provided further information on losses and its BCF. SHETL has provided further information in relation to its SF₆ emissions, its BCF and visual amenity.

2.48. SPTL intends to report publicly on what it is doing to contribute to fewer losses and will publish the first report in June this year. In the report SPTL will set out the impact a number of investments it is taking forward could have in reducing losses.

2.49. Both SPTL and SHETL note that they are reviewing how they report on their BCF. SPTL noted that its 2011 report will include third party data verification and an increase in the scope of their reporting. During 2012 SPTL intends to develop a Credit 360 based carbon reporting system to provide for carbon conversion, apportionment and enable remote reporting of contractors into its data collection systems. It notes that it has already funded investment in the development and provision of the required software for this work. SPTL also intends to develop a strategy business level carbon reporting system to help it identify carbon reduction opportunities and build on its control strategies over RIIO-T1. SHETL noted that it is identifying the relevant datasets and identifying new areas for inclusion. It noted that it is considering developing a new process to ensure it fully accounts for its environmental impact and intends to consult with interested parties in summer 2012 before finalising.

2.50. SHETL has provided information to inform its SF₆ baseline for RIIO-T1. These are broadly consistent with best practice. SHETL has also confirmed it accepts the incentive arrangements set out in our Strategy Decision document.

2.51. In relation to visual amenity, SHETL has welcomed the ability to access this proposed allowance if required. However, reflecting the scale of its investment plans, SHETL reiterated its view that it would not anticipate seeking funding to improve the visual amenity of existing assets. Although, not specifically identified as one of its outstanding issues, SPTL noted its support for the visual amenity allowance and noted it would continue to engage with stakeholders on willingness to pay by supporting NGET's survey.

Our views

2.52. We welcome the progress both companies have made in firming up their plans in a number of areas of environmental outputs. These are directly in response to the areas we highlighted as needing further work in the Initial Proposals. We consider

the respective plans set out by SPTL and SHETL to further develop their carbon monitoring and reporting processes during 2012/13 are the minimum requirements for identifying cost effective opportunities for managing their respective BCFs during RIIO-T1.

2.53. We note SHETL's plans for additional stakeholder engagement on reporting on its environmental impacts more broadly. We welcome the company engaging with stakeholders to identify which metrics and information about the company's environmental performance are most meaningful to stakeholders and how it can present this information to best effect. We encourage SHETL to build on best practice in this area.

2.54. In relation to SHETL's proposed baseline for SF₆ emissions, we note that this is broadly in line with the position set out in our Strategy Decision document. However, compared to the best practice commitments other TOs propose to implement in this area, SHETL has adopted a relatively conservative 1% leakage rate for all new additions of SF₆ equipment associated with its baseline load and non-load capex. To some extent this reflects the relatively lower level of experience SHETL has had with operating and monitoring these types of assets to date. We expect SHETL, with more experience of how these assets operate in the field, will adopt a leakage specification of 0.5% for equipment installed on its system as part of its prospective wider works programme.⁵

2.55. We welcome SPTL's intended approach to reporting on how it takes account of losses on its transmission system and look forward to its forthcoming report in June 2012. During the RIIO-T1 period there is likely to be an increase in power flows overall on SPTL's transmission system leading to an increase in total system losses. This makes it even more important that SPTL informs its stakeholders about how it is contributing to fewer losses than there would otherwise be if it did not undertake its proposed activities during the RIIO-T1 period.

2.56. Overall the proposals SHETL and SPTL have put forward are consistent with our Strategy Decision document. The implementation of the companies' plans in these areas will help to make the environmental impacts of transmission networks more transparent to stakeholders. Further, the actions the companies are taking will improve their environmental performance and deliver long term good value for consumers.

Final proposals - outputs SPTL will be required to deliver over RIIO-T1

Safety and reliability

2.57. There are no changes in this area from our Initial Proposals.

⁵ The baseline will be adjusted to take into account all additions from SWW on completion of each project. The effect of these projects on the baseline would be documented by SHETL as each within period determination project was submitted for approval under the SWW arrangements.

2.58. In line with our Strategy Decision document, the safety output will be the requirement for SPTL to comply with the legal safety obligations as set and monitored by the Health and Safety Executive (HSE) as the safety regulator.

2.59. In line with our Strategy Decision document the reliability output will be based on performance in relation to maintaining a low level of Energy Not Supplied (ENS). The key details of the incentive arrangements are as follows:

- SPTL's baseline will be set as an ENS of 225MWh per annum with an incentive rate of £16,000 per MWh.
- There will be a collar which limits the maximum penalty to 3% of allowed revenues such that there will be zero payment for performance below this level.
- There will a licence condition setting a minimum performance standard.

2.60. There will be a suite of secondary output measures that inform the safety and reliability of SPTL's network. These will relate to asset health criticality, replacement priorities, system unavailability and average circuit unreliability (ACU), fault and failures. These deliverables and baselines are consistent with our Strategy Decision document.

Network availability

2.61. SPTL will be required to develop and have in place by 1 April 2013 a NAP. This will be required to set out what the SO, and other stakeholders, can expect from the TO insofar as its actions affect the access to the transmission network. Its licence will set out key contents of the Policy.

2.62. SPTL will be expected to perform in line with the principles of its NAP. This will form the basis of a reputational incentive. There will not be a financial incentive associated with this output from the start of RIIO-T1.

Connections

2.63. SPTL will be required to comply with all of its obligations relating to its connections activity. A penalty of up to 0.5% of revenue per year could apply for failure to meet the timing requirements outlined in its licence. The level of the penalty will vary depending on the proportion of times it fails to meet the timing requirements.

2.64. Separately from the timely connections output, SPTL will connect new generation capacity in the baseline plan. This is summarised in Table 2.1.

Table 2.1 SPTL connection capacity output in RIIO-T1

Output	Additional capacity	Total cost (£m)
New generation connections	2503MW	£181

Customer satisfaction

2.65. SPTL will be required to develop a customer satisfaction survey that will be used to set the level of performance for the primary output. At present it looks like the output might be able to operate (possibly with dampened incentives) from 1 April 2013. If this is not the case provisions will be included to continue preparatory work for a later implementation. We recognise that KPI measures and an audit process might support the survey in informing this output measure.

2.66. A financial incentive of +/-1% of annual allowed revenue will be attached to the development of the survey.

2.67. In addition, SPTL will be subject to a discretionary reward for delivering exceptional results through effective stakeholder engagement. This will be up to a maximum of 0.5% of annual allowed revenue.

Environmental outputs

2.68. SPTL will be subject to the following outputs and incentives over RIIO-T1:

- **SF₆ emissions** – A baseline for procuring new equipment with a maximum leakage rate of between 0.5% and 1% per annum. Differences to baseline will be subject to a reward/penalty based on the non-traded carbon price for carbon equivalent emissions.
- **Losses** – The requirement to report annually to stakeholders on its contribution to fewer losses.
- **BCF** – The requirement to report annually on its BCF at a business level and to review its carbon reduction opportunities and control strategies during RIIO-T1.
- **Visual Amenity** – The requirement to demonstrate an ongoing commitment to use a range of mitigation measures during RIIO-T1 and undertake the work to make a judgement on the use of the allowance to reduce the impact of existing infrastructure as appropriate.

2.69. In addition, SPTL will be subject to the arrangements put in place for an EDR. These arrangements are being designed to complement the existing RIIO-T1 package for electricity transmission. As part of these arrangements SPTL is likely to be required to publish an annual executive level planning statement and consult on that statement. We have recently completed a consultation on the EDR and will publish our conclusions shortly.

Wider works outputs

2.70. Table 2.2 sets out the wider works outputs that will be included in SPTL's baseline price control package.

Table 2.2: Baseline wider works outputs for RIIO-T1

Scheme	Additional transfer capability	Start date	Delivery date	Cost (£m)
SPT-NGET series compensation	Boundary B6: 1100MW (Increase from 3300MW to 4400MW)	2011/12	2015/16	55.1
East – West upgrade		2011/12	2015/16	55.7
Western HVDC link	Boundary B6: 2200MW (Increase from 4400MW to 6600MW)	2012/13	2016/17	292.5
Hunterston-Kintyre link	240MVA AC Link (220kV)	2013/14	2015/16	19.3
Kilmarnock South voltage support	Grid Code and NETS SQSS (National Electricity Transmission System Security and Quality of Supply Standard) compliance on Hunterston Power Station closure	2017/18	2020/21	15.4

2.71. For two schemes in Table 2.2, the Western HVDC (WHVDC) link and the series compensation works on the B6 boundary, the final baseline costs will be updated later in 2012. This will follow the Authority's decision on efficient costs for the WHVDC link and tender information on the series compensation works. SPTL will also have a provision for the WHVDC link only to allow a reopener mechanism to adjust revenues for a pre-defined event. SPTL has proposed the reopener would cover the same events it has also predefined for the SWW cost and output adjusting events (for more information see Appendix 2). These are:

- the terms or conditions of any statutory consent, approval or permission (including but not limited to planning consent)
- unforeseen ground or sea-bed conditions
- extreme adverse weather conditions.

2.72. The reopener would make an adjustment to SPTL's allowed revenues for delivering the project only if a pre-defined event caused the total costs of delivery to change by more than 10% before the totex efficiency incentive rate was applied.

2.73. In addition to the baseline wider works outputs above, SPTL has identified further areas of its wider network that would require reinforcement if new generation projects develop in line with SPTL's best view and upper case scenarios. SPTL will request funding for these prospective SWW outputs when more information becomes available on whether each project is justified. More information on the arrangements for taking forward these SWW outputs during the price control are set out in Chapter 6 - 'Managing risk and uncertainty'.

2.74. As part of its baseline business plan, SPTL will deliver pre-construction outputs for the prospective SWW set out in Table 2.3. The required pre-construction

outputs are: routing, siting and optioneering studies, project design, environmental assessments, technical specifications for cost tenders, and planning consents.

Table 2.3: Baseline funding for pre-construction outputs

Scheme	Cost (£m)
East Coast HVDC	10.5
Dumfries and Galloway	10.7
Kilmarnock South Voltage Support	0.5
Total	21.7

2.75. We are currently developing a framework to enable competition in transmission. For the avoidance of doubt, projects treated as SWW in our RIIO final proposals could be subject to a competitive process and potentially delivered by a third party.

2.76. More information on the treatment of SWW outputs during RIIO-T1 is set out in Chapter 6 - 'Managing risk and uncertainty'.

Final proposals - outputs SHETL will be required to deliver over RIIO-T1

Safety and reliability

2.77. In line with our Strategy Decision document, the safety output will be the requirement for SHETL to comply with the legal safety obligations as set and monitored by the HSE as the safety regulator.

2.78. In line with our Strategy Decision document the reliability output will be based on performance in relation to maintaining a low level of ENS. The key details of the incentive arrangements are as follows:

- SHETL's baseline will be set as an ENS of 120MWh per annum with an incentive rate of £16,000 per MWh.
- There will be a collar which limits the maximum penalty to 3% of allowed revenues such that there will be zero payment for performance below this level.
- There will be a licence condition setting a minimum performance standard.
- SHETL will make compensation payments to customers off supply for 6 hours or more with an additional payment at 12 hours or more if applicable.

2.79. There will be a suite of secondary output measures that inform the safety and reliability of SHETL's network. These will relate to asset health criticality, replacement priorities, system unavailability and average circuit unreliability (ACU), fault and failures. These deliverables and baselines are consistent with our Strategy Decision document.

Network availability

2.80. SHETL will be required to develop and have in place by 1 April 2013 a NAP. This will be required to set out what the SO, and other stakeholders, can expect from the TO insofar as its actions affect the access to the transmission network. Its licence will set out key contents of the policy.

2.81. SHETL will be expected to perform in line with the principles of its NAP. This will form the basis of a reputational incentive. There will not be a financial incentive associated with this output from the start of RIIO-T1.

Connections

2.82. SHETL will be required to comply with all of its obligations relating to its connections activity. A penalty of up to 0.5% of revenue per year could apply for failure to meet the timing requirements outlined in its licence. The level of the penalty will vary depending on the proportion of times it fails to meet the timing requirements.

2.83. In addition, SHETL will agree standards of service with stakeholders on top of its licence requirements.

2.84. In addition to the timely connections output, SHETL will connect new generation capacity in the baseline plan. This is summarised in Table 2.4.

Table 2.4 SHETL connection capacity output in RIIO-T1

	Capacity output	Total cost (£m)
Sole use connections	1,168MW	£99
Shared use infrastructure	1,006MVA	£83

Customer satisfaction

2.85. SHETL will be required to develop a customer satisfaction survey that will be used to set the level of performance for the primary output. At present it looks like the output might be able to operate (possibly with dampened incentives) from 1 April 2013. If this is not the case provision will be included to continue preparatory work for a later implementation. We recognise that KPI measures and an audit process might support the survey in informing this output measure.

2.86. A financial incentive of +/-1% of annual allowed revenue will be attached to the development of the survey.

2.87. In addition, SHETL will be subject to a discretionary reward for delivering exceptional results through effective stakeholder engagement. This will be up to a maximum of 0.5% of annual allowed revenue.

Environmental outputs

2.88. SHETL will be subject to the following outputs and incentives over RIIO-T1:

- **SF₆ emissions** - Table 2.5 sets out SHETL's baseline for emissions over RIIO-T1. This covers emissions from existing SF₆ assets as well as a maximum leakage rate of 1% per annum from new equipment installed on SHETL's transmission system as part of its ex ante load and non load capex programme allowances. The baseline will be adjusted to take into account of additions from SWW outputs on completion of each project. The effect of these projects on the baseline would be documented by SHETL as each within period determination project was submitted for approval under the SWW arrangements.

Table 2.5 Baseline SF6 emissions for RIIO-T1

	2013 /14	2014 /15	2015 /16	2016 /17	2017 /18	2018 /19	2019 /20	2020 /21
Leakage in kg	150.7	173.1	210.7	226.1	245.3	261.4	270.9	274.7
% installed mass	2.00	1.8	1.7	1.6	1.5	1.5	1.5	1.5

- **Losses** – The requirement to report annually to stakeholders on its contribution to fewer losses.
- **BCF** – The requirement to report annually to stakeholders on its BCF at a business level during RIIO-T1.
- **Visual Amenity** – The requirement to demonstrate an ongoing commitment to use a range of mitigation measures during RIIO-T1 and undertake the work to make a judgement on the use of the allowance to reduce the impact of existing infrastructure as appropriate.

2.89. In addition, SHETL will be subject to the arrangements put in place for an EDR. These arrangements are being designed to complement the existing RIIO-T1 package for electricity transmission. As part of these arrangements SHETL is likely to be required to publish an annual executive level planning statement and consult on that statement. We have recently completed a consultation on the EDR and will publish our conclusions shortly.

Wider works outputs

2.90. Table 2.6 sets out the wider works outputs that will be included in SHETL's baseline price control package.

Table 2.6: Baseline wider works outputs for RIIO-T1

Scheme	Additional transfer capability	Start date	Delivery date	Cost (£m)
Beaully-Blackhillock-Kintore	Boundary B1: 300MW (Increase from 450MW to 750MW)*	Pre-RIIO T1	2015	50.8
Beaully Mossford substation	Sub-boundary 10: 338MW (element of overall scheme)	Pre-RIIO T1	2013/14	1.6

* This transfer capability of this boundary in 2015 will depend on when the Beaully-Denny upgrade is completed. The Beaully Denny upgrade will deliver an additional 800MW transfer capability and was approved under arrangements for Transmission Investment for Renewable Generation.

2.91. In addition to the baseline wider works outputs above, SHETL has identified prospective wider works outputs if new generation projects develop in line with its best view and upper case scenarios. SHETL will request funding for these prospective SWW outputs when more information becomes available on whether each project is justified. More information on the arrangements for taking forward these outputs during the price control are set out in Chapter 6 - 'Managing risk and uncertainty'.

2.92. As part of its baseline business plan, SHETL will deliver pre-construction engineering outputs for the prospective SWW set out in Table 2.7. The required pre-construction outputs are: routing, siting and optioneering studies, project design, environmental assessments, technical specifications for cost tenders, and planning consents.

Table 2.7: Baseline funding of pre-construction outputs

Scheme	Cost (£m)
Beaully - Blackhillock 275kV	0.5
Orkney Isles	13.8
Caithness Moray	2.3
Shetland HVDC	0.4
400kv East Coast	1.4
Kintore - Tealing (XT1 / XT2)	1.1
Beaully - Keith 400kV	13.4
Errochty Reconfiguration	0.2
Inner Hebrides HVDC (Islay)	7.0
Eastern Sub-sea HVDC - Second Circuit	9.8
Future Design Costs	15.7
Two Public Planning Inquiries	2.0
Total	67.6

2.93. We are currently developing a framework to enable competition in transmission. For the avoidance of doubt, projects treated as SWW in our RIIO final proposals could be subject to that competitive process and therefore potentially delivered by a third party.

2.94. More information on the treatment of SWW outputs during RIIO-T1 is set out in Chapter 6 - 'Managing risk and uncertainty'.

Where to find additional information

2.95. Additional information on the outputs and incentives for RIIO-T1 can be found in the following documents:

- Strategy Decision document – Supporting paper 'RIIO-T1: Outputs and Incentives'
<http://www.ofgem.gov.uk/Networks/Trans/PriceControls/RIIO-T1/ConRes/Documents1/T1decisionoutput.pdf>
- SPTL
 - Chapters 3 and 4 of its Executive Summary
http://www.spenergynetworks.com/PublicInformation/pdf/Executive_Summary.pdf
 - Supporting paper – 'Environment'
<http://www.spenergynetworks.com/PublicInformation/pdf/Environment.pdf>
- SHETL
 - Main paper – Chapters 2,3,4,5,6,7
[http://www.ssepd.co.uk/uploadedFiles/Controls/Lists/Resources/Compliance_report\(1\)/SHETL_BusinessPlanUpdateJanuary2012.pdf](http://www.ssepd.co.uk/uploadedFiles/Controls/Lists/Resources/Compliance_report(1)/SHETL_BusinessPlanUpdateJanuary2012.pdf)
 - Supporting Paper 'ENS Proposal'
http://www.ssepd.co.uk/uploadedFiles/Controls/Lists/Resources/Transmission_price_control_review/Current_documents/Supporting_information/RIIO_SHETL_January2012UpdateENS_Proposal.pdf
 - Supporting Paper 'Customer and Stakeholder Measures'
http://www.ssepd.co.uk/uploadedFiles/Controls/Lists/Resources/Transmission_price_control_review/Current_documents/Transmission_price_control_review_business_plan_supporting_information/RIIO_SHETL_DecemberUpdateCustomerAndStakeholderMeasures.pdf
 - Supporting Paper 'Environmental Measures'
http://www.ssepd.co.uk/uploadedFiles/Controls/Lists/Resources/Transmission_price_control_review/Current_documents/Transmission_price_control_review_business_plan_supporting_information/RIIO_SHETL_January2012UpdateEnvironmentalMeasures.pdf

3. Encouraging innovation

Chapter Summary

This chapter sets out the arrangements that will apply to encourage SPTL and SHETL to innovate to drive improved outcomes for consumers.

Introduction

3.1. The RIIO model has a number of elements that encourage innovation, including the longer price control period, the outputs focus and strong efficiency incentives. In addition, we set out the three elements of an innovation stimulus package which the companies have considered in developing their business plans:

- **Network Innovation Allowance (NIA)** - The NIA is a set allowance that each of the RIIO network licensees will receive to fund small-scale innovative projects as part of their price control settlement.
- **Network Innovation Competition (NIC)** - The NIC is an annual competition for funding larger more complex projects. The NIC will comprise two competitions - one for gas and one for electricity.
- **Innovation Roll-out Mechanism (IRM)** - A Revenue Adjustment Mechanism that enables companies to apply for additional funding within the price control period for the roll-out of new, proven solutions with demonstrable and cost effective low-carbon or environmental benefits.

3.2. Each network operator was required to include an innovation strategy as part of their business plan.⁶ We set out that the level of funding available through the NIA would be linked to the innovation strategy. We set out in the Strategy Decision document that the NIA would be capped at 0.5-1% of allowed revenue. We also set out that companies wishing to spend more than 0.5% of allowed revenue should request that higher amount in their innovation strategy. In making such a request the companies were required to provide justification for the additional funds. We set out that such requests would be judged by the quality and content of the innovation strategy as well as the company's justification.

What we set out in our Initial Proposals

3.3. We set out in the Initial Proposals that:

- both companies had provided a better coverage of innovation in their plans

⁶ The innovation strategy would not give regulatory approval for any specific project. Rather projects will need to meet the requirements of the NIC and NIA governance arrangements – which are being developed through the course of 2012.

- both companies had made improvements in their innovation strategies but neither had provided sufficient justification for their requested for a NIA of greater than the default position of 0.5% (SPTL had request 0.75% and SHETL requested 1%)
- both SPTL and SHETL would be given the opportunity to submit additional information prior to Final Proposals. We provided this opportunity as we recognised that this was the first time both companies have been required to develop innovation strategies and other network companies had the opportunity to learn from strategies set out by SPTL and SHETL
- we supported SHETL's proposal to change the profiling of its NIA allowance, which would have the effect of dividing the allowance evenly across the eight years of the RIIO-T1 period.

Summary of responses

3.4. Three respondents commented on innovation. One respondent strongly urged Ofgem to consider increasing all companies' NIAs to a level of greater than 1%. The respondent argued that innovation would be essential to achieve a low carbon transition and reliability at an affordable cost. It also considered it appropriate for customers or taxpayers to fund the research and development needed to establish the viability of different transmission options given the uncertainty around the value of these activities for individual shareholders.

3.5. SPTL noted that while it was disappointed with Ofgem's Initial Proposal not to provide its requested NIA of 0.75%, it did not intend to put forward further information to support an NIA of higher than 0.5%. SPTL considered its efforts would be best focussed on mobilising innovation projects.

3.6. SHETL submitted further evidence to Ofgem to justify its request for a higher level of NIA funding. Its main justification for the additional allowance remained that this would allow a more rapid deployment of innovation into the business over the RIIO-T1 period.

Our views

3.7. We agree with the first respondent that innovation will be an important factor in achieving the transition to the low carbon economy. However, we note that it is not the only important factor. Under RIIO-T1 we are providing a package of outputs and incentives including a range of environmental measures. Further we note that the amount of direct funding provided in relation to innovation does not just comprise the NIA but also the funding under the NIC and IRM. Taken together we consider this provides a strong package focused on delivering the transition to the low carbon economy while at the same time providing value to consumers.

3.8. We note that SPTL has not submitted a case for NIA funding of greater than 0.5%. We welcome its support of the overall innovation stimulus framework and its commitment to focus on mobilising innovation projects.

3.9. We note that SHETL has submitted a case for additional funding in relation to the NIA. This included the provision of further evidence to Ofgem. In absolute terms we consider that SHETL has developed a good quality innovation strategy. SHETL has met the minimum requirements that we set for the strategy in our Strategy Decision document and in some areas the quality of its response has been particularly strong. In addition, it has provided a good description of its business processes for selecting and managing projects. However, there are still areas of SHETL's strategy where we would have liked further detail.

Final Proposals: SPTL's arrangements for encouraging innovation in RIIO-T1

3.10. As SPTL has decided not to provide any additional justification for a higher NIA then, in line with its Initial Proposals, SPTL's NIA will be set at 0.5% of its allowed revenue.

Final Proposals: SHETL's arrangements for encouraging innovation in RIIO-T1


3.11. In light of the additional information they have provided we do not consider SHETL has done enough to justify the 1% NIA it has requested. However, we do consider it has justified a greater allowance than the 0.5% default. Based on our assessment approach we consider that SHETL's Innovation Strategy equates to an increased allowance of 0.2% of allowed revenue.

3.12. As such SHETL's NIA will be set at 0.7% of its allowed revenue. Further in line with the Initial Proposals, SHETL's total NIA will be divided evenly across the eight years of the RIIO-T1 period. As also set out in the Initial Proposals, we intend to build protection into the licence to deal with the possibility that actual revenues are lower than that forecast as otherwise this would have the effect of over recovery of NIA.

Where to find additional information

3.13. Additional information on innovation in RIIO-T1 can be found in the following documents:

- Strategy Decision Document – Supporting paper 'RIIO-T1 and GD1 Business plans, innovation and efficiency incentives'
<http://www.ofgem.gov.uk/Networks/Trans/PriceControls/RIIO-T1/ConRes/Documents1/T1decisionbusplan.pdf>



RIIO-T1: Final Proposals for SP Transmission Ltd and Scottish Hydro Electric Transmission Ltd

- SPTL
 - Chapters 9 of its Executive Summary
http://www.spenergynetworks.com/PublicInformation/pdf/Executive_Summary.pdf
 - Supporting paper – ‘Innovation’
<http://www.spenergynetworks.com/PublicInformation/pdf/Innovation.pdf>
- SHETL
 - Innovation Strategy - Update
[http://www.ssepd.co.uk/uploadedFiles/Controls/Lists/Resources/Compliance_report\(1\)/SHETL_InnovationStrategyUpdateJanuary2012.pdf](http://www.ssepd.co.uk/uploadedFiles/Controls/Lists/Resources/Compliance_report(1)/SHETL_InnovationStrategyUpdateJanuary2012.pdf)

4. Allowed revenue – ensuring cost efficiency

Chapter Summary

This chapter sets out our Final Proposals for an efficient level of expenditure over RIIO-T1 for SPTL and SHETL.

Introduction

4.1. In the Initial Proposals we set out the forecast baseline capex and opex for SPTL and SHETL, as set out in their updated business plans. This chapter summarises the responses to the Initial Proposals and sets out the proposed final baselines for the companies.

4.2. Capex is divided into load-related and non-load related expenditure. Load-related capex is the investment required to connect new generators and customers to the transmission network, to upgrade the existing transmission network including boundaries between TOs and to cater for growth in demand. The amount and location of load-related capex is dependent upon the quantity and location of new customers, particularly new generation customers and changes in demand for existing customers. As a result, there is significant uncertainty in load-related capex over the price control period. To overcome this we use a number of different mechanisms to fund the TOs' load related capex, with a baseline forecast being funded ex ante for each year of RIIO-T1, and uncertainty mechanisms (including revenue drivers and within-period determinations) which adjust revenue according to outcomes such as the volume of generation connected or capacity across defined boundaries.

4.3. Non-load related capex principally comprises of expenditure required to replace existing assets on the TO network, but also includes expenditure relating to network resilience, flooding, physical security and a telecoms network upgrade. Non-load related capex depends on the age and condition of existing assets and their criticality to the operation of the network. As this type of expenditure can be forecast with greater accuracy than load-related capex, it is generally funded through ex ante expenditure baselines.

4.4. Opex covers the ongoing costs of running the TOs' business, including asset maintenance and support services. It is funded through ex ante expenditure baselines.

What we set out in our Initial Proposals

4.5. We set out in the Initial Proposals that:

- SPTL proposed expenditure baselines of £1,449m for capex and £154m for opex. Its best view expenditure forecasts were £1,938m for capex and £154m for opex.
- SHETL proposed expenditure baselines of £849m for capex and £164m for opex. Its best view expenditure forecasts were £4,001m for capex and £244m for opex.
- For both companies, our view was that the level of costs appeared reasonable for the outputs that would be delivered.

Summary of responses

4.6. Only SHETL explicitly commented on the cost assessment section of the Initial Proposals. It noted that its baseline is challenging but that it is an appropriate challenge. However, it also noted that its opex allowance reflects its best view at the time of its business plan submission and that, in the event of a significant change to its obligations, there would need to be a mechanism to allow it to recover additional costs. It identified additional compliance or reporting requirements as an example.

Our views

4.7. We note SHETL's comments on the effect of changes in its obligations on its opex. We consider that the opex baseline is set at a level that allows for changes in obligations such as compliance and reporting requirements.

Final Proposals: SPTL capex and opex baselines for RIIO-T1

4.8. The proposed baselines and best view forecasts for SPTL are set out in Table 4.1. The following sections of this chapter set out the baseline proposals in more detail. The funding mechanisms dealing with the uncertainties around expenditure between the baseline and best view are set out in Chapter 6 – 'Managing risk and uncertainty'. The figures exclude non-controllable opex and expenditure carried out under Transmission Investment for Renewable Generation (TIRG) and Transmission Investment Incentives (TII) schemes, as this has already been assessed.⁷

⁷ A summary of Ofgem's decisions relating to TIRG and TII projects can be found at <http://www.ofgem.gov.uk/Networks/Trans/ElecTransPolicy/CriticalInvestments/TIRG/Pages/TIRG.aspx> and <http://www.ofgem.gov.uk/Networks/Trans/ElecTransPolicy/CriticalInvestments/InvestmentIncentives/Pages/InvestmentIncentives.aspx>

Table 4.1 - SPTL expenditure baselines and best view forecasts (excluding Non Controllable Opex)

£m - year to 31 March 2009/10 prices	2014	2015	2016	2017	2018	2019	2020	2021
Total load related capex	239.2	258.2	154.7	37.5	17.2	23.5	31.2	19.1
Total non-load related capex	66.8	68.9	70.5	81.8	90.6	89.9	96.9	78.3
Total opex	17.4	17.5	17.9	19.6	19.8	19.5	21.1	21.4
Total baseline expenditure	323.4	344.6	243.1	138.9	127.6	132.9	149.2	118.8

£m - year to 31 March 2009/10 prices	2014	2015	2016	2017	2018	2019	2020	2021
Total load related capex	243.9	283.4	214.2	136.1	120.3	116.6	102.9	19.1
Total non-load related capex	66.8	68.9	70.7	85.0	104.0	108.0	108.4	89.3
Total opex	17.4	17.5	17.9	19.6	19.8	19.5	21.1	21.4
Total best view forecast	328.1	369.9	302.7	240.7	244.2	244.2	232.3	129.8

Load-related capex

4.9. Baseline load-related capex of £781m is proposed during the RIIO-T1 period. This investment is required to connect new generation, to upgrade SPTL's network in order to manage the transmission of greater amounts of power generated in northern Scotland, and to reinforce the boundary between its network and that of NGET.

4.10. There has been one small change to the capex baseline for Final Proposals. In Initial Proposals SPTL had included its best view forecast of Real Price Effects in its capex baseline. For Final Proposals we have removed the element of RPEs which relates to capex above the baseline, and have instead funded this expenditure through application of an RPE allowance to the capex uncertainty mechanisms. The effect of this change is to reduce baseline capex by £25m over the period. However, the best view forecast is unchanged.

4.11. Table 4.2 below sets out the annual baselines for SPTL's load-related capex. Local Enabling investment represents projects which are triggered by new generation or demand connections. Wider works represents the expenditure required for reinforcement of the network in order to meet security and quality of supply requirements. Customer contributions are revenues from customers relating to construction of their connections. Real price effects represent growth in input prices (for example contract labour or materials) which may be greater than RPI. All figures are in 2009/10 prices.

Table 4.2 – Baselines for SPTL’s load-related capex

£m - year to 31 March 2009/10 prices	2014	2015	2016	2017	2018	2019	2020	2021
Local Enabling	81.3	87.2	59.2	21.7	20.4	16.3	23.9	16.1
Wider Works	161.2	172.9	102.4	22.3	2.0	6.5	5.7	1.7
Other capex	1.0	1.3	0.9	0.9	0.9	0.9	0.9	0.9
Customer contributions	-4.7	-6.8	-11.7	-9.2	-7.4	-1.8	-1.9	-1.5
Real price effects	0.4	3.6	3.9	1.8	1.3	1.6	2.6	1.9
Total load related capex baseline	239.2	258.2	154.7	37.5	17.2	23.5	31.2	19.1

Non-load related capex

4.12. Baseline non-load related capex of £644m is proposed during the RIIO-T1 period. SPTL is undertaking a significant overhead line replacement programme during RIIO-T1 and RIIO-T2 as lines that were constructed in the 1970s come to the end of their lives. This is a significant factor in the increase in forecast expenditure during the period.

4.13. There is significant uncertainty regarding cost estimates and timing for up to five overhead line schemes. The progress of these schemes depends on the configuration of network reinforcements, so they have been excluded from the baseline and will be funded through within-period determinations.

4.14. Table 4.3 below sets out SPTL’s non-load related capex in detail.

Table 4.3 – SPTL’s non-load related capex

£m - year to 31 March 2009/10 prices	2014	2015	2016	2017	2018	2019	2020	2021
Transformers	5.3	5.7	5.2	8.6	7.1	1.4	3.4	3.9
Switchgear	13.8	15.6	15.3	12.9	12.4	17.9	16.7	8.1
Protection and Control	11.8	11.6	10.6	10.4	11.2	6.5	7.0	7.5
Overhead lines	20.8	19.9	21.0	28.1	36.3	38.9	40.3	31.4
Other non-load related expenditure	15.2	15.1	16.6	18.3	17.6	17.5	20.0	18.9
Real price effects	0.1	1.0	1.8	3.4	5.8	7.7	9.3	8.6
Total non-load related capex baseline	66.8	68.9	70.5	81.8	90.6	89.9	96.9	78.3

Opex

4.15. Baseline opex of £154m during the RIIO-T1 period is proposed. This is set out in detail in Table 4.4 below. Direct opex represents operational expenditure directly related to network activities. Business support and CAI (Closely Associated Indirect) costs represent operational expenditure related to wider support of operations, and includes categories such as IT, finance, and network planning and design. The table excludes £193m of forecast non-controllable opex. This represents items such as network rates and licence fees which cannot be controlled by SPTL and are passed through to customers.

Table 4.4 – SPTL’s opex (Excluding Non Controllable Opex)

£m - year to 31 March 2009/10 prices	2014	2015	2016	2017	2018	2019	2020	2021
Direct opex	6.8	6.8	6.8	8.3	8.3	8.4	9.6	9.6
Business support and CAI	10.6	10.7	11.0	11.1	11.1	10.6	10.7	10.7
Real price effects	0.0	0.0	0.1	0.2	0.4	0.5	0.8	1.1
Total opex baseline	17.4	17.5	17.9	19.6	19.8	19.5	21.1	21.4

Final Proposals: SHETL capex and opex baselines for RIIO-T1

4.16. The proposed baselines and best view forecasts for SHETL are set out in Table 4.5. The following sections of this chapter set out the baseline proposals in more detail. The funding mechanisms dealing with the uncertainties around expenditure between the baseline and best view are set out in Chapter 6 – ‘Managing risk and uncertainty’. The figures exclude non-controllable opex and expenditure carried out under TIRG and TII schemes, as this has already been assessed.⁸

Table 4.5 - SHETL expenditure baselines and best view forecasts (Excluding Non Controllable Opex)

£m - year to 31 March 2009/10 prices	2014	2015	2016	2017	2018	2019	2020	2021
Total load related capex	113.0	127.1	181.1	103.2	40.0	30.7	22.5	22.3
Total non-load related capex	21.7	20.1	23.1	27.4	28.6	29.0	31.3	27.8
Total opex	12.7	15.4	18.1	20.5	22.7	23.8	24.9	26.3
Total baseline expenditure	147.4	162.6	222.3	151.1	91.4	83.5	78.7	76.3

£m - year to 31 March	2014	2015	2016	2017	2018	2019	2020	2021
Total load related capex	570.5	716.4	640.9	488.2	352.3	325.4	312.8	385.9
Total non-load related capex	21.7	20.1	23.1	27.4	28.6	29.0	31.3	27.8
Total opex	13.5	16.0	18.8	30.4	34.6	38.7	44.6	47.0
Total best view forecast	605.6	752.5	682.8	546.0	415.5	393.1	388.8	460.7

Load-related capex

4.17. Baseline load-related capex of £640m during the RIIO-T1 period is proposed. This investment is required to connect new generation, and to upgrade and reinforce SHETL’s existing network to provide additional capacity for this new generation.

4.18. SHETL’s proposed baseline only represents 17% of its best view scenario of likely investment. This reflects the uncertainty surrounding the timing of generation connection and wider works schemes. The investment for the large wider works

⁸ A summary of Ofgem’s decisions relating to TIRG and TII projects can be found at <http://www.ofgem.gov.uk/Networks/Trans/ElecTransPolicy/CriticalInvestments/TIRG/Pages/TIRG.aspx> and <http://www.ofgem.gov.uk/Networks/Trans/ElecTransPolicy/CriticalInvestments/InvestmentIncentives/Pages/InvestmentIncentives.aspx>

schemes, including the HVDC links to Scottish Islands and North East England, is addressed through the uncertainty mechanisms discussed in Chapter 6 – ‘Managing risk and uncertainty’.

4.19. Table 4.6 below sets out the annual baselines for SHETL’s load-related capex. Local Enabling investment represents projects which are triggered by new generation or demand connections. Wider works represents the expenditure required for reinforcement of the network in order to meet security and quality of supply requirements. Real price effects represent changes in prices for specific items (for example contract labour or materials) which may be greater than RPI. All figures are in 2009/10 prices.

Table 4.6 – Annual baselines for SHETL’s load-related capex

£m - year to 31 March 2009/10 prices	2014	2015	2016	2017	2018	2019	2020	2021
Local Enabling works	64.0	88.5	156.7	86.0	28.6	19.1	12.6	12.4
Wider Works	46.1	34.2	17.6	13.4	9.3	9.5	8.1	7.8
Other capex	2.7	2.8	2.7	0.2	0.2	0.2	0.2	0.2
Customer contributions	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Real price effects	0.2	1.7	4.0	3.7	2.0	1.9	1.6	1.9
Total load related capex baseline	113.0	127.1	181.1	103.2	40.0	30.7	22.5	22.3

Non-load related capex

4.20. Baseline non-load related capex of £209m during the RIIO T1 period is proposed. Expenditure is forecast to increase over the period as SHETL replaces overhead lines which are coming to the end of their lives.

4.21. Table 4.7 below sets out SHETL’s non-load related capex in detail.

Table 4.7 – Annual baselines for SHETL’s non-load-related capex

£m - year to 31 March 2009/10 prices	2014	2015	2016	2017	2018	2019	2020	2021
Transformers	2.0	2.5	2.5	5.0	6.0	9.0	7.0	11.0
Switchgear	3.0	3.5	1.1	2.0	1.0	1.3	2.0	0.0
Protection and Control	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
Overhead lines	7.8	6.8	8.7	12.6	14.1	10.8	14.0	8.6
Other non-load related expenditure	8.3	6.5	9.8	6.4	5.7	5.7	5.7	5.4
Real price effects	0.0	0.1	0.3	0.8	1.1	1.5	2.0	2.1
Total non-load related capex baseline	21.7	20.1	23.1	27.4	28.6	29.0	31.3	27.8

Opex

4.22. Baseline opex during the RIIO-T1 period of £164m is proposed. This is set out in detail in Table 4.8 below. The increase in opex during the period is largely due to the increasing size of SHETL's network. Direct opex represents operational expenditure directly related to network activities. Business support and CAI costs represent operational expenditure related to wider support of operations, and includes categories such as IT, finance, and network planning and design. The table excludes £95m of forecast non-controllable opex. This represents items such as network rates and licence fees which cannot be controlled by SHETL and are passed through to customers.


Table 4.8 – SHETL's opex (Excluding Non Controllable Opex)

£m - year to 31 March 2009/10 prices	2014	2015	2016	2017	2018	2019	2020	2021
Direct opex	2.5	3.1	4.0	4.3	4.4	4.5	4.4	4.5
Business support and CAI	10.3	12.2	13.8	15.5	17.2	17.8	18.5	19.3
Real price effects	-0.1	0.1	0.3	0.7	1.1	1.5	2.0	2.5
Total opex baseline	12.7	15.4	18.1	20.5	22.7	23.8	24.9	26.3

Where to find additional information

4.23. Additional information on cost efficiency in RIIO-T1 can be found in the following documents:

- Strategy Decision document – Supporting paper 'RIIO-T1: Tools for Cost Assessment'
<http://www.ofgem.gov.uk/Networks/Trans/PriceControls/RIIO-T1/ConRes/Documents1/T1decisioncosts.pdf>
- SPTL
 - Chapters 2,5 and Annexes of its Executive Summary
http://www.spenergynetworks.com/PublicInformation/pdf/Executive_Summary.pdf
 - Supporting paper – 'Delivery and Costs'
http://www.spenergynetworks.com/PublicInformation/pdf/Delivery_and_Costs.pdf
 - Supporting paper – 'Workforce Renewal'
http://www.spenergynetworks.com/PublicInformation/pdf/Workforce_Renewal.pdf
 - Supporting paper – 'Business Support'
http://www.spenergynetworks.com/PublicInformation/pdf/Business_Support.pdf
- SHETL
 - Main Paper – Chapters 3,5,7
[http://www.ssepd.co.uk/uploadedFiles/Controls/Lists/Resources/Compliance_report\(1\)/SHETL_BusinessPlanUpdateJanuary2012.pdf](http://www.ssepd.co.uk/uploadedFiles/Controls/Lists/Resources/Compliance_report(1)/SHETL_BusinessPlanUpdateJanuary2012.pdf)
 - Supporting Paper – 'Demonstrating Cost Efficiency'



RIIO-T1: Final Proposals for SP Transmission Ltd and Scottish Hydro Electric
Transmission Ltd

http://www.ssep.co.uk/uploadedFiles/Controls/Lists/Resources/Transmission_price_control_review/Current_documents/Transmission_price_control_review_business_plan_supporting_information/RIIO_SHETL_January2012DemonstratingCostEfficiency.pdf

5. Allowed revenue – efficient financial costs

Chapter Summary

This section sets out our Final Proposals on the elements of SPTL’s and SHETL’s price control settlement that we collectively refer to as ‘financial issues’. These are the allowed return, calculation of the Regulatory Asset Values (RAV) (ie capitalisation and depreciation) and pensions.

Introduction

5.1. This chapter provides a summary of our Initial Proposals and the consultation responses we received and sets out our Final Proposals, which are not materially different from those set out in our Initial Proposals.

5.2. Unlike in other chapters in this document, we set out both companies’ financial packages together in each section to avoid repetition.

Corporate finance

Summary of our Initial Proposals

5.3. In our Initial Proposals for SPTL and SHETL in RIIO-T1 we accepted the companies’ corporate finance proposals (allowed return, asset lives and depreciation) as submitted in their updated business plans. These are summarised in Table 5.1.

Table 5.1: Corporate finance Initial Proposals for SPTL and SHETL

Parameter	SPTL	SHETL
Cost of equity (post-tax real)	7%	7%
Cost of debt (pre-tax real)	Annually indexed using 10-year simple trailing average	Annually indexed using 10-year trailing average with bespoke weighting tracking investment profile
Notional gearing	55%	55%
Depreciation profile	Straight line: 20 years on existing assets, 45 years on new assets	Straight line: 20 years on existing assets, 45 years on new assets
Asset lives transition	One price control period (8 years)	Two price control periods (16 years)

Summary of responses

5.4. Three respondents commented on the corporate finance aspects of the Initial Proposals. Further detail is provided in Appendix 1 of the Overview document.

5.5. One respondent considered there was limited explanation on how risk had been considered in setting the allowed returns in the Initial Proposals. They considered that the difference between SPTL's and SHETL's capex-to-RAV ratios was not reflected in the return set in the Initial Proposals (SHETL's ratio is twice as high as SPTL's). The same respondent argued that SPTL would bear more risk as a larger portion of its totex allowance will be set at the start of the period, whereas the majority of SHETL's totex allowance is subject to revenue drivers and uncertainty mechanisms.

5.6. Respondents also expressed concern that the bespoke weighting applied to SHETL's cost of debt index did not appear to take into account depreciation of RAV.

5.7. SPTL made the following comments on the corporate finance Initial Proposals:

- Expressed concern that a sharp increase in interest rates could lead to a shortfall in funding against SPTL's actual cost of debt.
- Noted that it had evaluated the impact of the application of a similar approach to cost of debt as SHETL's proposed bespoke weighting but concluded that, for SPTL's situation, the small resulting adjustments to the index would not justify the increased complexity of such a mechanism.

5.8. SHETL's consultation response noted the position outlined by Ofgem that it would suffer no financial detriment from fast-tracking and that if the financial components as calculated under the licence model were reduced then SHETL should receive the necessary uplift to correct the position.

Our views and Final Proposals

5.9. In this section we comment on the consultation responses and summarise our Final Proposals.

5.10. Under the best view of totex, SHETL's capex-to-RAV ratio of 29% is considerably higher than the 15% ratio for SPTL. However, as Tables 5.3-5.6 of the Initial Proposals supporting document show, a far smaller share of SHETL's expenditure is set at the start of the price control. Around 76% of SHETL's best view totex is subject to uncertainty mechanisms such as the Strategic Wider Works volume driver, compared to 23% for SPTL. As noted in the consultation responses, the uncertainty mechanisms mitigate some of the risk for SHETL. Additionally, our Initial Proposals accepted SHETL's bespoke weighting cost of debt index, which further reduces cash flow risk. Overall, we considered that the proposed packages achieved similar levels of risk for SHETL and SPTL. We are further reassured by the fact that each company considers 7% cost of equity and 55% notional gearing

appropriate for its circumstances, given the rest of the regulatory package in Initial Proposals. We stress that, in accordance with the RIIO principles, for non fast-tracked companies we will set the financial package (or packages) that reflect their cash flow risk.

5.11. When describing SHETL’s bespoke weighted cost of debt index in Initial Proposals, we abstracted from depreciation and other changes to RAV in order to simplify the exposition. The approach to weighting, as proposed by SHETL, does account for depreciation and any other changes to RAV (eg disposals). By definition, the weights will add up to 100% in each year, so there is consistency in the approach. Table 5.2 updates and clarifies the formula from the Initial Proposals. We published the model that shows how the weighted index would be calculated alongside the Initial Proposals document.⁹

Table 5.2: Formula for SHETL’s weighted cost of debt index

Year	Dates	Index	Weighting
1	1/4/13 – 31/3/14	Ofgem trailing average index for year 1	100%
2	1/4/14 – 31/3/15	Ofgem trailing average index for year 2 + Index average for 1/4/13 – 31/10/13	Year 1 opening RAV / Year 1 closing RAV + Year 1 change in RAV / Year 1 closing RAV
3	1/4/15 – 31/3/16	Ofgem trailing average index for year 3 + Index average for 1/4/13 – 31/3/14 + Index average for 1/4/14 – 31/10/14	Year 1 opening RAV / Year 2 closing RAV + Year 1 change in RAV / Year 2 closing RAV + Year 2 change in RAV / Year 2 closing RAV
4	1/4/16 – 31/3/17	Ofgem trailing average index for year 4 + Index average for 1/4/13 – 31/3/14 + Index average for 1/4/14 – 31/3/15 + Index average for 1/4/15 – 31/10/15	Year 1 opening RAV / Year 3 closing RAV + Year 1 change in RAV / Year 3 closing RAV + Year 2 change in RAV / Year 3 closing RAV + Year 3 change in RAV / Year 3 closing RAV
...

5.12. With regard to SPTL’s argument about the risk of the cost of debt index persistently underfunding the cost of debt – the index is a proxy of network companies’ average cost of existing and new debt. It is true that current market rates may deviate from the value of the 10-year trailing average at any point in time. However, as long as network companies are able to issue debt no more expensively than the index value on the day of issuance (in our Strategy Decision document we showed that, since 1998, network companies have been able to issue debt on average 58bps more cheaply than the value of the index on the day of issuance), the 10-year trailing average should provide sufficient funding for their average cost of debt. In the Strategy Decision document, we showed this to be the case for different types of companies under the assumption of rapidly rising market rates.¹⁰

⁹ Cost of debt index - illustration of SHETL’s bespoke weighted index for RIIO-T1
http://www.ofgem.gov.uk/Networks/Trans/PriceControls/RIIO-T1/ConRes/Documents1/Cost_of_Debt_SHETL.xlsx

¹⁰ Decision on strategy for the next transmission and gas distribution price controls – RIIO-T1 and GD1 financial issues, paragraphs 3.14-3.48

5.13. Having given consideration to the consultation responses, we consider that SPTL's and SHETL's corporate finance proposals remain appropriate for fast-tracking. Our corporate finance Final Proposals are, therefore, unchanged from the Initial Proposals.

Pensions, tax, RAV and pass through costs

Summary of responses

5.14. There were no specific comments on these matters and we therefore set out below our Final Proposals, which are the same as in our Initial Proposals apart from some minor changes to SPTL's RAV calculations which are explained further below.

Final Proposals

Pensions

5.15. Tables 5.3 and 5.4 set out the pension allowances for both SPTL and SHETL. Both companies' pension deficit funding is subject to the ongoing review by the Government Actuary's Department (GAD). As set out in the tables below, the level of deficit funding for both SPTL and SHETL is very small. Consequently, any adjustments necessitated following that review will be made at the first triennial reset of allowances on 1 April 2015.

Table 5.3: SPTL pension allowances

2009-10 prices £m	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21
TPCR4 true up	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Established deficit recovery	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Total allowances	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7

Table 5.4: SHETL pension allowances

2009-10 prices £m	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21
TPCR4 true up	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Established deficit recovery	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Total allowances	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0

5.16. In the Strategy Decision document we indicated that, since allowances for the remaining years of TPCR4 and the Rollover year were based on forecasts, we would true-up the impacts of actual costs during RIIO-T1 via the annual update process.

5.17. In line with that decision, we will undertake the next efficiency review in mid-2014, true-up and reset revenues from 1 April 2015 and every three years thereafter. For TOs, that review will also determine their established deficit.¹¹ There

¹¹ Price control treatment of network operator pension costs under regulatory principles.

will be an additional true-up for the difference between the deficit used to set allowances and the actual established deficit at 31 March 2012 for TOs. At the three year review, any deficit costs relating to incremental deficit will be treated as totex.

RAV

5.18. The projected RAV for each company will be dependent on the level of incremental additions. We, therefore, show the RAV in Tables 5.5 and 5.6 as built up from base case additions and incremental additions. Additionally TIRG expenditure, which is remunerated outside the main RAV (ie in a 'shadow RAV') until the end of the incentive period (five years after completion of the project) is shown as a separate pool. The transfers into the main RAV are shown as increases to the opening main RAV and reduction to the 'shadow RAV'. These figures are as quoted in the Initial Proposals except for a minor change to the depreciation assumed on TIRG expenditure for both companies (<£1m).

5.19. The RAV additions are based on a fixed percentage of totex (90%) for both SPTL and SHETL.

Table 5.5: Expected change in RAV over the RIIO-T1 period for SPTL

RAV projection 2009-10 prices £m

	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21
Opening	956	1,123	1,353	1,591	1,757	1,923	2,026	2,115	2,190
Transfers	42	18	0	0	69	8	0	0	0
Restated opening	998	1,141	1,353	1,591	1,826	1,931	2,026	2,115	2,190
Base Depreciation	(74)	(83)	(94)	(105)	(116)	(120)	(122)	(122)	(124)
Base Additions	198	291	310	219	125	115	120	134	107
Incremental additions		4	23	54	92	105	100	75	10
Incremental depreciation		0	(0)	(1)	(3)	(6)	(9)	(11)	(13)
Closing	1,123	1,353	1,591	1,757	1,923	2,026	2,115	2,190	2,170

TIRG	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21
Opening	111	149	184	211	225	156	141	133	126
Transfers			0	0	(69)	(8)	0	0	0
Restated opening	111	149	184	211	157	148	141	133	126
Depreciation	(7)	(9)	(10)	(10)	(5)	(8)	(8)	(8)	(8)
Additions	46	44	37	24	4	0	0	0	0
Closing	149	184	211	225	156	141	133	126	118

Table 5.6: Expected change in RAV over the period for SHETL

RAV projection 2009-10 prices £m									
	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21
Opening	474	713	1,214	1,823	2,353	2,722	2,955	3,156	3,342
Transfers	97	0	0	13	0	0	0	0	0
Restated opening	571	714	1,214	1,836	2,353	2,722	2,955	3,156	3,342
Base Depreciation	(35)	(44)	(49)	(56)	(63)	(68)	(70)	(72)	(73)
Base Additions	178	133	146	200	136	82	75	71	69
Incremental additions		412	531	414	355	292	279	279	346
Incremental depreciation		0	(19)	(42)	(59)	(72)	(83)	(92)	(101)
Closing	713	1,214	1,823	2,353	2,722	2,955	3,156	3,342	3,582

TIRG									
	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21
Opening	155	291	388	451	442	420	398	376	354
Transfers	0	0	0	(13)	0	0	0	0	0
Restated opening	155	291	388	438	442	420	398	376	354
Depreciation	(9)	(14)	(14)	(24)	(22)	(22)	(22)	(22)	(22)
Additions	146	111	77	28	0	0	0	0	0
Closing	291	388	451	442	420	398	376	354	331

Pass through costs

5.20. In carrying out the activities set out in their licences, the TOs incur a number of costs which we consider to be outside of their reasonable control. In past price control periods we allowed the TOs to pass through a defined set of such costs to consumers. Primarily these are network rates. We will continue to allow these costs to be passed through to consumers during the new control period, subject to each company having to demonstrate that it has made all reasonable efforts to minimise the charges.

Financeability and Return on Regulatory Equity (RoRE) analysis

Summary of our Initial Proposals


5.21. Our Initial Proposals Consultation stated that SPTL's and SHETL's proposals passed our financeability tests under a range of stress tests. It also identified a RoRE range of 3.7-10.7% for SPTL and 3.4-10.4% for SHETL. We therefore considered the packages appropriate for fast-tracking under the RIIO principles.

Summary of responses

5.22. Three respondents commented on financeability and RoRE in the Initial Proposals document. Further detail is provided in Appendix 1 of the Final Proposals Overview document.

5.23. SPTL made the following comments on financeability and RoRE:

- Agreed that the proposed financial package is appropriate for its circumstances and presents a fair balance of risk and reward, and is therefore beneficial to customers and stakeholders.



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- Noted that it had not been able to verify our RoRE calculations and that its own analysis had produced a slightly greater overall risk range, and set out its own updated RoRE range to support this view.

5.24. SHETL made the following comments on financeability and RoRE:

- Noted that the Initial Proposals should be seen as a single package and that, if there were any changes to the financial proposals, the whole package should be reviewed to ensure it remained financeable.
- Disagreed with the view that projects funded under the SWW mechanism would be able to outperform its totex allowance as it considers there to be an asymmetric risk associated with the scope for overspend.

5.25. Similarly to SHETL, one respondent argued that the scope to outperform on SWW is lower than on expenditure set *ex ante* at the start of the price control period.

Our views and Final Proposals

5.26. While we accept that the scope for outperforming or underperforming an allowance narrows the nearer to the start of construction the allowance is set, we do not accept SHETL's claim that it is only exposed to downside risk on SWW. Overall, our views on financeability and RoRE are unchanged from our Initial Proposals.

Allowed revenues

Summary

5.27. The allowed revenues for the 'best case' view have been updated slightly from our view set for our Initial Proposals. The main change is to amend the assumed corporation tax rates in line with the recent budget announcement.

Summary of responses to Initial Proposals

5.28. There were no specific comments on these issues and we therefore set out below our Final Proposals.

Final Proposals

5.29. The allowed revenues including expected future investment on SWW and as a result of revenue drivers for both companies are summarised in Tables 5.7 and 5.8 below. Full details are included in Appendix 1.

Table 5.7: Summary of SPTL best view allowances

Best view £m 2009-10 prices	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	RIIO T1 Total
Totex	328	370	303	241	244	244	232	130	2,092
Base revenue	232	241	263	265	276	285	291	284	2,138
Transmission Investment Renewable Generation income	24	25	24	12	20	19	19	18	161
Closing RAV	1,353	1,591	1,757	1,923	2,025	2,115	2,190	2,170	

Table 5.8: Summary of SHETL best view allowances

Best view £m 2009-10 prices	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	RIIO T1 Total
Totex	606	753	683	546	415	393	389	461	4,245
Base revenue	167	237	289	304	314	327	346	373	2,356
Transmission Investment Renewable Generation income	47	61	67	64	62	60	58	56	474
Closing RAV	1,214	1,823	2,352	2,722	2,955	3,156	3,342	3,582	

5.30. We will update these values prior to completion of licence drafting to reflect the latest cost of debt index data together with changes resulting from any additional investment allowed under the TII mechanism.

5.31. As indicated in the Initial Proposals, we will be using a specific licence model to calculate revenues each year. This model is currently being finalised but we will ensure that SPTL and SHETL revenues are not reduced by any revised methodologies contained therein.

5.32. Further details of the annual update process will be set out with Initial Proposals for non fast-tracked companies in July, when we also intend to publish an initial version of the model. These processes will apply equally to SPTL and SHETL, although there will be accommodation of any company-specific approaches used by each in their business plans (eg the equity issuance true-up mechanism).

Where to find additional information

5.33. Additional information on the financial parameters for RIIO-T1 can be found in the following documents:

- Strategy Decision document – Supporting paper ‘RIIO-T1 and GD1 Financial Issues’
<http://www.ofgem.gov.uk/Networks/Trans/PriceControls/RIIO-T1/ConRes/Documents1/T1decisionfinance.pdf>
- SPTL
 - Chapter 6 of its Executive Summary
http://www.spenergynetworks.com/PublicInformation/pdf/Executive_Summary.pdf
- SHETL
 - Main Paper – Chapter 7
[http://www.ssepd.co.uk/uploadedFiles/Controls/Lists/Resources/Compliance_report\(1\)/SHETL_BusinessPlanUpdateJanuary2012.pdf](http://www.ssepd.co.uk/uploadedFiles/Controls/Lists/Resources/Compliance_report(1)/SHETL_BusinessPlanUpdateJanuary2012.pdf)

6. Managing risk and uncertainty

Chapter Summary

This chapter sets out the mechanisms that will apply to manage the risk and uncertainty that SPTL and SHETL may face during RIIO-T1.

Introduction

6.1. These Final Proposals set an ex ante, or baseline, revenue allowance for each company to finance and deliver an agreed level of outputs over the RIIO-T1 period. For some outputs, such as connections and wider works, the actual level a TO delivers and, therefore, the costs it would incur could be significantly different to the agreed ex ante package due to changing customer requirements. Similarly, a TO's costs or ability to efficiently finance delivery could alter during the price control period due to new statutory requirements or other circumstances beyond the TO's control.

6.2. The overarching principle for uncertainty mechanisms that we set out in our Strategy Decision document was that network companies should manage the uncertainty they face and that the regulatory regime should not protect network companies against all forms of uncertainty. The use of uncertainty mechanisms should be limited to instances in which they will deliver value for money for existing and future consumers while also protecting the ability of networks to finance efficient delivery.

What we set out in our Initial Proposals

6.3. We set out in the Initial Proposals a range of uncertainty mechanisms put forward by SPTL and SHETL in their respective business plans. These were:

- volume drivers with ex ante unit costs for sole use and shared used connection infrastructure in the event requests for new generation connections during RIIO-T1 exceed the connection capacity output funded through baseline allowances
- within period arrangements to determine SWW outputs and funding when more information is available to justify the costs and optimal timing of wider system reinforcements
- within period arrangements to determine costs for up to five large non-load related replacement/renewable works if triggered by load related upgrades (SPTL only)
- specific reopeners to recover uncertain costs associated with enhanced physical security, work force renewal (SPTL only), landowner compensation under wayleave (SHETL only), BT 21st Century Networks (SHETL only) and

exceptional sub-sea cable faults (SHETL only) if they exceed a materiality threshold.

6.4. For each company, our view was that mix of uncertainty mechanisms, taken with the business plan as a whole, achieved a fair balance of risk sharing with consumers as well as incentives for each company to efficiently manage the risk and uncertainties they are best placed to deal with.

Summary of responses

General

6.5. Six respondents commented on the proposed uncertainty mechanisms. One respondent supported the proposed process for funding significant infrastructure projects and the associated stakeholder consultation process. Another respondent also supported the flexibility mechanisms to augment the fast-track RIIO package, should additional generation come forward. A third respondent welcomed the recognition of real price effects, and noted that longer-term price controls introduce greater uncertainty and risks in projecting future costs.

Our views

6.6. We welcome stakeholder support for the uncertainty mechanisms in our Initial Proposals. We have retained the arrangements consulted on for dealing with risk and uncertainty in these Final Proposals.

SHETL's uncertainty mechanisms

6.7. SHETL welcomed the support for the mechanisms set out in its plan. It made the following specific comments on finalising these mechanisms:

- remained unconvinced that provisions for costs associated with sub-sea cable faults should be included in totex as these would be a result of exceptional events eg third party damage, and therefore over and above routine operation and maintenance (O&M) costs
- recognised the need to undertake further work to define its logging up mechanism to cover the costs incurred in compensating landowners in relation to wayleaves
- considered provision should be made through the current Income Adjusting Events (IATt term) mechanism to cover the potential for legislative changes and/or changes to the System Operator-Transmission Owner Code (STC) that could result in significant additional costs for the TOs that are currently unfunded.

Our views

6.8. SHETL envisages installing a significant volume of sub-sea cables (both HVDC and high voltage AC) as part of SWW during the RIIO-T1 period. As a consequence of such works, SHETL could be exposed to uncertain costs of exceptional cable faults associated with third party or unforeseen environmental damage during RIIO-T1. As SHETL's allowances to build and operate any such assets during RIIO-T1 and determined under SWW would include operating and maintenance expenditure to cover routine maintenance of cables we consider it appropriate that SHETL should take on some operational risk of sub-sea cables.

6.9. We agree with SHETL's view that it would be difficult to set an efficient allowance to cover the costs of such low risk but potentially high impact events through totex allowances. Instead we consider a more efficient risk sharing arrangement would be to allow a reopener mechanism for costs that exceed a materiality threshold of 1% of annual average forecast revenue after the application of the totex efficiency incentive rate. SHETL would get some relief for costs incurred that are below the materiality threshold from the totex efficiency incentive. We will work with SHETL to define the category for inclusion in the uncertain costs mechanism.

6.10. We welcome SHETL's commitment to work with us to finalise the licence text for specific uncertain costs relating to compensating landowners for wayleaves as set out in the Initial Proposals.

6.11. We do not consider SHETL has provided sufficient justification with respect to retaining a more general licence provision relating to unfunded costs it might incur as a result of potential changes to the STC. Nor do we agree that it is necessary to include a general provision for uncertain costs relating to legislative change. As part of the RIIO framework there will be an opportunity at the mid-period review to consider changes to outputs that can be justified by clear changes in Government policy along with the introduction of new outputs that are needed to meet the needs of consumers and other network users. We consider it likely that any significant legislative or code changes which had major implications for SHETL's outputs and costs in Final Proposals would fall into scope of the mid-period review of output requirements and is therefore already covered by existing provisions.

SPTL's uncertainty mechanisms

6.12. SPTL raised the following points on uncertainty mechanisms:

- supported the proposed use of uncertainty mechanisms in RIIO-T1 as protecting consumers' interests
- considered the proposed arrangement for dealing with exceptional costs in relation to the Western HVDC Link should change from only applying where one scenario (either related to weather, sea-bed conditions or consents) resulted in a total cost increase of greater than 10% of total project value to reflect an increase of 10% from a combination of those events

- considered the benefits for consumers from competition relating to wider system works had not been demonstrated with sufficient certainty and that benefits to customers would be greater if third parties were responsible for the entire project including pre-engineering works.

Our views

6.13. We welcome SPTL's support for the proposed set of uncertainty mechanisms as protecting consumers' interests.

6.14. We do not agree with SPTL's view that the cost and output adjusting event provision for the WHVDC link should be altered to reflect a 10% increase in total costs from a combination of the pre-defined events. SPTL will get some relief from the efficiency sharing factor incentive if it incurs increased costs as a result of a combination of the exceptional events where these are individually below the materiality threshold. We consider applying the mechanism to a single event as set out in Initial Proposals provides a stronger incentive on the company to mitigate the negative impact of an exceptional event more efficiently and provides a better balance of risk sharing with consumers.


6.15. Alongside the RIIO-T1 process we have been developing a framework to enable Ofgem to hold, in appropriate circumstances, a competitive process to award a TO the revenue stream needed to build, own and operate onshore electricity transmission assets. As part of that process we have consulted on which party would be best placed to complete the pre-construction engineering works and whether or not these might be transferable to another party subsequently selected to construct the assets. While the detailed arrangements for the competitive process are still being developed and a decision has not yet been taken with respect to this issue, SPTL should be aware that they could be required to make relevant pre-construction outputs available to third parties as part of a selection process, and eventually such pre-construction assets might be transferrable to the party selected to construct the assets. We intend to provide more information on the next steps for this policy workstream later this year.

Strategic Wider Works (SWW)

6.16. One respondent welcomed the clarity provided on the SWW process. It noted the importance of this process delivering decisions in a timely manner to enable the supply chain to mobilise effectively to deliver projects efficiently. It considered a guidance document providing greater clarity on how the framework would operate would build industry confidence.

6.17. While welcoming the proposed SWW arrangements, SHETL raised a few areas where it considered greater clarity was required. These were:

- if Ofgem has accepted a needs case then there should be no need to revisit the merits of a project at a later stage



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- the assessment timeframe should not be too rigid and the needs assessment and project assessment should be able to run concurrently over a period of 6-9 months
- the need to provide sufficient certainty to commit to the contract required to progress with a project – particularly where a project spans the RIIO-T1/T2 boundary.

6.18. SPTL expressed concern with Ofgem’s proposal to only apply a revenue trigger for reopeners for projects greater than £100m. Given experience for considerable variation in shared-use infrastructure (known as ‘collectors’) costs across their network, it considered this approach could result in underfunding in certain circumstances. It welcomed Ofgem’s willingness to consider a funding approach for projects below this threshold based on unit costs for substation and overhead lines and noted its intention to provide relevant information in this area.

6.19. SPTL also noted its proposal for an output for existing collectors linked to the current level of contracted generation that will be connected through those collectors. It noted that given that the generation capacity contracted to connect will change over RIIO-T1 then this output would need to be updated within period.

Our views

6.20. In Appendix 2 we have finalised our guidance on the SWW arrangements that would apply for all of the electricity TOs seeking within period determination for the Authority on additional funding and outputs to deliver wider system reinforcements. This finalised guidance had taken into account stakeholder responses and feedback on the proposed arrangements set out in the Initial Proposal consultation. We hope this provides further clarity to the industry as a whole on the assessment and decision making stages, requirements on the TOs and the arrangements for ensuring timely delivery of wider works outputs.

6.21. We agree with SHETL that the needs case for a SWW output should not, in most cases, need to be revisited if it has already been assessed by Ofgem. If there has been no significant changes in the key drivers or in the economic case for the reinforcement, the assessment process could vary, depending upon the relative extent of work required for the needs case and the project assessment (eg if the needs for a project case had already been considered by Ofgem in a previous piece of work, then we could agree with the TO to reduce or omit that stage).

6.22. Similarly we agree with SHETL that the assessment timeline should retain some flexibility. We intend to work with the TOs to set an indicative timeline for the assessment and decision making process stages. If the TO has reasons for a different timeline for a particular assessment, then it should clearly set out its proposition when requesting consideration under the SWW arrangements.

6.23. We note SHETL’s concern about the level of funding commitment and certainty they would get from under SWW arrangements for projects that started in RIIO-T1 but delivered in the RIIO-T2 period. We understand its key concern is that a

lack of funding certainty could negatively impact its ability to efficiently contract with suppliers for the delivery of the project.

6.24. A key principle of the SWW arrangements is that the regulatory framework does not act as a barrier to the efficient delivery of wider works outputs where these are justified by customers' requirements and prevailing security standards. The SWW arrangements as proposed should help overcome any potential regulatory boundary issues around the end of RIIO-T1. This is because under SWW the Authority will assess the merits of an entire reinforcement that spans RIIO-T1/T2 (both the needs case and detailed project cost assessment). Where the needs case justifies delivery by the proposed date (in RIIO-T2) the Authority would consider matters including whether a staged approach by the TO to procurement and contracting with suppliers would impact on the efficient costs of delivery.

6.25. If it could be demonstrated that staging the project would increase the costs of delivery the Authority would seek to give a minded to decision on the efficient costs of delivering the entire project and on funding the RIIO-T2 stages of the project through the TO's RIIO-T2 baseline, where the latter would be subject to the relevant RIIO-T2 financial parameters. This will be in addition to giving a funding decision on key milestones for the RIIO-T1 period via SWW arrangements. When setting funding allowances for RIIO-T2 the Authority would also have regard to potential impacts that could arise from changes in price control policy for ongoing service contracts the TO has in place for the delivery of a wider works output in RIIO-T2. In Appendix 2 of this document we have updated the SWW guidance to reflect this position.

6.26. After the publication of our Initial Proposals consultation, SPTL provided further information for a volume driver for shared use connections infrastructure. As noted in our Initial Proposals, SPTL proposed a volume driver was necessary to cover collector projects (typically between £50m – 100m each) over and above SPTL's baseline capacity output.

6.27. On the basis of the information provided by SPTL we consider there is sufficient justification to set a volume driver based on a schedule of unit costs for the shared use connections infrastructure. This approach is preferable to a single average unit cost because there are relatively few prospective collector schemes in SPTL's transmission area from which to derive an average. Consequently, if an outlier scheme was taken forward, a volume driver based on a single average unit cost might not be efficient or alternatively not provide sufficient funding for the works. In our view the schedule of unit cost allowances proposed by SPTL are aligned with market rates.

6.28. We intend to set an output for shared use infrastructure in SPTL's baseline plan which will not vary with the amount of contracted generation connected to it. Therefore, we have agreed with SPTL to set an output for the shared use infrastructure programme in its baseline on the maximum installed asset rating of the collectors rather than the contracted generation that will be connected through those collectors.

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Within period determinations of revenue adjustments for SWW

6.29. SPTL's wider works outputs in Chapter 2 are its baseline view of its wider network capability required over RIIO-T1. In addition to its baseline, SPTL expects that some or all of the prospective SWW deliverables in Table 6.1 could be required if future customer requirements develop in line with its best view or its upper case scenario. In the latter scenario SPTL assume a faster development of new generation connections in its own and SHETL's areas.

Table 6.1: Prospective strategic wider work outputs

Area	Required transfer capability	Key drivers	Scenario	Indicative		
				Start date	End date	Cost (£m)
Dumfries and Galloway	Additional 1800MW within system reinforcement	To facilitate renewables in SW Scotland, and provide a secure link to Moyle Interconnector	Best view	2015	2020	£317
East Coast (Kincardine – Harburn) 400kV	Boundary B5: 600MW	Increasing the capability of the central Scotland transmission system and Scotland – England interconnection	Best view	2014	2018	£114
Eastern HVDC from Torness to NE (variant from NGET/SHETL link)	Boundary B6: 1800MW	New offshore generation in Firth of Forth	Upper case	2014	2019	£286

6.30. If and when the needs case for the above projects becomes more certain SPTL will progress these projects through SWW arrangements.¹² Under these arrangements the TO will request Ofgem to determine the efficient costs of delivering wider works outputs and to adjust its funding during the price control period (ie within period determination).

6.31. Over the eight year RIIO-T1 price control period, new or alternative reinforcement projects to those identified in SPTL's business plan could be needed to meet customer requirements for network capability. SPTL will request funding under SWW arrangements for new reinforcements only if these deliver additional transfer

¹² These arrangements will replace the TII arrangements introduced during TPCR4.

capability across system boundaries, or intra system reinforcement, and cost more than £100 million to deliver.

6.32. We will include specific provisions for cost and output adjustments of SWW outputs that SPTL takes forward under these arrangements. These provisions will only apply when a single pre-defined event causes a significant increase in the costs, where the event is largely beyond the company's control. This mechanism would apply for SWW projects if the total cost of delivery changed by more than 20% before the totex efficiency incentive rate was applied.

Sole use and shared use connections volume drivers

6.33. Under its baseline RIIO-T1 package SPTL will complete connections up to a cumulative total capacity output of 4,393MW. On current forecasts of connection works completed up to and during TPCR4 and the TPCR4 Rollover (1,890MW), this amounts to a baseline of 2,503MW new connected generation capacity in the RIIO-T1 period.

6.34. If requests for generation connections exceed the cumulative capacity output of 4,393MW, SPTL's funding will be adjusted by volume drivers for sole use and shared use infrastructure.

6.35. SPTL's costs for sole use infrastructure will be 100% remunerated through a unit cost allowance (UCA) of £42,000 (2009/10 prices) per MW of additional capacity connected. For example, if SPTL connects a 100MW of new generation a revenue allowance would be calculated from the efficient connection costs of £4.2 million (100MW x £42k/MW) and the capitalisation rate. Conversely, if the total capacity of generation connected to SPTL's transmission network is less than the baseline level of 4,393MW, revenues would be clawed back per MW shortfall based on the UCA.

6.36. Similarly SPTL will be 100% remunerated for shared used infrastructure to connect contracted generation that exceed the baseline planned output of 1,073MVA installed asset rating from the schedule of costs in Table 6.2 below.

Table 6.2: Schedule of unit costs for shared use connections infrastructure

Description	2009/10 Prices	
	Oncosted (5%) £k	Output MVA
Substation		
400kV/132kV Substation 2 * 460MVA	23,412	460
275kV/33kV Substation Transformer Feeder 2 * 120MVA	8,005	120
275kV/33kV Substation Single Switch 2 * 120MVA	8,459	120
132kV/33kV Substation Transformer Feeder 2 * 90MVA	6,297	90
132kV/33kV Substation Single Switch 2 * 90MVA	6,541	90
Overhead Line		
20km OHL 275kV/400kV Double Circuit L8 Construction	25,450	1710 400kV Pre Fault
L8 OHL rate per km (+/-) adjustment on 20km cost	1,022	1170 275kV Pre Fault
20km OHL 132kV Double Circuit L7 Construction	20,180	406 132kV Pre Fault
L7 OHL rate per km (+/-) adjustment on 20km cost	761	
OHL Synergies Adjustment (Note 1)	936	
Platform Costs		
Removal and processing/disposal of rock /M ³	0.119	
Removal and off-site disposal of peat /M ³	0.055	
Haulage road construction /km	119	

6.37. On an annual basis, any over or under spend in SPTL's actual costs for connections relative to efficient (ie UCA) connection costs would be subject to the totex efficiency incentive and shared equally (50%) with consumers.

6.38. SPTL's funding allowances will be adjusted to cover the associated operating costs of connection works above its baseline. This will be calculated as an annual allowance of 1% of the cumulative gross value of the connection works it completes over its sole use and shared use infrastructure output capacities.

6.39. SPTL does not have any provisions for high cost connection projects. Therefore, all connections SPTL undertakes during RIIO-T1 will either be covered by the RIIO-T1 baseline or by the volume driver, and subject to the efficiency sharing factor described above.

Within period determination for specific non-load investment projects

6.40. In addition to the non-load investment in its baseline SPTL has identified two non-load related investments (see Table 6.3) that it considers would be in consumers' interests to progress if related load investments go ahead (through the SWW arrangements set out above). These non-load works will be subject to a within-period determination by Ofgem and funded through a revenue adjustment during the price control period. The process would be triggered by the commencement of the relevant wider works project.

Table 6.3: Potential non-load investments subject to within period determination

Non-load works	Load related investment trigger	Indicative cost (£m)
U & AT - Galashiels to Eccles OHL Rebuild (61 cctkm)	Scottish Border Area LR Activity 132 kV Easement Costs identified	13.7
XD - Jnc. XN route to Kincardine Major Refurbishment (Recond 10cctkm)	East Coast 400kV Upgrade 275 kV Easement Costs identified	3.4
XK - Jnc. XN route to Jnc. XM route OHL modernisation Major Refurbishment (Recond 21cctkm)	As above	9.7
XM - Jnc. XK route to Currie OHL modernisation Major Refurbishment (Recond 62cctkm)	As above	26.7
XN - Jnc. XD route to Jnc. XK route/ Jnc. XK route to Grangemouth Major Refurbishment (Recond 19cctkm)	As above	6.8

Totex efficiency incentive rate

6.41. SPTL will use a totex efficiency incentive rate of 50%.

Other uncertainty mechanisms

6.42. Table 6.4 below summarises the remaining uncertainty mechanisms SPTL will have for its RIIO-T1 Final Proposals price control package.

Table 6.4: Other uncertainty mechanisms in SPTL's price control package

Uncertainty	Proposed mechanism
Financial distress	Disapplication of the price control where outside the company's control.
Inflation	Adjust revenues for increases in Retail Prices Index.
Licence fees and business rates	Continue to pass through.
Uncertain costs associated with enhancement of physical security	Subject to a reopener for costs incurred that exceed 1% of average annual forecast revenue after the application of the totex efficiency incentive rate. Specific windows for reopener in 2015 and 2018.
Work force renewal	Subject to a reopener in 2016 if additional funding needed.
Mitigation of impacts of new infrastructure on visual amenity	Any requirements to be included in funding requests under SWW arrangements.

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Within period determinations on revenue adjustments for SWW

6.43. SHETL's baseline wider works outputs are set out in Chapter 2. Table 6.5 sets out SHETL's view of the prospective wider system reinforcements over and above its baseline outputs that could be required in its transmission area to accommodate the generation and demand profiles from the industry derived scenario *Gone Green*.

Table 6.5: Potential strategic wider work outputs

Area	Required capability	Key drivers	Scenario	Indicative		
				Start date	End date	Cost (£m)
Caithness Moray	Boundary B0: 600MW Boundary B0b: 732MW Boundary B1: 1150MW	Onshore and offshore renewable generation	Best view	2012/ 13	2016/ 17	937
400kV East Coast	Boundary B1: 150MW Boundary B2: 750MW Boundary B2b: 80MW Boundary B4: 900MW	Increase capability to export renewable energy to central Scotland and North England.	Best view	2013/ 14	2016/ 17	355
Kintyre - Hunterston	Boundary B3: 150MW Boundary B3b: 260MW	Renewable generation around Kintyre, Argyll and Bute area	Best view	2013/ 14	2018/ 19	188
Western Isles link & onshore works	Sub-boundary 11: 450MW	New generation on Lewis	Best view	2012/ 13	2015/ 16	430
Shetland HVDC	Sub-boundary 12: 600MW	Generation around Shetland	Best view	2013/ 14	2015/ 16	456
Orkney Isles	Sub-boundary 13: 1560 MW	Renewable generation around the Orkney Isles and Pentland Firth	Best view	2013/ 14	2015/ 16	1473
Beauly- Mossford Overhead Line	Sub-boundary 10: 338MW	Renewable generation projects in the Strathconon and Mossford areas	Best view	2013/ 14	2021/ 22	35
Eastern Sub- sea HVDC Link	Boundary B2: 2000MW Boundary B2b: 1880MW Boundary B4: 1800MW	Increase in the north-south transfer capacity	Best view	2013/ 14	2015/ 16	700

Area	Required capability	Key drivers	Scenario	Indicative		
				Start date	End date	Cost (£m)
Second East Coast Sub-sea HVDC Link	Boundary B2: 2000MW Boundary B2b: 2000MW Boundary B4: 2000MW	Wind generation including Moray Firth and marine generation from Pentland Firth and the Orkney Waters	Upper view	2019/20	2022/23	690
Islay HVDC Link	Sub-boundary 14: 1800MW	Marine generation off Islay.	Upper view	2019/20	2021/22	770

6.44. Similar to SPTL, SHETL will progress these projects as and when more information becomes available by requesting Ofgem to approve project specific revenue adjustments through the SWW arrangements.

6.45. In addition to the prospective SWW outputs identified in Table 6.5, or possibly instead of some of these, some alternative projects might come forward over the price control period. SHETL has set out some criteria that wider system reinforcements would need to meet to be eligible for consideration under SWW arrangements. The projects would need to:

- deliver additional transfer capability across system boundaries or provide intra system reinforcement
- cost more than £50 million to deliver
- exclude project components that have been funded previously under TII.

6.46. Reinforcement works that SHETL takes forward under SWW arrangements will include provisions for cost and output adjustments for pre-defined events that could lead to significant increases in the costs but are beyond its control. With the exception of the HVDC link to the Western Isles, this mechanism would apply for projects less than £500 million if the total cost of delivery changed by more than 20% before the totex efficiency incentive rate was applied. For projects greater than £500 million, the materiality threshold will be 10% before the totex efficiency incentive. For the Western Isles link, which will be the first HVDC scheme undertaken by SHETL, it will have a 10% materiality threshold before the totex efficiency incentive.

Connections volume driver – sole use infrastructure and shared use infrastructure

6.47. SHETL will complete new sole-use and shared-use infrastructure for connections works up to a capacity output of 1,168MW and 1,006MVA respectively under its baseline RIIO-T1 package.

6.48. In the event that SHETL exceeds one or both of the baseline capacity outputs for connections, SHETL's sole use and shared use infrastructure connection costs would be 100% remunerated per MW of additional capacity connected with a sole use UCA of £75,000/MW and a shared use UCA of £83,000/MVA (2009/10 prices).

SHETL's volume driver remuneration will be phased equally across four years starting in the year connection costs are initially incurred.

6.49. The volume driver would also be used to calculate how much of SHETL's baseline allowance it is required to return in the event that customer requirements for connection do not reach the proposed capacity outputs. Any over or under spend would be subject to the totex efficiency incentive and shared equally (50%) with consumers.

6.50. SHETL's sole use and shared use infrastructure UCAs will be adjusted annually by 1.5% in Real Price Effects. SHETL's revenues will also be adjusted for the associated operating costs of the new connections. The allowance will be calculated annually at 1% of the cumulative gross value of the connection works it completes over its capacity outputs.

6.51. Connection projects with atypical unit costs that are greater than £150k/MW for sole-use and £166k/MVA for shared-use will be classified as a high cost project (HCP). For HCP projects, SHETL will be remunerated with a UCA of £294k/MW for sole-use connections and £182k/MVA for shared-use connections. The totex efficiency incentive and a UCA would operate on 50% of the connection costs with the other half of costs being passed through to consumers directly.

Totex efficiency incentive rate

6.52. SHETL will have a totex efficiency incentive rate of 50% during the RIIO-T1 period.

Other uncertainty mechanisms

6.53. Table 6.6 below summarises the remaining uncertainty mechanisms SHETL will have in RIIO-T1 Final Proposals price control package.

Table 6.6: Other uncertainty mechanisms in SHETL's price control package

Uncertainty	Proposed mechanism
Uncertain costs associated with BT 21 st Century Networks, enhancement of physical security, compensating landowners under wayleave or exceptional sub-sea faults due to third party and environmental damage	Reopener for uncertain costs associated with specified categories if incurred costs exceed a material amount. A material amount is defined as exceeding 1% of annual average forecast revenue after the application of the totex efficiency incentive rate. Specific windows for reopener in 2015 and 2018.
Financial distress	Disapplication of the price control where outside the company's control.
Inflation	Adjust revenues for changes in RPI.
Licence fees and business rates	Continue to pass through.
Mitigation of impacts of new infrastructure on visual amenity	Any requirements to be included in funding requests under SWW arrangements.

Where to find additional information

6.54. Additional information on the treatment of uncertainty and risk in RIIO-T1 can be found in the following documents:

- Strategy Decision document – Supporting paper ‘RIIO-T1 and GD1 Uncertainty Mechanisms’
<http://www.ofgem.gov.uk/Networks/Trans/PriceControls/RIIO-T1/ConRes/Documents1/T1decisionuncert.pdf>
- SPTL
 - Chapter 7 of its Executive Summary
http://www.spenergynetworks.com/PublicInformation/pdf/Executive_Summary.pdf
 - Supporting paper – ‘Risk Management and Uncertainty Mechanisms’
http://www.spenergynetworks.com/PublicInformation/pdf/Risk_Management_and_Uncertainty_Mechanisms.pdf
- SHETL
 - Main Paper – Chapter 5
[http://www.ssepd.co.uk/uploadedFiles/Controls/Lists/Resources/Compliance_report\(1\)/SHETL_BusinessPlanUpdateJanuary2012.pdf](http://www.ssepd.co.uk/uploadedFiles/Controls/Lists/Resources/Compliance_report(1)/SHETL_BusinessPlanUpdateJanuary2012.pdf)
 - Supporting Paper – ‘Sharing Risk’
http://www.ssepd.co.uk/uploadedFiles/Controls/Lists/Resources/Transmission_price_control_review/Current_documents/Transmission_price_control_review_business_plan_supporting_information/RIIO_SHETL_January2012UpdateSharingRisk.pdf
 - Supporting Paper – ‘Revenue Drivers’
http://www.ssepd.co.uk/uploadedFiles/Controls/Lists/Resources/Transmission_price_control_review/Current_documents/Supporting_information/RIIO_SHETL5RevenueDriversFebruary2012.pdf
 - Supporting Paper – ‘Strategic Wider Works’
http://www.ssepd.co.uk/uploadedFiles/Controls/Lists/Resources/Transmission_price_control_review/Current_documents/Transmission_price_control_review_business_plan_supporting_information/RIIO_SHETL_January2012UpdateStrategicWiderWorks.pdf

Appendices

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Appendix 1 – Allowed Revenues

Table A1: SPTL – best view

SPTL	RIIO-T1									
	Em 2009-10 prices	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	RIIO T1 Total
Totex										
Slow pot	295	333	272	217	220	220	209	117	1,883	
Fast pot	33	37	30	24	24	24	23	13	209	
Totex	328	370	303	241	244	244	232	130	2,092	
Regulatory Asset Value (RAV)										
Opening RAV	1,123	1,353	1,591	1,757	1,923	2,025	2,115	2,190		
Transfers from 'shadow RAV'	18	-	-	69	8	-	-	-	94	
Restated opening RAV including transfers	1,141	1,353	1,591	1,826	1,931	2,025	2,115	2,190		
RAV additions (totex slow pot)	295	333	272	217	220	220	209	117	1,883	
Depreciation	(83)	(94)	(106)	(119)	(125)	(130)	(134)	(137)	(930)	
Closing RAV	1,353	1,591	1,757	1,923	2,025	2,115	2,190	2,170		
Allowed Costs										
Fast pot expenditure	33	37	30	24	24	24	23	13	209	
Depreciation	83	94	106	119	125	130	134	137	930	
IQI additional income	9	9	7	4	3	4	4	3	42	
Capex and other incentives	-	-	-	-	-	-	-	-	-	
Tax allowance	16	12	15	11	12	12	12	11	101	
Pension deficit costs	1	1	1	1	1	1	1	1	6	
Notional equity issuance/gearing costs	4	-	8	-	-	-	-	-	12	
Return	68	69	79	88	93	97	101	103	699	
Total controllable costs	213	223	245	247	259	269	274	268	1,998	
Non-controllable operating costs	24	24	24	24	24	24	24	24	193	
Price Control Revenue										
Base revenue	232	241	263	265	276	285	291	284	2,138	
Excluded services	5	6	6	6	7	7	7	8	53	
Transmission Investment Renewable Generation income	24	25	24	12	20	19	19	18	161	
Total revenue	262	272	293	284	303	312	317	310	2,352	
Annual change	27.9%	3.8%	8.0%	-3.2%	6.7%	2.9%	1.7%	-2.4%		

Table A2: SPTL – base view

SPTL	RIIO-T1									
	Em 2009-10 prices	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	RIIO T1 Total
Totex										
Slow pot	291	310	219	125	115	120	134	107	1,421	
Fast pot	32	34	24	14	13	13	15	12	158	
Totex	323	345	243	139	128	133	149	119	1,578	
Regulatory Asset Value (RAV)										
Opening RAV	1,123	1,348	1,564	1,678	1,755	1,758	1,756	1,768		
Transfers from 'shadow RAV'	18	-	-	69	8	-	-	-	94	
Restated opening RAV including transfers	1,141	1,348	1,564	1,747	1,763	1,758	1,756	1,768		
RAV additions (totex slow pot)	291	310	219	125	115	120	134	107	1,421	
Depreciation	(83)	(94)	(105)	(116)	(120)	(122)	(122)	(124)	(887)	
Closing RAV	1,348	1,564	1,678	1,755	1,758	1,756	1,768	1,750		
Allowed Costs										
Fast pot expenditure	32	34	24	14	13	13	15	12	158	
Depreciation	83	94	105	116	120	122	122	124	887	
IQI additional income	9	9	7	4	3	4	4	3	42	
Tax allowance	16	12	14	11	13	14	15	16	112	
Pension deficit costs	1	1	1	1	1	1	1	1	6	
Notional equity issuance/gearing costs	4	-	7	-	-	-	-	-	11	
Return	68	69	76	82	83	83	83	83	626	
Total controllable costs	213	219	234	228	232	236	240	239	1,842	
Non-controllable operating costs	24	24	24	24	24	24	24	24	193	
Price Control Revenue										
Base revenue	232	237	252	246	250	253	257	255	1,982	
Excluded services	5	6	6	6	7	7	7	8	53	
Transmission Investment Renewable Generation income	24	25	24	12	20	19	19	18	161	
Total revenue	261	268	282	265	276	280	283	281	2,196	
Annual change	27.6%	2.6%	5.4%	-6.3%	4.4%	1.3%	1.2%	-0.7%		

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Table A3: SHETL – best view

SHETL	RIIO-T1									
	Em 2009-10 prices	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	RIIO T1 Total
Totex										
Slow pot	545	677	614	491	374	354	350	415	3,820	
Fast pot	61	75	68	55	42	39	39	46	424	
Totex	606	753	683	546	415	393	389	461	4,245	
Regulatory Asset Value (RAV)										
Opening RAV	713	1,214	1,823	2,352	2,722	2,955	3,156	3,342		
Transfers from 'shadow RAV'	-	-	13	-	-	-	-	-	13	
Restated opening RAV including transfers	713	1,214	1,836	2,352	2,722	2,955	3,156	3,342		
RAV additions (totex slow pot)	545	677	614	491	374	354	350	415	3,820	
Depreciation	(44)	(68)	(98)	(122)	(140)	(153)	(164)	(175)	(965)	
Closing RAV	1,214	1,823	2,352	2,722	2,955	3,156	3,342	3,582		
Allowed Costs										
Fast pot expenditure	61	75	68	55	42	39	39	46	424	
Depreciation	44	68	98	122	140	153	164	175	965	
IQI additional income	4	5	7	5	3	3	2	2	31	
Tax allowance	9	12	13	7	4	4	4	5	58	
Pension deficit costs	1	1	1	1	1	1	1	1	8	
Notional equity issuance/gearing costs	3	9	13	9	5	2	2	1	45	
Return	46	71	99	119	134	144	153	163	928	
Total controllable costs	168	242	298	318	329	345	365	393	2,458	
Non-controllable operating costs	9	9	13	13	13	13	13	13	95	
Price Control Revenue										
Base revenue	167	237	289	304	314	327	346	373	2,356	
Excluded services	11	14	23	27	28	31	31	33	197	
Transmission Investment Renewable Generation income	47	61	67	64	62	60	58	56	474	
Total revenue	224	312	378	395	403	418	435	462	3,027	
Annual change	77.8%	39.4%	21.1%	4.3%	2.2%	3.5%	4.2%	6.1%		

Table A4: SHETL – base view

SHETL	RIIO-T1									
	Em 2009-10 prices	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	RIIO T1 Total
Totex										
Slow pot	133	146	200	136	82	75	71	69	912	
Fast pot	15	16	22	15	9	8	8	8	101	
Totex	147	163	222	151	91	83	79	76	1,013	
Regulatory Asset Value (RAV)										
Opening RAV	713	802	899	1,056	1,129	1,143	1,148	1,147		
Transfers from 'shadow RAV'	-	-	13	-	-	-	-	-	13	
Restated opening RAV including transfers	713	802	912	1,056	1,129	1,143	1,148	1,147		
RAV additions (totex slow pot)	133	146	200	136	82	75	71	69	912	
Depreciation	(44)	(49)	(56)	(63)	(68)	(70)	(72)	(73)	(496)	
Closing RAV	802	899	1,056	1,129	1,143	1,148	1,147	1,143		
Allowed Costs										
Fast pot expenditure	15	16	22	15	9	8	8	8	101	
Depreciation	44	49	56	63	68	70	72	73	496	
IQI additional income	4	5	7	5	3	3	2	2	31	
Tax allowance	8	7	8	8	6	7	8	9	62	
Pension deficit costs	1	1	1	1	1	1	1	1	8	
Notional equity issuance/gearing costs	3	-	1	1	-	-	-	-	5	
Return	36	40	46	51	53	54	54	54	389	
Total controllable costs	111	118	141	144	141	143	146	147	1,091	
Non-controllable operating costs	9	9	13	13	13	13	13	13	95	
Price Control Revenue										
Base revenue	110	114	131	130	125	125	127	127	989	
Excluded services	11	14	23	27	28	31	31	33	197	
Transmission Investment Renewable Generation income	47	61	67	64	62	60	58	56	474	
Total revenue	167	189	220	221	215	216	216	216	1,660	
Annual change	32.8%	12.9%	16.6%	0.2%	-2.7%	0.2%	0.2%	-0.2%		

Appendix 2 – Guidance on Strategic Wider Works Arrangements

Introduction

1.1. We are committed to encouraging network companies to play a full role in a sustainable energy sector and tackling climate change. In 2009, the Transmission Study (ENSG Report), a joint industry initiative, identified that a large number of major transmission reinforcements would be needed to meet the Government's 2020 targets. We introduced Transmission Investment Incentives (TII) in 2010 to supplement capital allowances and deep revenue drivers set within TPCR4 to facilitate the timely delivery of critical electricity transmission infrastructure projects. We intend to extend these arrangements for the rollover year 2012-13.¹³

1.2. In our Strategy Decision document on the next price control strategy, we set out options available to the TOs to fund wider works outputs under RIIO-T1. These included a provision to allow us to make within-period determinations on revenue adjustments during the price control period for TOs to deliver Strategic Wider Works (SWW) outputs (defined as increases in boundary capability or equivalent additional transmission capacity where there is no existing boundary). These SWW arrangements will replace TII but will retain some elements of TII where appropriate. This guidance has taken into account the responses received on our proposed arrangements that were consulted on as part of the RIIO-T1 Initial Proposals for SPTL and SHETL in February 2012.

1.3. The revenue adjustments we make through these arrangements would cover costs of construction works and an expenditure allowance for the operation and maintenances costs associated with the completed asset. Funding for associated pre-construction engineering works will be included in each TO's core revenue package ('baseline revenue') agreed for the RIIO-T1 price control.

1.4. As set out in Chapter 6 on managing risk and uncertainty, SHETL and SPTL expect they will need to progress several large reinforcement projects through SWW arrangements during RIIO-T1. These works will be in addition to the wider works output capacity set out in Chapter 2 that will be funded through each TO's baseline revenue allowances. Each company will determine the timing that it takes these SWW projects forward as and when more information confirms the technical and economic case for delivering a project by a certain point in time.

¹³ For more information please see the decision letter published in November 2011 <http://www.ofgem.gov.uk/Pages/MoreInformation.aspx?docid=29&refer=Networks/Trans/ElecTransPolicy/CriticalInvestments/InvestmentIncentives>

1.5. The same financial parameters for their overall price control package (set out in Chapter 5) will apply to projects approved under SWW during RIIO-T1. This is consistent with the principles in our Strategy Decision document.

1.6. In terms of risk sharing arrangements with consumers on SWW projects, both companies will need to include the efficient means of managing the risks associated with delivering and owning the SWW outputs within the overall cost of the project, where appropriate. In addition, the totex costs of SWW projects will be subject to the same efficiency incentive rate that applies to SHETL's and SPTL's price control package. This means that both companies will be exposed to 50% of any over or under spend of delivering the SWW output, including any additional costs arising from events, where the costs of managing such risks are incorporated into the efficient costs of delivery. In some cases it will be more efficient for consumers overall to bear some low probability and high impact risks by means of a cost and output adjusting event (COAE). For both SPTL and SHETL we have identified specific risks that would be more efficient to address after the event had occurred. This is because it would avoid building in high mitigation costs for an event that has a low likelihood. The pre-defined events for which the COAE provisions will apply are set out in paragraphs 1.32 – 1.36.

1.7. The SWW arrangements are designed to ensure value for money for consumers and timely funding of the construction and opex costs associated with SWW outputs that are needed to meet customer requirements of additional transmission capacity. It will achieve this by, firstly, providing the TOs with flexibility to request a reopener to fund the costs of delivering SWW outputs once more information is available; and secondly, allowing us to apply proportionate scrutiny, on a case-by-case basis, to the needs case and project assessment for delivering SWW outputs.

1.8. The TOs have identified in their business plans a number of projects that they consider are suitable for future consideration under the SWW arrangements. We will require the TOs to keep us up to date on the status of these projects, as well as give us notice of any other potential projects that emerge during the RIIO-T1 period.

1.9. The SWW arrangements would operate alongside the framework for third party delivery of onshore transmission assets. We will be developing this framework over the coming months. We will take into account the interactions between the two frameworks, including the appropriate point at which we would assess whether a project is suitable for the competitive approach. This appendix sets out how we will treat construction projects that we determine to be appropriate for delivery by the incumbent TO under the SWW arrangements.

Staged approach

1.10. The SWW arrangements will generally take a staged approach for the assessment, delivery and closure of these projects. Under the assessment stage we will determine whether the project meets the eligibility criteria for consideration under the SWW arrangements, with reference to its cost materiality and the needs case for the project. We will also assess the specifics of the costs and outputs for the

construction phase. Following this, there will be the delivery stage where we will implement decisions about additional funding and output delivery and the TO will regularly report on delivery progress. The final stage will be delivery review and closure where we confirm whether the TO has delivered the agreed output to the standards expected.

1.11. The following table sets out the stages for the regulatory treatment of a project under SWW. In reality, it is likely that there will be some interaction between some of the various stages and that the process is more iterative or involves overlapping steps in practice. For example, in stepping between the needs case and project assessment, we would expect to have an initial view on the needs case but this may be subject to further review in light of some aspects of the project assessment.

Table A1.1: Generic stages for the regulatory treatment of an SWW project

Stages	Objective	TO	Ofgem
Eligibility assessment	Determine eligibility for assessment under SWW mechanism.	Advises Ofgem of its intention to submit a request for SWW and provides evidence of the scheme meeting the pre-defined eligibility criteria. Provides information on the project timescales for modelling and tender results.	Assesses whether scheme is eligible. If appropriate, agrees with the TO the timetable for assessment.
Needs case assessment	Determine needs case for the project, including the scope of proposed works and timing; and show that lessons (eg for planning) from previous projects are being applied.	Submits details of needs case (based on Security and Quality of Supply Standards (SQSS, cost-benefit analysis, user commitment, etc), including justification of proposed timing and explanation of how proposed project would meet the required scope.	Assesses the needs case, including whether the proposed timing is appropriate.
Project assessment	Justify proposals against technical readiness and cost effectiveness, including that any outstanding pre-con work is on track according to proposed project timelines. Determine funding allowances and outputs, and criteria for any future adjustments to costs or outputs.	Submits detailed information about design, costs and risks for project.	Assesses the TO's forecasts of total construction costs to complete the secondary deliverable by the scheduled completion date. Issues consultation on initial findings and issues under consideration. Proposes funding allowances, secondary

Stages	Objective	TO	Ofgem
	This process will build on the TII process.		deliverable and completion date.
Implementing decisions	Provide TO allowances for efficient costs of delivery output where needs case is justified.		Publishes decisions. Consults on licence changes. Issues licence changes.
During construction	Monitor progress towards outputs, and expenditure against profiled allowances.	Reports to Ofgem on progress and expenditure. Notifies Ofgem of any asset value adjusting event.	Considers requests for any COAE. Applies efficiency incentive annually.
Post-construction	Determine delivery of outputs.	Advices Ofgem about delivery of outputs.	Determines performance in delivery of outputs.

1.12. We anticipate that we will conduct a small number of assessments during 2012/13. These assessments will not be conducted under the TII framework, but will be assessed in the context of RIIO-T1. This could include assessments of large projects that would, were they to be submitted during RIIO-T1, be eligible for assessment under the SWW arrangements. These will be treated, in some respects, as “test cases” for refining and improving the arrangements. As noted above, this will also allow us to take into account interactions with the framework for third party delivery of onshore transmission assets as this develops.

More detail on SWW arrangements

Eligibility assessment

1.13. When a TO considers the needs case for a project is sufficiently clear, the TO should notify us of its intention to proceed with the construction phase of the project. For projects that are to be undertaken jointly between more than one TO, it is important that they all participate in this initial notification. We need to have confidence at this early stage that there is sufficient coordination between TOs, which is essential for the efficient planning and delivery of a project. Also, if we clearly understand the working arrangements between the TOs (eg a formal joint venture) then this will help us in planning what information will be required from which TOs at each stage of the assessment.

1.14. At this eligibility assessment stage, the TO(s) would provide us with evidence to enable us to decide whether the project is eligible for consideration under the SWW arrangements, ie whether the project meets the eligibility criteria each TO has pre-defined. SPTL and SHETL have proposed eligibility criteria and these are set out in Chapter 6. If the project meets the eligibility criteria, we would work with the TO to agree an assessment timeline. This would be subject to further review as the assessment progresses, and to the timely provision of information by the TO.

Needs case assessment

1.15. In line with the timetable that had been agreed for the particular project assessment, the TO would submit to us the needs case for the project. This information would have to include evidence to justify: the overall need for reinforcement (eg key specific drivers and SQSS analysis); the reasoning for preferring the proposed project (eg using optioneering and cost-benefit analysis); and the proposed timing of commissioning (eg using least regret analysis). We would assess the TO's submission, and determine whether there was a demonstrable need for the reinforcement in the timescale proposed by the TO, and whether the proposed scope of the works was appropriate.

Project assessment

1.16. Subject to a justified needs case for the proposed reinforcement, the process would proceed to the project assessment stage. In line with the timetable that had been agreed for the particular project assessment, the TO would submit to us the detailed plans and evidence that the proposed costs (capex and opex) are efficient.

1.17. We would use two approaches to determine the appropriateness of the proposed costs. Firstly, the costs would have to be broken down by the TO in sufficient detail to allow a thorough assessment, including benchmarking of specific elements. Secondly, we would need to understand the TO's processes for procurement and selection, to determine whether these were efficient and could therefore be expected to lead to an efficient outcome.

1.18. The TO would also have to provide more detail on the project risks and its proposed risk sharing arrangements, showing how they had been evaluated and allocated efficiently. We would expect the TO to have identified the most efficient means of managing risks and including these, where appropriate, within the overall cost of the project (and hence within the allowed expenditure). However, we recognise that there could be some risks that have low probability and high impact that could be addressed more appropriately by means of a COAE discussed below.

1.19. We would also require the TO to keep us informed with progress towards being ready to proceed with construction in the proposed timescales, eg status of applications for all necessary consents. This will help us to determine whether the work is likely to proceed as proposed, and whether construction funding will be required as requested by the TO. It could be the case that any funding allowances were contingent upon the TO satisfying certain criteria in relation to outstanding points.

Implementing funding and output decisions

1.20. Our decisions will allow the TOs to recover the efficient totex costs of delivering the wider works outputs. Our assessment for a scheme will establish the efficient construction costs for the project, profiled over the construction period, along with

the efficient opex costs that the TO will incur as a result of the changes to its network associated with the project, eg maintenance costs during the RIIO-T1 period. Our assessment for a scheme will also establish the required wider works output, expressed in terms of increases in boundary capability (or equivalent where there is no existing boundary), delivered by a specific date.

1.21. We will specify in the TO's licence the new SWW outputs, and we will adjust the TO's revenues based upon the profiled totex expenditure, adjusted for inflation. All SWW outputs will be subject to the provisions for a COAE as specified in these Final Proposals. Finally, there will be licence provisions setting out timely delivery standards, which would be set to correspond to the point in time at which the reinforcement works are deemed optimal to minimise system costs and to comply with security standards.

1.22. In general, in our funding decision, we will commit to funding the total cost of the works. However, there could be exceptions. For example, where an overall project can be delivered in stages and the need case only justifies progressing the first stage while keeping options open to proceed with later stages. Another example could be particular SWW outputs that span the RIIO-T1 and RIIO-T2 price control periods. In such cases, we might commit to funding only up to that juncture, in order to avoid complicating funding decisions taken under the next price control.


1.23. However, we recognise that this could create uncertainty for the TOs for two key areas of the treatment of such projects, namely:

- the funding commitment to deliver the entire output
- the financial parameters that would apply and therefore the financial risk and return.

1.24. It is important that the regulatory regime does not create a barrier to the efficient financing of key reinforcements. We think our approach under the SWW arrangements will help to avoid such situations. As set out above we will assess the relative merits of the entire reinforcement (the needs case and the detail project cost assessment) that spanned the two price controls. Where the need case justified delivery by the proposed date (in the next price control), Ofgem would consider the impact on the efficient costs of delivery of the TO taking a staged approach to procurement and to contracting with suppliers.

1.25. Where a staged approach is not considered to have a material impact on costs and risks, Ofgem would take a minded to position on the needs case for the entire project, but only take funding decisions on key milestones for the RIIO-T1 period via SWW arrangements. Ofgem would defer a decision on the allowances for the remaining stages of the reinforcement to our decision on the TOs business plan for the next price control. The TOs would have sufficient certainty about the level of funding to allow them to proceed with the works under RIIO-T1.

1.26. If it could be demonstrated that staging the project would increase the costs of delivery, we would seek to:



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- give a minded to position on the needs case and a funding decision on key milestones for the T1 period via SWW arrangements (as above)
- give a minded to decision on the efficient costs of delivering the entire project, and a minded to position on funding the later stages of the project through the TOs' baseline for the next price control.

1.27. Whichever route was used (whether a staged funding arrangement, or a single funding arrangement), the funding granted under the next price control would be subject to the financial parameters of that price control. In setting funding allowances for that next price control Ofgem, would have regard to potential impacts that might arise from changes in price control policy in relation to a existing service contract the TO had for delivery of an output that span both price controls.

1.28. As is the case with baseline totex, a fixed proportion of the capital additions arising from the within-period determinations during RIIO-T1 would be entered into the main RAV in line with actual expenditure and the capitalisation rate. This would earn the same rate of return as the rest of the regulatory asset value under RIIO-T1. The remainder of the costs would be expensed.

1.29. The actual expenditure incurred on SWW projects by the TO in any year would be compared with the allowed expenditure for that year. We would apply the totex efficiency incentive so that the TO is exposed to a proportion of any overspend (and similarly retains a proportion of any underspend). There would be a two year lag in any revenue adjustments due to the efficiency incentive.

During construction

1.30. The TO would be required to provide information on an annual basis on the status of SWW projects and delivery progress. Details of actual expenditure as compared with forecast expenditure would be used in our annual iteration of the financial model to make revenue adjustments in line with the efficiency incentive. Information on the status of progress towards outputs would be used as a means of monitoring delivery and to give us "early warning" of any issues.

1.31. The companies have identified some specific risks that could be more efficient to address after the fact by means of a cost and output adjusting event. This provision will apply only for prescribed events in the following material cases: 1) where costs (as measured before the application of the totex efficiency incentive) changed by more than a certain threshold; or 2) where the event will cause the projected delivery date to fall out with the agreed financial year.

1.32. For SHETL, with the exception of the Western Isles HVDC link, a COAE will only apply for projects less than £500 million if a single prescribed event led to a change in total delivery costs of at least 20%; and for projects above £500 million, a COAE will only apply for changes in costs of more than 10%.

1.33. A COAE will apply in the single event of:

- extreme weather (worse than 1 in 10 for land-based activity, equivalent provisions for marine-based activity)
- the imposition of additional conditions or constraints by a statutory body
- movement of agreed outages by the SO
- changes in the project scope that could not have been anticipated during the assessment process.

1.34. For SPTL, a COAE will apply for a SWW project if a single prescribed event led to a change in total delivery costs of at least 20% before the totex efficiency incentive.

1.35. A COAE will apply in the single event of:

- extreme weather (worse than 1 in 10 for land-based activity, equivalent provisions for marine-based activity)
- the terms or conditions of any statutory consent, approval or permission (including but not limited to planning consent)
- unforeseen ground or sea-bed conditions.

1.36. The TO will provide evidence, including the assessment of independent technical experts, to support the submission for a COAE. We will determine whether the event constituted an asset value adjusting event. If applicable, then we would determine whether the project remained economically efficient as a consequence of the event. Finally, if applicable, we would determine the amount by which the project costs should be adjusted for each year of construction.

Post commissioning

1.37. Once the project has been commissioned, we will require the TO to confirm delivery of the wider works outputs. Each project will have an associated output, defined as the increase in boundary or intra system capability. The TO will be required to verify that the agreed increase has been delivered, and to advise Ofgem of this, along with the relevant supporting evidence.

1.38. Ofgem will review the TO's performance in the delivery of the outputs. Where the TO had not delivered the agreed output on time, we would work with the TO to understand the reasons for this. Failure by a TO to deliver the output on time as specified in the licence could potentially constitute a contravention of the licence condition. In considering whether this is the case or not, the Authority would look at the factors leading to the late delivery 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. Consistent with our Strategy Decision document we will address late delivery in RIIO-T1 through the

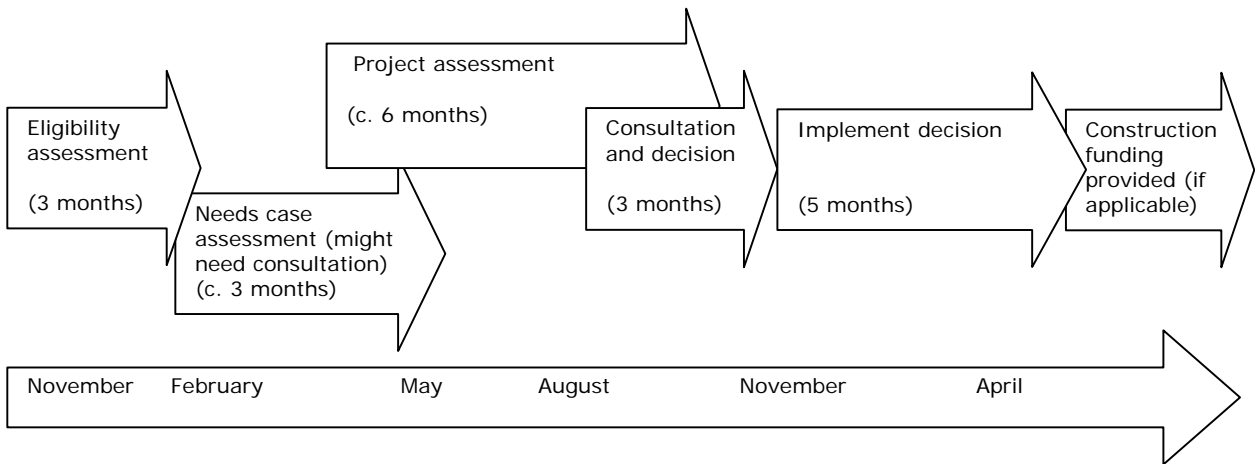


imposition of a financial penalty. If the Authority is satisfied that the late delivery constitutes a contravention the TO could be subject to financial penalty determined under the Authority's 'Statement of Policy with Respect to Financial Penalties'.

1.39. In setting a financial penalty the Authority will take into consideration the level of consumer detriment that is a consequence of the late delivery, as well as aggravating or mitigating actions undertaken by the TO in relation to the late delivery and its impact on consumers.

Timing of stages under SWW

1.40. The following diagram is an indicative timeline for the SWW process. In reality, it is likely that there will be a degree of interaction between some of the stages that means this process is more iterative or involves overlapping steps in practice. Also, we recognise that there will be valid reasons for using different timings for certain projects, and this would have to be agreed in advance between Ofgem and the TO(s). For example, we note that the split between the needs case assessment and the project assessment could vary, depending upon the relative extent of work required for the needs case and the project assessment (eg if the needs for a project case had already been considered by Ofgem in a previous piece of work, then we could agree with the TO to reduce or omit that stage). We will also consider these timings alongside the development of the regime for third party delivery of onshore transmission assets.



1.41. We will consult on each proposal submitted by a TO under the SWW arrangements. We will follow the model used in TII, such that we will consult during our project assessment. We will consult on the TO's proposal, our views based on our assessment to date, and on the issues to consider in our ongoing assessment. We have found in TII that there is sufficient information available at this point for stakeholders to reach informed views about the details of the proposed projects, and that there is sufficient time left in the assessment process for us to take their views into account when reaching our decisions.

1.42. Based on our experience of assessing large projects under the TII framework we consider up to one year for the entire assessment process, from the initial submission to a decision on SWW outputs and funding allowances, would be appropriate in most cases. Our preference, where possible, will be to make final decisions in time to input changes to funding allowances into the financial model, to conduct the statutory consultations on the licence changes, and to modify the licence for outputs and allowances in time for the next financial year. This would allow for greater predictability of network charges, to the benefit of network users. For this preferred timeline, we will need to take the final decision by November before the financial year in which the TO would incur delivery costs. However, we recognise that the timings of some projects would mean that this preferred SWW timeline might not be appropriate.

1.43. We reserve the right to propose a different timeline for any particular assessment, if there is justification for doing so. Similarly, if a TO believes that there is justification for a different timeline for a particular assessment, then the TO should explain its reasoning and set out a clear proposition for us to consider at the earliest possible opportunity. We will work with the TOs to determine the optimal timeline in those cases, and the TO would then proceed with submitting its proposal in line with the agreed timeline.

1.44. For projects that were suited to our preferred timeline, the TO will need to submit its initial request by November of the year before a decision was to be made, which is about one and a half years before the start of the financial year in which the TO would start incurring construction costs. This timescale will allow Ofgem to investigate all of the relevant issues, narrowing down on the key questions at the same time as the TO was refining its plans and arriving at a position on the costs and risks.

1.45. We recognise that this preferred timeline could result in decisions for some projects being made further in advance (eg where costs were to be incurred from late in a financial year) than for others (eg where costs were to be incurred from early in a financial year). This could be acceptable in some cases (eg when the need case is clear, and the TO is confident about the costs), but there could be cases in which it was not possible (or desirable) to make a decision too far in advance of the TO incurring delivery costs.

1.46. In those cases in which timings differ to our preferred timeline, such that we could not make a final decision by the November prior to the financial year in which the TO started incurring delivery costs, then we will make retrospective funding allowances in the next financial year. We will seek to agree with each TO the most appropriate approach for assessments that could not follow our preferred timeline.

1.47. In all cases, we will depend on the TOs submitting information to us at the agreed times (including additional information that we might request during our assessment), in order to enable us to reach decisions at the agreed times.