

#### Guidance

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#### Overview:

This document provides guidance on the Strategic Wider Works (SWW) arrangements introduced as part of the electricity transmission price control, RIIO-T1. The purpose of the SWW arrangements is to facilitate large transmission projects that are needed during the price control period (1 April 2013 to 31 March 2021) to extend and strengthen the transmission network and transport electricity from where new generation is built to where demand is located.

The first part of this document is aimed at stakeholders with a general interest in the SWW arrangements. It provides an overview of the SWW arrangements, explains how a decision on a new transmission project will be implemented and its delivery monitored. The remainder of this document (from Chapter 3 onwards) provides the Transmission Owners (TOs) with more detailed guidance on the requirements for preparing its submissions under the SWW arrangements.

It is ultimately the responsibility of the TO to decide what information is necessary to make a robust case for a proposed reinforcement and to provide us with all relevant information to inform our assessment. We will update this guidance from time to time.

### Context

Ofgem<sup>1</sup> is the Office of Gas and Electricity Markets which regulates the electricity and gas industries in Great Britain. Our principal duty is to protect the interests of existing and future gas and electricity consumers. Consumers' interests are taken as a whole, including their interests in the reduction of greenhouse gases and in the security of the supply, and in the fulfilment of relevant statutory objectives when we are carrying out our functions as the gas and electricity regulator of Great Britain.

One way in which we can protect the interests of consumers is by regulating the network companies though price controls. We set price controls to specify the services and level of performance that the TOs must provide for users and consumers and to restrict the amount of money that the network companies can recover through network charges over the length of a price control period.

In 2012 we published our Final Proposals for the electricity TOs - Scottish Power Transmission Limited (SPT), Scottish Hydro Electric Transmission Plc (SHE Transmission) and National Grid Electricity Transmission Plc (NGET) - which set out the key elements of the price control from 1 April 2013 to 31 March 2021.

As part of Final Proposals for the RIIO-T1 price control we introduced the SWW arrangements to facilitate large transmission projects during the price control period. The SWW arrangements have been formally implemented into the Electricity Transmission licences of SHE Transmission, SPT and NGET through Special Condition 6I (Specification of Baseline Wider Works Outputs and Strategic Wider Works Outputs and Assessment of Allowed Expenditure). This guidance is intended to provide further information on the SWW arrangements.

### Associated documents

Decision on strategy for the next transmission price control - RIIO-T1 (March 2011) <a href="https://www.ofgem.gov.uk/publications-and-updates/decision-strategy-next-transmission-price-control-riio-t1">https://www.ofgem.gov.uk/publications-and-updates/decision-strategy-next-transmission-price-control-riio-t1</a>

RIIO-T1: Final Proposals for SP Transmission Ltd and Scottish Hydro Electric Transmission Ltd (April 2012) <a href="https://www.ofgem.gov.uk/publications-and-updates/riio-t1-final-proposals-sp-transmission-ltd-and-scottish-hydro-electric-transmission-ltd">https://www.ofgem.gov.uk/publications-and-updates/riio-t1-final-proposals-sp-transmission-ltd-and-scottish-hydro-electric-transmission-ltd</a>

RIIO-T1: Final Proposals for National Grid Electricity Transmission and National Gas Grid (December 2012) <a href="https://www.ofgem.gov.uk/publications-and-updates/riio-t1-final-proposals-national-grid-electricity-transmission-and-national-grid-gas-%E2%80%93-overview">https://www.ofgem.gov.uk/publications-and-updates/riio-t1-final-proposals-national-grid-electricity-transmission-and-national-grid-gas-%E2%80%93-overview</a>

<sup>&</sup>lt;sup>1</sup> The terms 'Ofgem', 'the Authority', 'we' and 'us' are used interchangeably in this document.

# Contents

Executive Summary	4
1. Introduction	7
2. Overview of SWW arrangements	11
3. Assessment of proposed Strategic Wider Works Eligibility Needs Case assessment Project Assessment	<b>20</b> 22 24 28
<b>4. Implementation and delivery of SWW outputs</b> Implementing output and funding decisions During Construction Delivery	<b>32</b> 32 33 34
Appendix 1 - Glossary	36

# **Executive Summary**

#### Introduction

RIIO is the regulatory framework we use to set price controls and regulate the performance of the network companies. It is an outputs-led framework. In setting the current electricity transmission price control, RIIO-T1, we specified outputs for the type and level of network services that the network companies must provide throughout the price control period. The price control also restricts the amount of money that the companies can recover through network charges to pay for the delivery of those outputs.

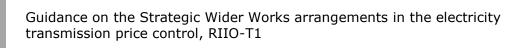
In RIIO-T1, large transmission projects to strengthen or extend the electricity transmission system are generally known as wider works outputs. These are triggered by a need to increase the capacity of the network or to extend the network to accommodate new generation and convey electricity from where it is generated to where demand is located, as well as comply with network security standards.

At the time of finalising RIIO-T1, there was uncertainty around the timing and cost of some large transmission projects as these would depend to a significant extent on the level of future generation. The potential impacts of this uncertainty on consumers could be significant given the scale of the investment involved. If these investments are undertaken earlier than needed this may lead to higher costs for consumers due to unnecessary infrastructure financing costs or increase the risk of assets being built that turn out not to be fully utilised. On the other hand, delayed delivery of critical infrastructure could be detrimental to consumers' interests including through higher costs to manage network constraints; higher greenhouse gas emissions; and possible risks to security of supply. To help manage this uncertainty, flexible arrangements are included in RIIO-T1 to consider large transmission projects when more information was available to inform decisions on whether the investment is in the interests of existing and future consumers.

#### **Overview of SWW arrangements**

When a TO wishes to bring forward a transmission project for consideration under the SWW arrangements, it must give notice to the Authority that it is proposing a new network development for regulatory approval. It must also submit supporting information to justify the reinforcement and the efficient costs of delivering the proposed transmission project.

Following notification by a TO that it is proposing a new transmission project, we will first check whether the proposed reinforcement is eligible for consideration under the SWW arrangements. To be eligible, the proposal must meet pre-defined criteria including the level of the expected cost and the type of outputs it is expected to deliver.



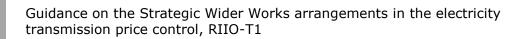
If the project is eligible for assessment, we will assess the Needs Case for the proposal. As part of this assessment we look at the factors supporting the need for the new transmission project. This includes, amongst other factors, the expected increase in generation relative to the existing capacity of the transmission network, as well as the forecast costs to consumers if transmission capability is not sufficient and is expected to constrain generation. To ensure that the investment case is robust we will also review the uncertainties that have been taken into account, for example, different generation scenarios. We will also look at whether the technical scope and timing of delivery are well justified relative to alternative options, and whether the proposal is likely to provide long-term value for money for existing and future consumers. In most cases, we expect to consult stakeholders on our initial views from our assessment of the Needs Case.

In addition to the Needs Case, we will also undertake a Project Assessment where we look in greater depth at the preferred option and the TO's readiness to proceed. We will assess whether the TO has developed a robust development plan and risk sharing arrangements to deliver the project efficiently and whether there is sufficiently advanced technical plans to assess the efficient costs and specify a new SWW output. To inform our final decision on the proposal we will consult stakeholders on the detailed Project Assessment and our views on the SWW output and the efficient costs of delivering the project.

If we conclude positively on all aspects of our assessment, we will implement our final decision by proposing modifications to the TO's Electricity Transmission licence. As part of this modification we will specify a new SWW output for the transmission project and an adjustment to the TO's allowed expenditure under the RIIO-T1 price control that the TO can recover through its network charges. The licence modification will also require the TO to deliver the SWW output by a specified date.

In general, there will be some overlap and interaction between the assessment of the Needs Case and the Project Assessment. As a result, we expect a straightforward proposal may take approximately 12 to 15 months from the TO's notice submission to our final decision and licence modification. However, the timing could vary depending on the specifics of the proposal including the complexity of the project and/or whether there is any interaction with other policy areas. Moreover, the timescale for our assessment and final decision is dependent upon receiving timely and complete submissions from a TO for our assessment.

Once a SWW output has been approved and set out in a TO's licence, we will monitor the TO's delivery performance. During the construction phase, a TO will report annually to us on its progress against the delivery plan. The TO will need to highlight divergences from the plan and its view of the impact on the scheduled delivery date, expenditure etc, as well as any actions it is taking to efficiently manage the impacts on users and consumers. When a TO has commissioned a transmission project it will need to provide evidence that the works have achieved the SWW output specified in its licence. If a TO does not deliver the specified output or delivers it to a different timescale, we would assess the specific facts of the case, including the potential impact on consumers. Subject to our assessment of the circumstances, failure by a TO to deliver the specified output could constitute a breach of the licence condition and potentially be subject to enforcement action by Ofgem. In all instances any investigation will follow our enforcement processes and policies.





## 1. Introduction

#### **Chapter summary**

Explains which parts of the guidance are likely to be of general interest to stakeholders. It also gives some background on how the SWW arrangements will help to manage uncertainty in the context of the current price control, RIIO-T1, for the network companies and consumers.

1.1. This document provides information for stakeholders on the SWW arrangements that were introduced as part of RIIO-T1. It amends and replaces the guidance published as part of the RIIO –T1 Final Proposals<sup>2</sup>.

#### Who should read this document

- 1.2. We suggest that all stakeholders with an interest in the SWW arrangements read this chapter which provides further background information on the development of the SWW arrangements. We also suggest that stakeholders read Chapter 2 for an overview of how we will assess a TO's proposal for a large transmission projects under the SWW arrangements and when we will consult with stakeholders as part of this process. In Chapter 2, we also summarise how we will implement a decision on a TO's proposal for a new transmission project, and how we will monitor a TO's delivery performance.
- 1.3. Chapters 3 and 4 of this document have been specifically written with the TOs in mind. These chapters give more detailed guidance on the requirements for submitting a proposal to us for assessment under the SWW arrangements. It also sets out our assessment and decision making approach. We recommend that the TOs refer to these chapters for further detail on the scope of requirements when they are preparing a notification and submissions for our assessment under Special Condition 6I of the Electricity Transmission licence. We also expect the TOs to take into account our assessment and decision making approach set out in this guidance when it is developing its plans for a proposed new transmission project.

<sup>&</sup>lt;sup>2</sup> See Appendix 2 of the RIIO-T1 Finals Proposals for SPT and SHE Transmission and Appendix 2 of the Cost assessment and Uncertainty supporting document of RIIO-T1 Initial Proposals for NGET.

#### **Background to price controls and the RIIO framework**

- 1.4. One way we protect existing and future consumers is to regulate network companies though price controls. Price controls are needed because in general energy networks are a single provider of network services. To ensure consumers and users get the services they want, we specify in price controls both the services and level of performance that the network companies must provide as well as the total amount of money the network companies can recover through network charges to consumers and users.
- 1.5. In 2010 Ofgem introduced a new network regulatory regime called RIIO (Revenue=Incentives+Innovation+Outputs) a new performance based model for setting the network companies' price controls. To implement the new RIIO model a price control review was undertaken between 2010 and 2012 for the companies that own the high voltage electricity transmission network in Great Britain.

#### Large transmission projects in the RIIO output framework

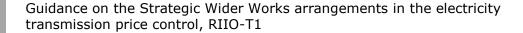
- 1.6. As part of setting the current electricity transmission price control, RIIO-T1, we specified outputs that consumers and users wanted network companies to deliver throughout the price control period.<sup>3</sup> We developed these through written consultation and stakeholder workshops.
- 1.7. Large transmission projects to strengthen or extend the electricity transmission system are known as wider works outputs in RIIO-T1. In general, these works are triggered by a combination of different generation connections and are required to increase the capacity or extend the network to convey electricity from where new generation is built to where demand is located, as well as comply with network security standards.
- 1.8. In the output framework, wider works outputs are measured in terms of increases in the electricity transfer capability across system boundaries<sup>4</sup> (or within system boundaries) in accordance with the national security and planning standards for the transmission network, known as the National Electricity Transmission System Security and Quality of Supply Standard (NETS SQSS). As part of RIIO-T1 we also specified the amount of money that the companies can spend and recover from users and consumers for the delivery of wider works outputs. Under the RIIO-T1 price control, it is much clearer what the TOs are expected to deliver, and what they will be held to account for throughout the price control period.

8

<sup>&</sup>lt;sup>3</sup> <a href="https://www.ofgem.gov.uk/publications-and-updates/decision-strategy-next-transmission-price-control-riio-t1">https://www.ofgem.gov.uk/publications-and-updates/decision-strategy-next-transmission-price-control-riio-t1</a>

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<sup>&</sup>lt;sup>4</sup> A system boundary splits the transmission network into two parts across which the capability to transfer electrical power can be assessed. For the avoidance of doubt, system boundaries are not network ownership boundaries and each TOs network could contain multiple system boundaries.



1.9. In this guidance, large transmission projects are interchangeably referred to as 'large scale network developments', 'strategic wider works', 'SWW outputs' or 'wider reinforcements'.

#### SWW arrangements to help manage uncertainty

- 1.10. In business plans developed for the price control review, the TOs identified some very large transmission projects totalling approximately £8 billion (2009/10 prices) that may be needed during the RIIO-T1 price control period. However, there was some uncertainty as to whether the potential wider reinforcements will actually be required as the reinforcements are dependent on generation market developments.
- 1.11. To help manage this uncertainty we included SWW arrangements as part of the price control settlement to allow a TO to propose large scale network developments and additional funding during the price control period when more information would be available on whether the investment is in the interests of existing and future consumers.
- 1.12. Under these arrangements, the incumbent TO is able to initiate a regulatory assessment of its proposal for a wider reinforcement by providing a notice to us. If we conclude positively on the issues covered by our assessment we will determine a new SWW output and an adjustment to the TO's allowed expenditure in RIIO-T1 so that it can recover the efficient costs of delivery from consumers.
- 1.13. A key advantage of the SWW arrangements is that it ensures decisions are made when sufficient information is available about the drivers, timing and efficient costs of delivering the transmission project. In addition, it enables us to apply proportionate scrutiny, on a case-by-case basis, to our assessment of wider reinforcements proposed by the TOs.
- 1.14. As part of our strategy for RIIO-T1, we also considered the role for third party involvement in the development, build and ownership of transmission assets. We highlighted in our Final Proposals under RIIO-T1 that projects treated as SWW could potentially be subject to this competitive process and therefore potentially delivered by a third party. This matter is now being taken forward as part of a wider project on Integrated Transmission Planning and Regulation (ITPR). We consulted on our emerging thinking on ITPR in June 2013.<sup>6</sup>

9

 $<sup>^5</sup>$  In business plans for RIIO-T1, the TOs also identified some network development projects that have greater levels of certainty in terms of the need, timing and delivery costs. In the RIIO-T1 Final Proposals we have set specific wider works outputs and approved approximately a total of £3.7 billion allowed expenditure in baseline allowances for the TOs to deliver these network development projects.

<sup>&</sup>lt;sup>6</sup> A copy of the consultation can be found here: <a href="https://www.ofgem.gov.uk/ofgem-publications/52728/itpremergingthinkingconsultation.pdf">https://www.ofgem.gov.uk/ofgem-publications/52728/itpremergingthinkingconsultation.pdf</a>



1.15. In general, we expect to apply the assessment and decision-making approach described in this document when a TO notifies us of a proposal for a new transmission reinforcement. However, there may be circumstances that require a different assessment approach from that set out in this document. Where this occurs we will explain why.

# 2. Overview of SWW arrangements

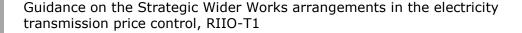
#### **Chapter Summary**

Gives a non-technical overview of the end-to-end SWW arrangements for wider reinforcements during the price control period. It is intended to provide stakeholders with an understanding of the assessment and decision making process and how this will be informed by consultation with stakeholders. It also explains how we will implement a positive decision and monitor the delivery of the output.

- 2.1. The SWW arrangements cover:
  - the TO's notification to us that it is proposing a new network development and that it intends to make a submission for assessment;
  - our assessment of network development proposals submitted by the TOs and our process for consulting stakeholders;
  - our decision making process and the implementation process to modify the TO's transmission licence for a SWW output and the additional allowed expenditure it can recover under the RIIO-T1 price control; and
  - the monitoring regime that tracks the TO's progress and expenditure during construction and verifies completion of the network development to the required delivery standards.

#### TO's role

- 2.2. Network companies have a statutory obligation to develop and maintain the transmission system in an efficient, coordinated and economical manner. As part of this responsibility, it is for the TO to identify what system reinforcements may be needed to meet the needs of existing and future transmission system users.
- 2.3. The requirements for planning and operating the transmission system are set out in the NETS SQSS. The NETS SQSS criteria must be used by TOs to identify the level of transmission capability that ensures adequate demand security, facilitates competition in the generation market and is economic. In general, a reinforcement is economic when the cost of the project is less than the cost consumers would otherwise pay under the counterfactual that there is no increase in transmission capability. For example, to manage bottlenecks on the transmission network the System Operator would need to pay generators to stop generating in areas where there is a temporary excess of power flowing on to the system relative to the level that can be transmitted securely.
- 2.4. In considering options, a TO should consider transmission solutions such as a wider reinforcement as well as non-transmission solutions such as contracting with users for availability, or active network management systems that make the most of the real time operational capacity of the existing network etc.



- 2.5. Under the SWW arrangements it is for a TO to determine the appropriate timing for reinforcements and it can trigger an assessment at anytime during the RIIO-T1 price control period by formally notifying us of a wider reinforcement it considers is necessary. In its notification, the TO will need to show that its proposal is suitable for assessment under the SWW arrangements. To do this, the TO will need to provide:
  - a description of the proposed SWW output and the allowed expenditure it estimates is necessary to deliver the project;
  - the reasons for the request;
  - confirmation that the proposal has not been funded elsewhere in the price control; and
  - a planned submission timetable.
- 2.6. Only network developments that are of a significant scale will be considered under the SWW arrangements. As a result, we expect a TO should also provide timely information to stakeholders about its proposals, including when its plans change. This is necessary so that stakeholders are able to plan appropriately and consider the impact and timing of any decisions that they need to make in relation to their own plans.
- 2.7. After a TO has notified us of its proposal it must also provide relevant information to support its proposal covering:
  - a Needs Case submission which should include a justification for the project (including the proposed scope and timing) and an explanation of how the proposed reinforcements would best meet the required need compared to the alternatives; and
  - a detailed Project submission which includes detailed plans on design, delivery, cost and risks for the project along with evidence that the proposed costs are efficient.

#### Ofgem's role and assessment

- 2.8. Following notification by a TO that it is proposing a new transmission project, we will first check whether the proposed reinforcement is eligible for consideration under the SWW arrangements. To be eligible, the proposal must meet pre-defined criteria including the level of the expected cost and the type of outputs it is expected to deliver.
- 2.9. If the project is eligible, we will undertake an initial review of the submission. The aim of this is to review the content and quality of the submission, the issues which need to be considered in our assessment, and to decide whether the submission includes all of the information required for us to carry out a Needs Case assessment of the proposal.

- 2.10. If we consider that the submission does not contain all the relevant information that we need to carry out our assessment we may decide to send the submission back to the TO. We will set out to the TO the areas needing improvement and/or the additional information needed for us to commence a Needs Case assessment. We expect such 'send backs' to be the exception rather than the rule, and this guidance document is intended to provide the TOs with sufficient detail on what is to be included so that this can be avoided.
- 2.11. Upon receipt of a complete submission we will decide our assessment approach and an indicative assessment timetable under the SWW arrangements. Consistent with the RIIO-T1 price control review process, we will adopt an assessment approach that is based on the RIIO proportionate assessment principles. This will enable us to focus our efforts on the areas that need the most assessment to ensure that the proposal is in the interests of existing and future consumers.
- 2.12. Our assessment of the wider reinforcements proposed by a TO will include:
  - an assessment of the Needs Case for the proposed development; and
  - a Project Assessment which will look at the detailed technical plans and efficient costs of delivering the TO's proposed reinforcement.
- 2.13. The objective and scale of each of these are explained further below.

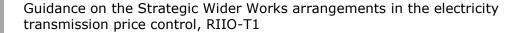
Needs Case assessment

- 2.14. The objective of our Needs Case assessment is to consider whether:
  - there is a well justified need for reinforcement of the transmission system;
  - the delivery timetable put forward by the TO is appropriate;
  - the technical scope of the option for reinforcement being proposed is appropriate; and
  - the proposed reinforcement is in the interests of existing and future consumers.
- 2.15. To assess whether the proposal is well justified we will look at the drivers for the proposed reinforcement and consider whether there is a need for the proposed transmission investment relative to other available options, including the status quo. We also need to be satisfied that the investment case is robust in the context of the current policy environment, and against a range of credible uncertainties such as the level of future generation capacity connecting to the network or the expected costs that will be paid by consumers if no reinforcement of the network takes place (the counterfactual scenario). Our assessment of these issues will be informed by relevant information including the information provided by the TO. This would include information on the current transmission network and projections of the combination of generators expected to connect in the future. Our assessment of the generation projections will also consider supporting information such as contracted connection dates, the level of user commitment, local consent status of proposed generation developments and historical slippage rates.

- 2.16. Our Needs Case assessment will also be informed by the Cost Benefit Analysis (CBA) undertaken by the TO (or its consultants). This should economically evaluate network reinforcements compared to the counterfactual that no reinforcement is undertaken and provide an estimate of the costs and benefits of each option put forward for assessment from the perspective of consumers.
- 2.17. An important aspect of our assessment is examining the robustness of these economic estimates to the assumptions and other inputs used in the CBA modelling. For example, we will assess the sensitivity of the results where there is uncertainty about key assumptions or modelling inputs that underpin the investment case. This could include different generation scenarios, the level of constraint payments and the potential for other future developments to help manage constraints in the study area, as well as other inputs such as modelled power flows and the constrained generation arising under the counterfactual scenario.
- 2.18. The TO should also provide its assessment on the optimal timing of the network development and how this takes account of risk to consumers. We will also review supporting information on the critical path of delivering the reinforcement, and any practical considerations such as supply chain issues and network availability. Our general approach to assessing the optimal timing of proposed transmission developments is to compare the potential costs to consumers associated with delivering capacity too early (incurring financing costs earlier than necessary and risk of asset stranding) or too late (increased constraint costs).
- 2.19. To assess whether the technical scope of the proposal is justified we will review technical power system studies of the level of transmission capability that is required to meet future generation and comply with security standards. We will also assess the TO's evaluation of options that could provide the additional transmission capability. The latter should include an explanation of the relative merits of each option against key factors considered in the evaluation of the different options, such as capital costs, technical benefits, planning risks, environmental impacts, technology risks, supply chain issues and economical anticipatory investment to meet future need.
- 2.20. In general, we expect to consult stakeholders on our Needs Case assessment of proposals made by a TO. We expect to consult for a minimum of eight weeks. We consider that in the majority of cases this period will be appropriate given the likely significance of specific projects under the SWW arrangements and the expected level of interest from wider stakeholders on our assessment. This is also in line with our consultation guidelines. We may chose to run longer or shorter consultation periods from time to time, in line with our consultation guidelines taking into account the complexity, scale, cost and urgency associated with a proposed SWW output.

14

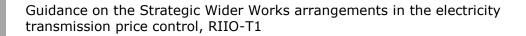
<sup>&</sup>lt;sup>7</sup> If Ofgem's consultation approach were to change in future we will adopt the revised recommended practice. A copy of 'Guidance on Ofgem's approach to consultation' is available at: <a href="https://www.ofgem.gov.uk/ofgem-publications/37043/guidance-ofgems-approach-consultation.pdf">https://www.ofgem.gov.uk/ofgem-publications/37043/guidance-ofgems-approach-consultation.pdf</a>



- 2.21. After considering stakeholders' views and undertaking any further assessment we think is needed, we will publish a letter setting out our views on the Needs Case, which will usually include a minded-to position.
- 2.22. This will be subject to review following our detailed Project Assessment on the efficient costs of delivering the new SWW output.

#### Project Assessment

- 2.23. In contrast to the Needs Case Assessment, the Project Assessment will only look in greater depth at the preferred reinforcement option. The objective of our Project Assessment is to assess whether the detailed technical design of the proposed reinforcement is fit for purpose and whether:
  - the TO has developed a sufficiently robust delivery plan and risk sharing arrangements to deliver the proposed output efficiently; and
  - the technical option and costs are efficient.
- 2.24. Our assessment will be informed by detailed information provided by the TO on its procurement strategy, construction programme and costs, delivery plan and risk mitigation strategies.
- 2.25. In considering the efficiency of the proposal we will use a number of approaches, including benchmarking costs, where comparable data is available. In other areas, where it is more difficult to apply such techniques, our assessment will evaluate the TO's procurement strategy and the extent to which this is likely to lead to a competitive outcome. We will seek evidence that the TOs have provided their suppliers with sufficiently detailed information, and allowed sufficient time for the suppliers to price the construction costs and risks efficiently. We will also assess the robustness and appropriateness of the TO's evaluation of and proposed approach to allocating risk and the costs of managing those risks. An important factor is whether the risks have been allocated to the party best placed to efficiently manage those risks and whether there is an appropriate balance between TO and consumer risk allocation. We will also assess whether there is a sufficiently robust construction programme and that progress has been made towards being ready to proceed within the proposed timescales.
- 2.26. We expect to consult stakeholders again after we have carried out our initial Project Assessment. This consultation will help inform our final decision on any appropriate outputs and allowed expenditure adjustment that is to be made. As with the consultation on the Needs Case, the consultation on the Project Assessment will typically be for an eight week period.
- 2.27. After considering stakeholders' views and carrying out any additional assessment we consider necessary we will make a determination on the SWW outputs and an adjustment the the TO's allowed expenditure in RIIO-T1. Any initial views reached on particular issues in our Needs Case assessment will not fetter our



discretion in making a decision on the appropriate outputs and allowed expenditure for a proposal following the Project Assessment. We will set out this determination in a decision letter.

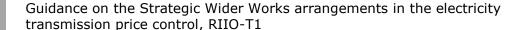
- 2.28. If we conclude positively (ie we determine that allowed expenditure should be given for a specific output) the decision letter will include details of:
  - the new SWW output as measured by an increase in boundary transfer capability or equivalent additional transmission capacity where there is no existing boundary;
  - the adjustment to the TO's RIIO-T1 allowed expenditure it can recover from consumers; and
  - the required timescales for the new output to be delivered.

#### *Implementation*

2.29. Our determination on SWW outputs and allowed expenditure adjustment can only take effect through a modification to the TO's Electricity Transmission licence. Before modifying the licence we will publish a statutory consultation on the proposed licence modifications (the consultation will be for a period of no less than 28 days). The proposed modification will be intended to amend the licence to reflect any new SWW output, an associated expenditure allowance and a scheduled date for the availability of the assets on the transmission system. Subject to the statutory procedure for licence modifications, the proposed modifications will take effect no less than 56 days after the date on which our decision to make the modifications is published. For the avoidance of doubt, this licence obligation would require the TO to deliver the specified increase in transmission capacity by a specified date.

#### Construction

- 2.30. Once a SWW output has been included in its licence a TO would be required to report annually during the construction phase, on its actual expenditure and progress in delivering the SWW output. As part of this process the TO should provide an update on the status of the project delivery programme against the project plan. This should include an explanation of divergences in expenditure or project milestones or concerns that the TO has about delivery progress.
- 2.31. We will compare a TOs reported annual spend on an SWW project to the allowed expenditure that was approved for that year. We will apply the efficiency incentive rate (as specified for each TO in the RIIO-T1 Final Proposals) to the difference between actual expenditure and annual allowed expenditure that has been approved for a specific project so that the TO is exposed to a proportion of any overspend (and similarly retains a proportion of any underspend).
- 2.32. During the construction phase a TO may also notify us that it intends to seek an adjustment to the allowed expenditure and/or specified SWW output through the provisions in its licence for a Cost and Output Adjusting Event (COAE). We expect



such instances to be rare as the provisions apply only for a small number of predefined events that have a relatively low likelihood of occurring but could have a material impact of the costs of delivering the output, eg an extended period of extreme weather that delays the construction programme significantly. Another provision for an Output Adjustment (OA) would also allow for the SWW output to be re-defined in the case that there has been an unexpected change in the generation and demand background compared to the levels that were expected at the time the SWW output was specified.

#### Delivery

- 2.33. We will monitor the TO's performance in the delivery of the SWW outputs as part of the annual reporting cycle under the price control. If the TO has not delivered the agreed output on time, we would expect the TO to explain why and to provide plans for progression.
- 2.34. Failure by a TO to deliver the output on time as specified in the licence could potentially constitute a breach of its licence. In considering whether this is the case or not, we would follow our usual processes and policies for investigation and enforcement set out in *Enforcement Guidelines on Complaints and Investigations*. Among other things, we 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.
- 2.35. For the avoidance of doubt, in general we consider that a licensee is responsible for all of its actions, including where it engages third parties. Licensees are best placed to manage these risks rather than consumers. Therefore, we do not consider it appropriate to treat issues differently based on whether the licensee does the work in house or uses an external contractor. This helps to ensure that the licensee takes appropriate care in the selection and practices of the contractor.
- 2.36. If we are satisfied that the late delivery constitutes a breach of its licence, the TO could potentially be subject to financial penalty determined under our *Statement* of policy with respect to financial penalties.<sup>9</sup>
- 2.37. Table 1 below summarises the end-to-end arrangements for the assessment, implementation and delivery of an approved SWW output.

17

<sup>&</sup>lt;sup>8</sup> If Ofgem's enforcement approach were to change in future we will adopt the revised recommended practice. A copy of the most recent guidelines can be found here: <a href="https://www.ofgem.gov.uk/ofgem-publications/37567/enforcement-guidelines-2012.pdf">https://www.ofgem.gov.uk/ofgem-publications/37567/enforcement-guidelines-2012.pdf</a>
<sup>9</sup> A copy of the policy statement can be found here: <a href="https://www.ofgem.gov.uk/ofgem-publications/74207/utilities-act-statement-policy-respect-financial-penalties.pdf">https://www.ofgem.gov.uk/ofgem-publications/74207/utilities-act-statement-policy-respect-financial-penalties.pdf</a>

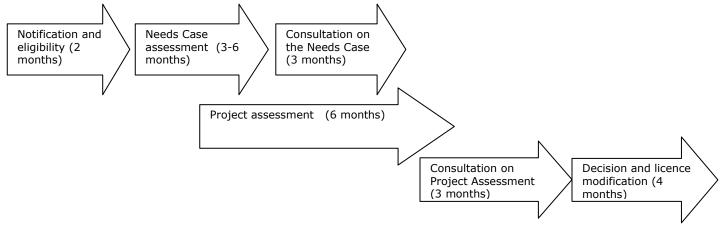


Regulatory	Objective	то	Ofgem
1. Notification	Request that the Authority specify a new SWW output	Formally notifies Ofgem it proposes a new SWW output	Consider assessment approach and timetable.
2. Assessment		•	
- Eligibility	Check whether proposal is eligible for assessment under SWW arrangements.	Provides information to show the proposed SWW output is eligible for assessment under SWW arrangements.	Review whether scheme is eligible and meets qualification criteria in Final Proposals.
- Needs Case	Ensure investment case is robust and the scope and timing of proposed works are appropriate. Ensure the proposed reinforcement provides value for money for existing and future consumers.	TO submits information to justify its proposals, and a timetable for submitting other relevant information for assessment under SWW arrangements.	Assess the strength and certainty of the need for the proposal and whether the proposed scope and timing are well justified.  Consult on initial views arising from assessment and issues under consideration.
- Project Assessment	Ensure proposal is cost efficient and TO is ready to proceed according to the proposed project timelines.  Determine efficient costs and define SWW output to be delivered.	Submits detailed plans about design, costs, delivery and managing risks for the project.	Assess the TO's delivery plans and proposed costs to deliver the SWW output by the proposed completion date.  Consults on initial views and proposals for SWW output to be delivered and efficient costs, and
			scheduled completion date.
3. Decision and implementation	Specify a new SWW output for TO to deliver and adjust the TO's RIIO-T1 allowed expenditure.		Consults on licence changes. Publish decision.
4. Construction	Ensure timely progress towards delivery of SWW outputs.	Reports to Ofgem on progress and expenditure.  Notifies Ofgem of any Cost and Output Adjusting Event (COAE).	Monitor progress and actual expenditure against allowed expenditure.  Applies efficiency incentive annually.  Considers requests for a COAE.

Regulatory process	Objective	то	Ofgem
5. Delivery	Timely delivery of SWW outputs.	Advises Ofgem about the delivery of outputs.	Monitors the TO's performance in the delivery of the outputs.

2.38. Figure 1 below gives an indicative timeline for the assessment and implementation of a straightforward decision on a new SWW output. Some submissions may require more or less time for assessment than is indicated here. This will depend on a number of issues including the scale and technical complexity of the proposal or if there are interactions with other policy issues. We have not included the construction and delivery phase for large scale network developments in the timeline, as this will vary according to the size and complexity of the particular proposal.

Figure 1: Indicative timeline of SWW assessment and implementation of decisions



- 2.39. There will be some overlap and interaction between the assessment stages (as indicated in Figure 1). As a result, we expect that a straightforward proposal may take approximately 12 -15 months from beginning-to-end. However, as noted above, the timing could vary depending on the specifics of the proposal including the complexity of the project and whether there is interaction with other policy areas. Moreover, this timescale is dependent upon receiving timely and complete submissions from the TOs for our assessment. We will continue to review the above timeline during the price control period and reflect any changes in an updated guidance document.
- 2.40. The next chapter of this document is written for the benefit of the TOs and covers the assessment process in more detail. It includes the key issues that we will examine in each assessment area and the relevant information we require from the TOs in respect of new proposed SWW outputs. Chapter four provides more detail on the regulatory processes and requirements to implement a positive decision on a new wider reinforcement and a TO's reporting requirements during the construction and delivery stages.

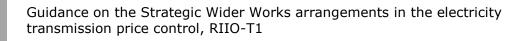
# 3. Assessment of proposed Strategic Wider Works

#### **Chapter Summary**

This chapter is aimed primarily at the TOs. We set out in more detail the relevant issues we will consider in each assessment area and the relevant information we are likely to need from the TOs to inform our assessment.

#### Introduction

- 3.1. Our assessment of the wider reinforcements proposed by a TO under the SWW arrangements is set out in Special Condition 6I of the Electricity Transmission licence and covers:
  - the eligibility of the proposed reinforcement under the SWW arrangements;
  - the Needs Case for the proposed SWW output; and
  - a Project Assessment looking at the detailed technical plans and the efficient costs of delivering the proposed reinforcement, including risk management.
- 3.2. While each assessment area covers distinct issues, there is a degree of interaction between our assessment of the Needs Case and the Project Assessment. For this reason we anticipate some overlap in these assessment areas. One advantage of this approach is that it may help to reduce the overall timescale of our assessment.
- 3.3. We are committed to consulting and reaching conclusions on the Needs Case and Project Assessment areas when we have sufficient information to do so. However, given the possibility of new information coming to light such as changes to the policy environment or other important factors, we expect that the assessment and decision making process may be iterative in some cases. Accordingly, initial views and conclusions reached on particular issues in our assessment will not fetter our discretion in making the final determination on the SWW outputs and any associated adjustments to allowed expenditure under the RIIO-T1 price control at the end of our overall assessment.
- 3.4. For the avoidance of doubt, we emphasise that the information specified in each assessment area below is not intended to be an exhaustive checklist or structure for a TO's submission. Rather, it should be seen as a guide to the information that we consider to be relevant in light of the issues we intend to consider in each assessment area. As each project is unique, the information required will vary between projects. We expect a TO to consider carefully the supporting material it considers appropriate to our assessment to ensure that it makes robust submissions for the project. It is the TO's responsibility to ensure it

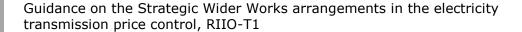


includes sufficient information in its submissions to enable us carry out our assessment.

- 3.5. If we consider that the submission does not contain all the relevant information that we need to carry out our assessment we may decide to send the submission back to the TO. We expect such 'send backs' to be the exception rather than the rule and this guidance document is intended to provide the TOs with sufficient detail on what is to be included so that this can be avoided wherever possible. We will set out to the TO the areas needing improvement and/or any additional information that we need to commence a Needs Case assessment following an initial review.
- 3.6. There is some crossover between the information provided in support of the Needs Case and the Project Assessment. However the exact requirements could vary depending on the particular project. Also as the Project Assessment submission will generally be made after the Needs Case submission it is important that the TO includes up-to-date information at the time of the Project Assessment submission rather than relying on information included in the Needs Case submission.
- 3.7. It is not intended that this guidance is taken as a substitute for any statutory, licence or other relevant requirements. Therefore, we recommend that the TOs read this document in conjunction with any relevant statutory obligations and Special Condition 6I of the Electricity Transmission licence.

#### **General principles and requirements**

- 3.8. The provision of timely and complete information by the TO in respect of a new proposed SWW output is very important. As set out in Special Condition 6I we will only be able to start assessing the case for a proposed SWW output when a TO has provided us with the relevant information required to inform our assessment.
- 3.9. The quality of the information submitted, the robustness of the data within it, and how well it is justified, will also influence the degree of regulatory scrutiny we apply during our assessment. Therefore, to help the SWW assessment process run as smoothly as possible, it is important that TOs meet a number of general requirements as follows:
  - Keep us updated about the expected submission schedule for at least the next six months and ideally beyond, including when it expects to make a new submission, or if there are changes to the timetable that the TO has previously advised us of.
  - Identify whether there will be any joint working with other TOs in the delivery of the proposed SWW output.
  - Provide complete and navigable submissions that do not rely on the crossreferencing of information provided previously to Ofgem for some other purpose or given in a previous submission that was subsequently withdrawn.



- Maintain an assurance system for the quality and completeness of information submitted to us, eg senior management sign off on all submissions made to
- Clearly identify and justify the validity of assumptions used in supporting analysis.
- Keep the submission up-to-date throughout our assessment period and actively provide us with the most up to date information and version of documents, eg status of generators in study area, risk registers, etc.
- Inform us as and when changes are made to key assumptions and provide a log of the impacts of such changes on the supporting analysis and results.
- Respond in a timely manner to requests for further information, ensuring that the information provided is complete, accurate and addresses the issue or question being raised.
- Proactively engage with stakeholders including other TOs, seeking their views and providing them with timely updates to changes in its plans in relation to proposed SWW outputs.

#### **Eligibility**

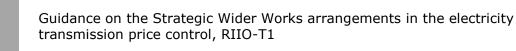
3.10. A TO will trigger the SWW assessment process by notifying us under Part F of Special Condition 6I of the Electricity Transmission licence that it is proposing a new network reinforcement. In its notice, the TO must show that the proposed reinforcement meets the eligibility criteria set out in the following paragraph for assessment under the SWW arrangements.

#### Relevant issues for Ofgem to consider in its eligibility assessment

- 3.11. When we receive the notification and supporting information, we will review the TO's proposal against the eligibility criteria for SWW assessments that we set out in Final Proposals as follows:
  - the output will deliver additional transfer capability capacity across system boundary (or within boundary) or wider system benefits;
  - the costs cannot be recovered under any other provision of the TO's price control settlement; and
  - the total expected delivery cost is greater than the threshold specified for each TO as shown respectively in Table 2 below.

Table 2: TO-specific cost thresholds for SWW outputs

Company	Cost threshold
Scottish Hydro Electric Transmission Plc	£50m
SP Transmission Ltd	£100m

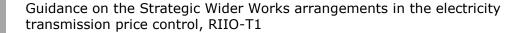


Company	Cost threshold
National Grid Electricity Transmission Plc	£500m

- 3.12. In some instances, where a proposed reinforcement has already been shown as suitable for assessment under the SWW arrangements (for example, those we listed as a prospective SWW output in the RIIO-T1 Final Proposals for a TO), we may not review the eligibility of the proposal (unless the proposed reinforcement has changed significantly).
- 3.13. If a proposed project is to be undertaken jointly between more than one TO we will also consider if there is sufficient coordination between the TOs for the efficient planning and delivery of a project. Therefore, we expect all TOs to participate in the initial notification to us. This will also help us determine what information will be required from each TO or jointly in each part of the assessment and to inform the overall assessment timeline.
- 3.14. We will also review the TO's proposed timetable for the project's critical path and for providing us with the relevant information we need to conduct the remainder of the assessment. A key issue we want to consider is whether there are any implications arising from the TO's proposed delivery timetable for our assessment approach and timetable under the SWW arrangements for that project.
- 3.15. At this stage of the process, we will assemble a project team which will work together on each stage of the assessment. This team will liaise directly with the TO to discuss the proposed reinforcement.
- 3.16. In general, we do not expect it will be necessary to consult with stakeholders on the initial eligibility assessment, before we consider the substantive proposal.

#### Relevant information for the TO's eligibility submission

- 3.17. The TO's notification needs to demonstrate how the proposed SWW output meets the qualification criteria for assessment under the SWW arrangements. It should also provide sufficient information on the overall delivery timetable and the proposed project's critical path. The notification should include, but is not limited to:
  - A measure of the proposed SWW output in terms of the increase in transmission transfer capability across system boundaries or sub boundary and/or other wider system benefits.
  - Confirmation that the project has not been funded as part of the current price control settlement or other funding.
  - Estimates of total delivery costs, excluding the costs of pre-construction activities undertaken by the TO to develop the technical design plans and obtain the necessary planning or development consents in preparation for constructing a SWW output.



- An indicative timeline for the project delivery including the expected timing for awarding key supply contracts.
- A timeline for the TO to provide further information submissions to Ofgem (ie when it will provide its submissions for the Needs Case and Project Assessment).
- Details of the proposed working arrangements between the TOs (eg a formal joint venture or other forms of co-operation) if the project is to be undertaken jointly between more than one TO.
- Any other analysis or information that the TO considers to be relevant to the Authority's determination of its request.

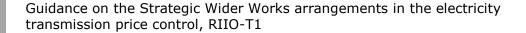
#### Scope of Ofgem's conclusions on the eligibility assessment

3.18. If the proposal meets the eligibility criteria, we will discuss with the TO an indicative timetable for our assessment of the Needs Case and detailed Project Assessment. In coming to a view on the assessment timetable we will consider the TO's timetable for providing all relevant information and the TO's timetable for delivering the project. This timetable would be subject to further review as our assessment progresses. It will also depend on the timely provision of information by the TO(s). Likewise, Ofgem will aim to review new information in a timely manner.

#### **Needs Case assessment**

#### Ofgem's assessment of the Needs Case

- 3.19. When we receive the Needs Case we will first check it contains all the information we think is necessary for our assessment. If necessary information is missing or insufficient, we may send the submission back to the TO.
- 3.20. Consistent with the assessment objectives set out in Special Condition 6I our assessment of the Needs Case will examine a number of issues, including but not limited to:
  - Whether the TO has submitted a well justified case for the reinforcement, eg presents relevant information and analysis to support the proposed network development which is in the interests of existing and future consumers relative to the alternative options, including the status quo.
  - Whether an appropriate range of uncertainties have been taken into account for the purpose of justifying a robust requirement for the reinforcement and optimal timing, eg potential generation connecting that has an impact on the required network capacity, level of user commitment, constraint costs and, demand projections.
  - Whether the technical scope of the proposed reinforcement is appropriate, ie
    whether the TO has adequately considered alternative transmission options
    and / or operational measures to meet the network requirements and whether
    its preferred option represents an economical, efficient and coordinated
    solution relative to the other options available.
  - The validity of the assumptions and inputs used in the quantitative analysis.



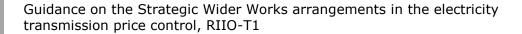
- Whether the cost benefit methodology is appropriate and the sensitivity analysis is well justified.
- Whether the methodology for estimating the costs of options is appropriate and allows a fair comparison between the different options.
- Whether there are aspects of the Needs Case that we will revisit once we
  have received further information from a TO, eg market tested costs data
  (that is submitted as part of the Project Assessment) to verify the cost benefit
  analysis.
- 3.21. We will consult stakeholders on the relevant issues considered in our Needs Case assessment. Stakeholders responses will help to inform our initial views of whether the technical scope and delivery timing of the proposed SWW output is sufficiently well justified and represent long term value for money for existing and future consumers.
- 3.22. In general, we plan to consult for a minimum of 8 weeks. We may vary the consultation period where appropriate, in line with our Guidance.

#### Relevant information in the TO's Needs Case Submission

3.23. As detailed in Special Condition 6I, the TO will submit a Needs Case for the project. It is the TO's responsibility to provide us with all relevant information to inform our assessment and to make a robust case for the reinforcement. As noted previously we expect the information set out below to be relevant to the issues we will consider under the Needs Case assessment. However, the TO should not limit its submission to the points listed below. It should consider in each case whether there is additional material likely to be relevant to our assessment.

#### Evidence on the need and scope of the proposed reinforcement, including:

- Details of the existing transmission capacity, including whether the boundary is currently compliant with planning standards (NETS SQSS).
- An explanation of the investment drivers and justification for the reasonableness of these assumptions for the purpose of testing the Needs Case, eg current generation, demand and constraint costs, projections of future demand, generation and constraint costs.
- The strength of user commitment and certainty around this driver, including supporting evidence on historical rates of termination and the slippage in the timing on contracted generation connections.
- An explanation of the operational need and the scope, ie size and type of reinforcement required to comply with NETS SQSS and the potential longer term need.
- Analysis and explanation of what would happen without the added investment.
- The scope of the transmission works required to meet the capacity need and options considered.
- An explanation of the policy context and how it has helped to inform the choice of options and the timing of reinforcement.



- An explanation and justification of all of the assumptions used in the submission.
- Where a proposal is an iteration of a previous submission an explanation of any changes made (eg increases in cost, change in scope or technical design).

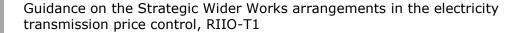
#### Evidence on the options considered and the TO's preferred solution, including:

- A clear description of the options considered including potential transmission and non-transmission solutions (eg active network management) and an explanation of the adequacy of the options considered to accommodate the identified reinforcement requirement.
- A relative appraisal of the reinforcement options (optioneering) covering lifetime costs, NETS SQSS compliance, technical complexity, lead times, environmental impacts, amenity values, impact on security of supply, delivery and planning and other risks and option values.
- An explanation of the appraisal methodology.
- Consideration of potential benefits and risks of future proofing, eg including some anticipatory investment.
- An explanation of the relative merits of the TO's preferred solution and why the other options were discounted.
- An annual profile of the expected total delivery cost and an explanation of any changes in cost from previous estimates.
- Estimates and explanation of the Capex and Opex costs for each solution.

#### Evidence on the expected long-term value for money for the consumer, including:

- Life-time Cost Benefit Analysis (CBA) of reinforcement options. This should include, among other things, environmental benefits, monetised costs and benefits to consumers and impacts on security of supply.
- A justification for the number of reinforcement options included in the CBA.
- An explanation of the methodology used in the CBA, the assumptions used, and justification of the validity of these assumptions.
- CBA results on the expected net economic benefits of the reinforcement options and analysis of the sensitivity of the results to key inputs and assumptions such as the volume of generation and demand projections, discount rates and constraint volumes and costs.
- A range of evidence based scenarios for future electricity generation in the affected area.
- The modelling of the CBA. The model is a fundamental piece of evidence supporting the needs case and should be reviewed by Ofgem. The submission should include, but not be limited to, a working spreadsheet of the CBA, details of the inputs and outputs from the CBA (including the calculations and spreadsheets used to derive the volume of constraints (GWh)), and any modelling of key assumptions. Limitations on the transparency of modelling and/or inputs may undermine the credibility of the submission.
- Relevant information provided by the System Operator (SO) which has been used to inform the analysis on the proposed reinforcement.

#### Evidence on the optimal timing of the reinforcement, including:



- An assessment of the key uncertainties underlying the timing of the transmission reinforcement, including CBA results for different delivery dates and a range of generation scenarios.
- Analysis of the merits of different delivery dates under various scenarios. This should include least worst regret analysis.
- Description and explanation of factors that have driven the decision on timing.
   This should include making it clear the extent to which factors such as availability of resources and supply chain constraints are influencing the timetables and the evidence of these.

#### Project timelines and the delivery strategy, including:

- A delivery plan/schedule, including the project lifecycle, lead times and key milestones.
- An explanation of the procurement strategy (eg the objectives, operating structure, how the TO will maximise value for customers, supplier strategy, risk management, post delivery evaluation).
- An assessment of the supply chain availability for the preferred solution, eg setting out any significant constraints or supply issues.
- An overview of the risk profile of delivering the competing reinforcement options, eg potential planning sensitivities, supply chain issues, cost uncertainties, weather related risks and risks to consumers, such as technology risks or delays in delivery. The TO should also include a detailed description of how they intend to manage these risks.
- An explanation of how lessons learned from previous projects will be applied to the proposed SWW project.

# Evidence on the quality of the TO's stakeholder engagement on its proposal, including:

- The TO's stakeholder engagement plan and the range of stakeholders that involved.
- The range of stakeholders' views on key aspects of the proposal.
- An explanation of where stakeholders' views have informed the proposal, and where the proposal differs from the views of stakeholders and the TO's justification for this.

#### Ofgem's minded to position on the Needs Case assessment

3.24. We will develop our position on a TO's proposal for a new SWW output and the associated expenditure allowance iteratively over the course of the Needs Case assessment and the Project Assessment. This is because there are a number of interactions between the two assessment areas. Therefore, under the SWW arrangements, we will make a single determination on the TO's proposal at the end of the process, once we have completed all of the assessment areas and been able to consider the project in the round.

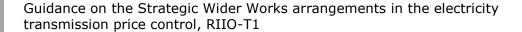
- 3.25. Where possible, we would like to be able to arrive at a minded to position in part or whole of our Needs Case assessment for the TO's proposed SWW output. Our minded-to position would be subject to concluding positively on related issues in our Project Assessment or other such issues that we might specify as relevant from time to time during the assessment period. For example, we may wish to verify the CBA submitted as part of the Needs Case with the market-tested cost data that is submitted as part of the Project Assessment, or other related conditions such as obtaining relevant planning consents.
- 3.26. In some instances we may not consider it appropriate to come to an initial or a minded-to position following the consultation on the Needs Case. This could be the case for example for more complex projects that are not sufficiently far advanced or if stakeholders have significant concerns in response to the consultation or raise additional significant issues that require further assessment before we can come to a minded-to position.
- 3.27. Following the consultation, we will publish a letter setting out our views on the Needs Case assessment and how stakeholders' responses have informed this. We would make clear whether or not we have reached a minded-to position and what the outstanding aspects of our assessment are and the information that would be needed to resolve these matters.

#### **Project Assessment**

- 3.28. In contrast to the Needs Case Assessment, the Project Assessment will only look in greater depth at the preferred option. In the Project Assessment we will focus on the TO's readiness to proceed with delivery and the efficiency of the total forecast costs of construction and other elements, including risk contingencies.
- 3.29. It is ultimately the TO's responsibility to provide us with all relevant information to inform our assessment. It is for the TO to make a robust case for the proposed reinforcement. As noted previously, we expect the information set out below to be relevant to the issues we will consider under this assessment area.

#### **Ofgem's Project Assessment**

- 3.30. Consistent with the aims set out in Special Condition 6I to determine the efficiency of the proposed costs and technical readiness to proceed with a proposed SWW output, our Project Assessment will examine a number of issues, including but not limited to:
  - Whether there is sufficient detail on the technical design to justify that the
    costs are efficient and that any optional capabilities included in the proposal
    represent long-term value for money.
  - The robustness of the TO's process for procurement and selection, and whether this process had been efficiently applied and could be expected to lead to an efficient outcome.



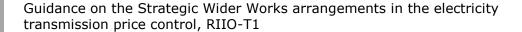
- The efficiency of the proposed costs, taking into account the conclusions on the above and any additional detailed cost assessment including benchmarking of specific elements.
- The evaluation of risks, and the appropriateness of the proposed risk management strategy including the allocation of risks and the associated costs.
- The appropriateness of the construction programme and progress made towards being ready to proceed in the proposed timescales.
- 3.31. We will consult stakeholders on the relevant issues considered in our Project Assessment and our initial views on the SWW output that the TO would be required to deliver and the efficient delivery costs. We will also highlight where our assessment has shed further light on the relevant issues considered in the Needs Case and/or conditions attached to a previous minded-to position on the Needs Case. Stakeholders' responses will also help to inform our initial views.
- 3.32. As for the Needs Case submission, in general, we expect to consult for a minimum of 8 weeks.

#### Relevant information for the TO's Project Assessment Submission

3.33. In line with the indicative assessment timetable, the TO would need to submit detailed plans and information showing the TO's readiness to proceed with the proposed SWW project and that the proposed costs of delivering the output are efficient. Moreover, we would expect to see detail on the technical design, a delivery strategy, and details of how the TO will manage risk. It is important that all relevant information is provided as part of the Project Assessment submission. As such the TO should include copies of all documents referred to in the submission.

#### TOs will need to provide evidence of cost efficiency, including:

- A breakdown of all costs and cost schedules associated with the project (eg land, capital investment, expected maintenance, refurbishment, part and full replacement of assets). In discussion with the TO we may provide a spreadsheet requesting that this information be provided in a particular format.
- Evidence that the costs are efficient, eg through cost benchmarking, market testing, or competitive tendering.
- An explanation of any changes in costs from previous submissions.
- A description of the cost methodology (eg estimates, market testing, benchmarking) and a comparison, where possible, to historic costs in carrying out similar projects.
- An explanation and a summary of any contingencies and other factors included in the cost of individual items eg insurance.
- Details of the procurement strategy followed (eg the objectives, operating structure, how the TO will maximise value for customers, supplier strategy, risk management, post delivery evaluation) and the procurement timetable and selection process, specifying whether the project will be a turnkey



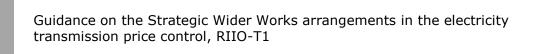
- solution or delivered through multi provider contracts, and providing details of the supply chain and any supply constraints.
- An explanation of which cost components have been acquired though a
  competitive tendering exercise. If applicable, provide secure access to tender
  documents, details of the preferred bidder proposals and second proposals
  including the scores awarded in the tender assessment process.
- Clarify which contracts have been awarded and provide a timetable for those which are to be awarded in the future.
- Once the contracts have been awarded a copy should be provided to us so that we can see the final costs, and contract terms.

#### Delivery strategy and risk management, including:

- A description of the delivery model and a detailed delivery plan/schedule with key dates and critical paths clearly identified.
- Evidence of readiness to proceed, eg details of delivery team structure, roles and responsibilities.
- Details of the company's previous experience in managing similar projects and how learning from previous projects (if applicable) will inform proposal, eg lessons learnt on previous risk mitigation strategies.
- The delivery risk profile of the proposed project, and an assessment of the key risks, and uncertain costs. An up-to-date risk register should be included along with details of how the risk register has been derived and the process for updating it (including audit trail).
- The risk mitigation strategy and risk sharing arrangements, including what costs and risks have been included in supplier contracts, and why this represents and efficient level. All incentives in the contract to encourage the supplier to deliver on time and to budget should be highlighted, eg arrangements to pass through any potential regulatory penalties to the supplier through the contract.
- Details on the level of contingency risk that is included in the proposed costs and justification for why this is an appropriate level given other risk sharing mechanisms such as RIIO-T1 efficiency sharing factor and the Cost and Output Adjusting Event provisions that are part of the SWW arrangements.
- A summary of the insurance strategy. This should include what factors are insured against.

#### Technical Design, including:

- A description of the construction works.
- Details of any changes in design since the Needs Case submission.
- An appropriate level of detail on technical designs (eg substation layout) and construction techniques to be used in the project, with the expectation that more detail would be provided if design and/or construction activity is technically challenging, novel, or a cause for divergences in cost relative to industry benchmarks.
- detail on any optional capability that is included in the technical proposal and justification for its inclusion.



#### Scope of Ofgem's conclusions on the Project Assessment

- 3.34. After considering responses to the consultation we will publish the Authority's decision on the required SWW output that the TO will be expected to deliver and the adjustment to the TO's RIIO-T1 allowed expenditure for delivering that output, unless there is a requirement to consult further. The new SWW Output will be specified in terms of an increase in boundary transfer capability (or equivalent change in transmission capacity where there is no existing boundary) to be available by a scheduled date.
- 3.35. In Final Proposals for the RIIO-T1 price control we set out that the scope of allowed expenditure for new SWW outputs determined by the Authority under the SWW arrangements would only cover the total costs of the construction works and the operation and maintenance costs associated with a delivered SWW output. For the avoidance of doubt, the adjustment to the TO's RIIO-T1 allowed expenditure determined through the SWW arrangements will not include any associated preconstruction engineering works. The latter is covered by a separate provision for this activity that is included in each TO's baseline settlement for the RIIO-T1 price control.
- 3.36. The next chapter describes the delivery stage and how we intend to give effect to the Authority's decisions taken under the SWW arrangements in relation to new SWW outputs and the adjustment to the TO's RIIO-T1 allowed expenditure through licence changes. It also gives an overview of the requirements on a TO to report on progress during the delivery phase and the additional provisions that allow the TO to seek a re-opener of the decision in order to adjust the specified SWW output and allowed costs for certain pre-defined events where these materially change the scope of works to deliver the specified output.

# 4. Implementation and delivery of SWW outputs

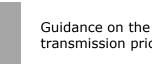
#### **Chapter Summary**

Describes the process for the Authority's implementation of decisions on a new SWW output and the associated adjustment to allowed expenditure that a TO can recover. We also highlight the reporting requirements on TOs during the construction and delivery of SWW outputs.

#### Implementing output and funding decisions

- 4.1. When we have published a decision on a new SWW output and the allowed cost recovery for the TO, we will also publish a statutory consultation under section 11A of the Electricity Act 1989 in order to give effect to that decision. This consultation will set out the proposed modifications to Special Condition 6I and will be for a minimum period of 28 days.
- 4.2. After the statutory consultation, and consideration of stakeholders' responses, the Authority will determine whether the proposed modifications set out in the consultation document (namely a new SWW output, an agreed delivery date, and the annual allowed expenditure for delivering the SWW output) can be made (or be made subject to minor alterations). Alternatively, the Authority will consult again and set out the reasons why it has chosen to do so.
- 4.3. If the Authority decides to make the proposed modifications, the decision will take effect not less than 56 days after the decision to proceed with the making of the modifications is published.
- 4.4. Adjustments to the TO's allowed expenditure in RIIO-T1 that have been determined and approved under the SWW arrangements by Ofgem will be given effect through the Annual Iteration Process (AIP). The AIP was introduced as part of the RIIO regulatory framework to update a TO's allowances in RIIO-T1 each year for additional allowed expenditure that has been approved by Ofgem through the SWW arrangements as well as other changes arising from the incentives or other expenditure adjustments that reflect a TO's performance in delivering the outputs set out in Final Proposals for RIIO-T1. The AIP will take place in the autumn of each year to update the transmission company's Price Control Financial Model.
- 4.5. In the event that an allowed expenditure adjustment for an approved SWW is not updated before the TO starts to incur the delivery costs, <sup>10</sup> the TO's expenditure

<sup>&</sup>lt;sup>10</sup> This might be the result of timing issues between when a determination is announced and



allowances would be amended retrospectively in the next AIP, ie the following year, with a time value of money adjustment so as not to cause any financial loss to the TO.

#### **During Construction**

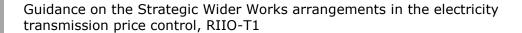
#### TO's role

- 4.6. The TOs are required through Standard Condition B15 (Regulatory Instructions and Guidance) to report annually during the construction phase on its expenditure and progress in delivering the SWW output. As part of this annual update the TO should provide an update on the status of the project delivery programme against the project plan. This should include an explanation of divergences in expenditure or project milestones or concerns that the TO has about delivery progress.
- 4.7. Although we expect such occurrences to be rare, a TO may notify us during the construction phase that it intends to seek an adjustment to the allowed expenditure and/or specified SWW output through the provisions in Special Condition 6I for a Cost and Output Adjusting Event (COAE) or an Output Amendment (OA). The provisions will apply only for a small number of pre-defined events that have a material impact on the efficient costs of delivering the output or if there has been an unexpected change in the generation and demand background relative to that expected at the time the SWW output was specified. We refer the TO to the requirements in Special Condition 6I of the Electricity Transmission licence for further detail on the requirements of these provisions.

#### Ofgem's role

- 4.8. We will monitor progress against deliverables based on information provided in the TO's annual regulatory report. Where appropriate we will consider and make decisions on any COAE or OA requests made by a TO.
- 4.9. Following receipt of the annual information from a TO we will compare actual incurred expenditure on SWW projects in any year with the allowed expenditure for that year. We will apply the efficiency incentive rate to the difference between actual incurred expenditure and allowed expenditure (as specified for each TO in the RIIO-T1 Final Proposals) 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 adjustments that are due as a consequence of the efficiency incentive.

when the AIP is scheduled.



#### **Delivery**

#### TO's role

- 4.10. Once the SWW output has been commissioned the TO must confirm to us the delivery of SWW output as specified in the TO's licence. The TO will have to provide evidence to verify that the required increase in boundary capacity has been achieved.
- 4.11. One way to provide evidence that an SWW output has been delivered would be through an independently verified report. This report should include, but not be limited to: some background on the proposed reinforcement, verification whether it has delivered the agreed level of increased boundary capacity, highlight any areas of non-compliance and confirm whether there needs to be additional work.

#### Ofgem's role

- 4.12. We will review the TO's performance in the delivery of the SWW outputs. Where the TO has not delivered the agreed output on time, we would expect the TO to explain why and to provide plans for progression. Failure by a TO to deliver the output on time as specified in the licence could potentially constitute a breach of the licence condition. In considering whether this is the case or not, we would follow our usual processes and policies for investigation and enforcement set out in *Enforcement Guidelines on Complaints and Investigations*. Among other things, we 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.
- 4.13. For the avoidance of doubt, in general we consider that a licensee is responsible for all of its actions, including where it engages third parties. Licensees are best placed to manage these risks rather than consumers. Therefore, we do not consider it appropriate to treat issues differently based on whether the licensee does the work in house or uses an external contractor. This helps to ensure that the licensee takes appropriate care in the selection and practices of the contractor.
- 4.14. If the Authority is satisfied that the late delivery constitutes a breach of the TO's licence, the TO could potentially be subject to financial penalty determined under the Authority's' Statement of policy with respect to financial penalties.
- 4.15. In setting a financial penalty the Authority would take into consideration certain factors, including the level of consumer detriment that is a consequence of

<sup>&</sup>lt;sup>11</sup> A copy of the guidelines can be found here: <a href="https://www.ofgem.gov.uk/ofgem-publications/37567/enforcement-quidelines-2012.pdf">https://www.ofgem.gov.uk/ofgem-publications/37567/enforcement-quidelines-2012.pdf</a>



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.

# Appendix 1 - Glossary

#### Α

#### Authority

The Gas and Electricity Markets Authority is our governing body and is referred to variously as GEMA (Gas and Electricity Markets Authority) or the Authority. The Authority was established by section 1 of the Utilities Act 2000 to regulate the gas and electricity markets in Great Britain. The role of the Authority is to oversee our work and provide strategic direction.

#### В

#### Benchmarking

The process used to compare a company's proposals (eg its costs) or performance to that of best practice or to average levels within the sector.

#### C

#### Capital Expenditure (CAPEX)

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

#### F

#### Fettering discretion

Procedural fairness demands that decision-makers do not "fetter" their discretion. Officials can have a pre-determined policy on how discretion will usually be exercised. But if a policy becomes so rigid that it prevents a decision-maker from responding to the merits of each case, their discretion will have been "fettered". In reference to the SWW arrangements, this means that previous positions (eg on needs case assessments) do not affect our ability to reconsider these cases in the light of new evidence.

#### Ι

#### Integrated Transmission Planning and Regulation (ITPR)

The Integrated Transmission Planning and Regulation (ITPR) project is reviewing the existing GB electricity transmission arrangements. It is looking at how the system is currently planned and delivered, assessing whether any changes are appropriate to



facilitate a future integrated system. This is in response to the longer term challenges arising from the move to a decarbonised energy system.

#### L

#### Licence conditions (obligations)

An obligation placed on the network companies to meet certain standards of performance. The Authority has the power to take appropriate enforcement action in the event that a licensee fails to meet these obligations.

#### Licence condition - Special Condition 6I

A licence condition in the Electricity Transmission licence which details the governance framework for us to assess proposals made by a TO for a new Strategic Wider Works Output and the associated allowed expenditure adjustment.

#### Ν

#### Network charges

These are charges that the network companies make to users of the network to recover the costs incurred to deliver the outputs the companies are required to provide during the price control period.

#### Network companies

In this case it refers to the electricity transmission owners in GB (ie NGET, SHE Transmission and SPT).

#### National Electricity Transmission System (NETS)

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

National Electricity Transmission System Security and Quality of Supply Standard (NETS SQSS)

As referred to in the Electricity Transmission licence Standard Conditions C17 and D3. This is the standard in accordance with which the electricity transmission licensee must plan, develop and operate the transmission system.

#### National Grid Electricity Transmission plc (NGET)

The Electricity Transmission licensee in England & Wales

#### 0

Operating Expenditure (OPEX)



Expenditure on the day to day operation of a network such as staff costs, repairs and maintenance and business overheads.

#### Outputs (objectives of new regulatory framework)

The network services that the network companies are required to deliver over the price control period. The TOs must report information annually on output delivery which will enable us to assess network company performance over a control period.

#### Price control

The regulatory framework that we use to specify the outputs that the network companies are required to deliver over a given period of time and restrict the amount of money that the companies are allowed to recover from users and consumers.

#### R

#### Reinforcement (Electricity Transmission)

The installation of new transmission assets to accommodate changes in the level or pattern of electricity supply and demand, and meet the applicable security standards.

#### RIIO (Revenue = Incentives + Innovation + Outputs)

Ofgem's new regulatory framework was developed from a review of the previous price control framework, RPI-X. It was implemented for Gas Distribution and Transmission price controls in 2012. RIIO places emphasis on the accountability of network companies for delivering outputs over the price control period, and incentives to drive innovation and deliver a sustainable energy network at value for money to existing and future consumers.

#### RIIO-Transmission Price Control Review 1 (RIIO-T1)

The price control for the transmission network companies introduced on 1 April 2013 and to run until 31 March 2021. It is the first transmission price control review to reflect the new regulatory framework, RIIO.

#### S

#### Scottish Hydro Electric Transmission plc (SHE Transmission)

The Electricity Transmission licensee in northern Scotland.

#### SP Transmission Limited (SPT)

The Electricity Transmission licensee in southern Scotland.

#### Stakeholder



Stakeholders are the parties that are affected by, or represent those affected by, decisions made by network companies and Ofgem. As well as network users and consumers, this would for example include Government and environmental groups.

#### Stranded asset

Is a term that describes an asset that has become obsolete, or non-performant, but must be recorded on the balance sheet. In this case it specifically refers to reinforcements that are not fully utilised (because of insufficient generation).

#### Т

#### Transmission Owner (TO)

Companies which hold transmission owner licenses. Currently there are three electricity TOs: NGET, SPT and SHE Transmission.

#### Turnkey projects

Is a type of project that is constructed so that it could be sold to any buyer as a completed product. In this case it refers to the situation where a reinforcement is completed by only one supplier.

#### U

#### User commitment

The level of security provided by developers of new generation to the proposed transmission reinforcement.

#### V

#### Value engineered

A value engineered project would provide value for consumers and be built in an economically efficient manner. Value engineering differs greatly from over engineering; where projects are gold plated, or built to the level where the vast majority or all risk has been mitigated.