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generators, suppliers, consumer
groups and other interested
parties

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Date: 25/01/2019

Dear Colleague,

Consultation on Scottish Power Transmission Ltd.'s Output Measures Adjusting Event request and review of the Opening Asset Value for the South West Scotland Transmission Investment for Renewable Generation (TIRG) Project.

1.1. Scottish Power Transmission Ltd. (SPT) has completed construction works on Part A of the development of the South West Scotland (SWS) renewables connection project. This phase consists of the expansion of the existing grid substation at Coylton, a new substation at New Cumnock and a 400kV double circuit overhead line (OHL) from Coylton to the New Cumnock substation. Part A of the SWS project is one of five phases on the SWS program, and the only phase that is funded through the Transmission Investment for Renewable Generation (TIRG) mechanism[1].

1.2. In 2016, following completion of the SWS project, SPT submitted a post construction technical report and a post construction expenditure report, both accompanied by separate independent auditor statements authored by GHD and in accordance with Special Licence Condition 3J.10[2]. SPT also submitted a preconstruction and construction expenditure report, accompanied by an auditor's statement authored by Ernst and Young[3]. Finally, in addition to these minimum requirements, SPT submitted an Output Measures Adjusting Event (OMAE), together with the required notice, accompanied by an independent audit report authored by GHD[4].

1.3. We have carefully assessed all the information before us and we have identified three key considerations:

- Whether to accept the OMAE request;
- What the Opening Asset Value (OAV) should be for the post construction period; and
- Whether any adjustment needs to be made to reflect delays.

[1] Please refer to Appendix A for detail on the TIRG mechanism.
[2] SPT Special Licence Conditions: https://epr.ofgem.gov.uk/Content/Documents/SPTL%20-%20special%20conditions%20consolidated%20-%20Current%20Version.pdf
[3] Also in accordance with Special Licence Condition 3J.10.
[4] These reports and auditor statements have not been published as part of this consultation and will remain confidential.

Output Measure Adjusting Event

1.4. During the pre-construction period, SPT made a decision not to proceed with an element of the project scope – the replacement of the Quad Booster at Tongland substation. SPT has submitted an OMAE under Special Condition 3J.12, and in accordance with 3J.6(b)(ii), to request to remove this output from the project scope. Having reviewed SPT's submission and carried out our own analysis, our provisional view is that SPT's request to remove this element from the project scope is reasonable. Appendix B and C provide further explanation of our review and our proposed approach to amending the licence.

Opening Asset Value

1.5. Special Licence Condition 3J.7 and 3J.8 require us to determine the OAV for relevant projects for the post construction period. This value determines the revenue allowance for the 5 years after construction ends and the project is delivered. During this period, the Transmission Owners (TOs) can retain the value of efficiency savings or losses against the allowed construction expenditure for the project. These revenues are based on allowed construction expenditure rather than actual expenditure. This gives TOs an incentive to deliver projects efficiently. Unless we determine otherwise, this value will reflect the value specified in the TIRG condition.

1.6. In the SWS final project proposal set in 2004[5], the project allowance was set to £42.55 million[6]. The final project expenditure was £43.7 million. We note a £1.15 million overspend against the allowed expenditure, despite the Quad Booster having been removed from the project scope.

1.7. Upon review of the independent audit prepared by GHD on SPT's post construction expenditure report, we understand that the overspend is mainly a result of the increase in anticipated construction costs associated with the OHL works.

1.8. We have determined that the SWS project has met all of the requirements set out in Special Condition 3J.8(b) of SPT's Transmission Licence. Our assessment of this criteria is outlined in Appendix D. We equally recognise that the forecasted allowance includes the Quad Booster, which we propose to remove from the project scope.

1.9. Our provisional view is that it is appropriate and aligned with the principles of the TIRG mechanism to maintain the OAV and post construction revenues for the project, reflecting the original allowance of £42.55 million. This means that the overspend of £1.15 million will not be shared with consumers during the post construction period.

Project Delays

1.10. In addition to determining the OAV, we must also consider whether a project has experienced delays which need to be reflected in a change to the start of the post-construction period. Schedule C of the licence anticipated a three-year construction period. It was expected that the project would be completed and the outputs delivered in year 2014/15, however, SPT has notified the Authority that project completion took place in 2016/17.

[5] TIRG final project proposals: https://www.ofgem.gov.uk/ofgem-publications/56481/9139-28804.pdf. Note that at this time the SWS project was referred to as 'Kendoon'.
[6] All revenues are stated in 2009/10 prices unless stated otherwise.

1.11. As indicated in the GHD post construction expenditure report and from reviewing evidence provided by SPT, there was a 16-month delay in the completion of the project. We propose that this should be reflected as a two-year delay during the post-construction period. Appendix E outlines the events that led to a delay in the SWS project.

1.12. Licensees delivering TIRG projects are funded based on the post-construction period starting the year after the construction period is expected to end. In the case of the SWS project, the outputs were delivered two years after the start of the post-construction period anticipated by the licence[7]. This means that SPT was able to recover allowances two years before it should have been able to. Appendix A provides further detail on the TIRG mechanism and an explanation of the four periods.

1.13. We are considering the application of an adjustment to the allowances to reflect the financial implications of receiving the post-construction revenues early. TIRG projects in the past have adopted one of two alternative approaches to correct the revenues received early from delays. These options are explained below in the context of the impact of each option on SWS projects:

Option 1- Restatement of SPT's historical allowances using the general price control revenue recovery correction term[8]

1.14. Under Option 1 we would restate SPT's historical allowed revenues to account for the post construction period commencing in 2017/18 instead of in 2015/16, as originally anticipated. This would involve reducing the allowed revenue for 2015/16 and 2016/17 to zero and 'shifting' the post construction period such that it now spans from 2017/18 to 2021/22. Please see the table in Appendix F which illustrates how we propose to move the post construction period.

1.15. This option is in line with decisions made in previous SPT TIRG projects, including the B5 boundary project[9] and the Beauly Denny project.

1.16. This proposed approach makes two adjustments to rectify the overall allowance for the SWS project. Firstly, it accounts for the fact that, being shifted later, the allowances would be higher in nominal terms due to inflation. Secondly, it removes the interest SPT would have received as a result of these allowances being collected early. The latter is achieved by applying the general price control revenue recovery correction term. Further explanation of how this correction term works can be found in Appendix G of this letter.

1.17. The combined effect of this proposed adjustment will result in a total payment of approximately £0.46 million[10] to SPT in the last two years of the restated post-construction period. The small payment to the company is because the correction term used in the over/under recovery mechanism in nominal terms applies an interest rate which is lower than our current inflation forecasts. The interest rates applied in the correction term will be based upon the relevant year of the Bank of England's Official Bank Rate. This estimated adjustment to historical allowances is in nominal terms and therefore it is subject to change to reflect both actual inflation and actual interest rates in respect to the year in which the adjustments are made, 2021/22.

[7] Table in Schedule C of Special Licence Condition 3J.
[8] This is the mechanism applied to correct over/under recovery of overall price control annual revenue. For further information on how it is used in the Revenue Model please refer to Special Licence Condition 3A Part E. Throughout this letter we will refer to this mechanism as the 'correction term'
[9] B5 Boundary project consultation letter: https://www.ofgem.gov.uk/sites/default/files/docs/2015/07/boundary_b5_consultation_published_0.pdf This letter consults jointly of the delays for the B5 Boundary project and the Beauly Denny project.
[10] This estimate is in nominal terms.

Option 2- Make an adjustment to ensure that consumers are fully NPV-neutral to the revenues SPT received early

1.18. Alternatively, under Option 2 we would make an adjustment to SPT's allowed revenue in 2021/22, using the relevant rate of return to achieve an NPV neutral adjustment.

1.19. This NPV neutral calculation would use the rate of return that is applicable to TIRG projects during the five-year post construction period, which is 8.8%[11]. It should be noted that this rate is specific to TIRG projects during the construction and five-year post construction periods and that a lower Weighted Average Cost of Capital (WACC) has been applied under the RIIO-ET1 price control.

1.20. Under Option 2, as set out in Appendix F, we anticipate the adjustment will initially be reflected in 2019/20 as an over recovery, which in turn will adjust the allowed revenue for 2021/22 by an estimated £6.9 million. This estimate is also in nominal prices and is subject to change with inflation and interest rates in the relevant year that the adjustment is made; 2021/22.

1.21. This proposed approach is in line with what we adopted for the Scottish Hydro-Electric Transmission's (SHETL) Sloy TIRG project[12]. In that TIRG decision we applied an adjustment to SHETL's allowed revenues using the 8.8% rate of return, through a modification of SHETL's revenue base value (RBt) in the Special Licence Condition J2[13]. We applied this adjustment on the basis that "the project was not operational during the delay and was thus not delivering the benefit to network users which would qualify it for the post construction funding"[14].

Our initial view

1.22. We recognise that SPT has delivered the SWS project two years later than expected. The TIRG final proposals[15] set out that any under delivery of outputs would be investigated unless the licensee was clearly not at fault. We consider that this also includes the actions of any third parties engaged by the licensees.

1.23. Based on the information provided by SPT and from reviewing the GHD post construction expenditure report we note that the delays in the delivery of the SWS project were largely the result of SPT's contractor entering liquidation and the delays in obtaining planning consents. Appendix E provides an explanation of the cause of the delays in each output.

1.24. We also note that during these delays, the project was still operational. SPT were striving to comply with their licence obligations and continue construction works for the SWS project during the delay, unlike the Sloy project where SHETL were not operational during the delay. On that basis, our initial view is that Option 1 would be more appropriate in recognising the effect of SPT recovering revenue early in the SWS project in the context of TIRG. Subject to consultation, our proposed intention would be to restate the incorrect historical allowed revenues using the correction term.

[11] The 8.8% is the pre-tax cost of capital in real terms used in the TIRG mechanism in Special Licence Condition 3J.5.
[12] SHETL's TIRG Determination Letter for project 'Sloy': https://www.ofgem.gov.uk/ofgem-publications/52604/tirg-sloy-determination-pdf
[13] Licence modification notice for SHETL's Sloy: https://www.ofgem.gov.uk/sites/default/files/docs/2012/08/sloy-modification-notice---final.pdf
[14] Page 4 of the SHE-T TIRG Determination Letter for project Sloy.
[15] TIRG final proposals: https://www.ofgem.gov.uk/ofgem-publications/56481/9139-28804.pdf

1.25. We note that, under the RIIO framework, the WACC applicable to a licensee's price control settlement is used to calculate time value of money adjustments. This is when the award or application of a financial value, attributable to a particular year, is deferred until a later year irrespective of whether the deferral is routine and in accordance with a price control mechanism. Any decision to take a different approach to the treatment of delays under the TIRG mechanism should not be understood as a change in approach under the RIIO framework.

Consultation

1.26. We are seeking views on our proposals in the following areas:

1. Do you agree with our proposal to accept OMAE?
2. Do you agree with our provisional view that the OAV should equal the value as originally specified in the TIRG condition for the SWS project?
3. Do you agree that the post construction period should have started in 2017/18, and that we should recognise this by shifting the post construction period back to account for the two-year delay?
4. Do you have a view on the two approaches proposed to account for delays in the SWS project?
5. Do you agree with our initial preference to implement Option 1?
6. Is there any other relevant information that we should take into account?

Next Steps

1.27. We welcome views from any interested parties regarding the issues raised in this letter. We will use these to inform our determination of the Output Measures Adjusting Event, the Opening Asset Value and our approach to adjusting historically allowed revenues.

1.28. Please submit your response by 25th of February 2019, preferably by email, to Eilidh Alexander (Eilidh.alexander@ofgem.gov.uk). We will also accept postal submissions. Please send these to:

Eilidh Alexander
Electricity Transmission Policy Team
Ofgem
3rd Floor
32 Albion Street
Glasgow
G1 1LH

1.29. Responses will be published on our website unless they are marked confidential[16]. If you would like your response to remain confidential, please clearly mark your response to that effect and provide reasons for confidentiality.

1.30. We anticipate publishing our decision in March 2019. If you have any queries regarding this consultation, please contact Eilidh Alexander.

Yours faithfully,

Min Zhu
Deputy Director of Electricity Transmission Sector
System and Networks

[16] Ofgem will respect such requests, subject to any obligations to disclose information, for example, under the Freedom of Information Act 2000 or the Environmental Information Regulations 2004.

Appendix A- TIRG Mechanism

1.31. The TIRG mechanism[17] was established in 2004 to fund transmission projects to connect renewable generation outside the price control process to minimise investment delays. It provides the three electricity TOs with expenditure allowances for specific transmission reinforcement projects. The various TIRG projects, including the SWS project, can be broken down into four distinct phases:

Pre-construction	**Construction**	**Post-Construction period**	**Regulated Asset Value period**
Period prior to construction.	Period of construction. The length of the construction period is set out in the Licence with an annual revenue allowance set for each year.	Period of 5 years which begins one year after output is delivered.	15 year period during which any savings are shared with consumers.

1.32. The OAV sets the revenue for the post-construction period, which is designed to start the year after a project is commissioned. During this period, the TOs can retain the value of any efficiency savings or endure any overspend against the project's forecasted costs. This gives TOs an incentive to deliver projects efficiently. Any cost savings or justified overspend are shared with consumers. The TIRG final proposals and the published guidance note[18] for the mechanism provide further background on the intention behind the post-construction period.

[17] TIRG Final Proposals; https://www.ofgem.gov.uk/ofgem-publications/56481/9139-28804.pdf
[18] A copy of the Guidance document can be found here: https://www.ofgem.gov.uk/ofgem-publications/56420/12320-27505-pdf

Appendix B- Our proposal for the OMAE

1.33. The TIRG mechanism allows TOs, under specific circumstances, to request to make relevant amendments to the scope of their construction works. Such a request is referred to as an Output Measures Adjusting Event (OMAE) in accordance with Special Licence Condition 3J.6.b(ii).

1.34. An OMAE can only be accepted where the TO is able to demonstrate that it is necessary to comply with the terms and/or conditions of any statutory consent, approval or permission in respect of the transmission investment or when a change in scope has occurred where it is necessary to comply with technical, engineering or planning constraints. An OMAE allows for amendments to the scope to be made but does not allow for modifications in the allowed expenditure.

1.35. In 2008, SPT carried out an assessment of the impact of an increase in renewable generation on the SWS project scope. This assessment identified that it was no longer necessary to replace the Quad Booster as part of the SWS project as the anticipated generation in this region was increasing significantly and there was a risk that the Quad Booster may obstruct the capacity. It was decided that the Quad Booster was no longer required in completing the overall objective of the SWS project and if SPT had delivered this Quad Booster there was a risk that it would become a stranded asset.

1.36. In 2017, SPT submitted a request for an OMAE to remove one output measure from the project scope; the Quad Booster at Tongland[19].

Our proposal to approve the OMAE

1.37. Our provisional view is that SPT's SWS OMAE notice meets the criteria in the licence. SPT has been able to demonstrate that a change in scope has occurred by reason of a necessity to comply with technical, engineering or planning constraints, in accordance with 3J.6(b)(ii). Additionally, SPT's OMAE submission has complied with all of the particulars outlined in Special Licence Condition 3J.12, and the requirements in the associated guidance document[20].

1.38. Subject to consultation, it is our provisional view that the decision to remove the Quad Booster from the project scope is justified and economically reasonable. A decision to install the Quad Booster would have resulted in an increased risk of asset stranding and would not have been in the interest of consumers. We also consider that SPT have delivered the overall output that was required of the SWS project. We are therefore proposing to accept their OMAE.

[19] See Appendix C below for the SWS Output Measures
[20] TIRG Guidance Document; https://www.ofgem.gov.uk/ofgem-publications/56420/12320-27505-pdf

Appendix C- Project Scope

1.39. We are proposing to amend the output measures in the table for the South West Scotland in Schedule C of Special Licence Conditions 3J to reflect our proposal to approve SPT's OMAE. Our proposed amendments are highlighted in red below.

Output Measures: South West Scotland

Project scope	**Capability as at 31 March 2005**			**Forecast capability prior to construction start date**			**Forecast capability post construction**		
Area connection infrastructure	Circuit voltage (kV)	Winter rating (MVA)	Summer rating (MVA)	Circuit voltage (kV)	Winter rating (MVA)	Summer rating (MVA)	Circuit voltage (kV)	Winter rating (MVA)	Summer rating (MVA)
New Cumnock - Kilmarnock South	Circuit does not presently exist.			Circuit does not presently exist.			275	955	760
New Cumnock - Coylton	Circuit does not presently exist.			Circuit does not presently exist.			275	955	760
New Cumnock 275/132 'SGT1'	Circuit does not presently exist.			Circuit does not presently exist.			275/132	240	240
New Cumnock 275/132 'SGT2'	Circuit does not presently exist.			Circuit does not presently exist.			275/132	240	240
~~Tongland Quad. Booster~~	~~132~~	~~90~~	~~90~~	~~132~~	~~90~~	~~90~~	~~132~~	~~190~~	~~190~~

Appendix D- Assessment of SWS project against the Opening Asset Value Criteria

1.40. Special Licence Condition 3J.8(b) and the associated guidance document[21] sets out the criteria that is required to be considered when determining the OAV. We have used this criterion to establish and asses the reasonableness of SPT's costs and the extent to which the outputs have been delivered. Each criterion is addressed separately below:

- **Whether the final aggregate transmission investment expenditure set out in the post-construction expenditure report has been efficiently incurred**

1.41. The allowed expenditure set in the initial proposals[22] for the SWS project was £42.55 million. The final expenditure detailed in the expenditure report was £43.7 million, which includes the allowance for the Quad Booster. Therefore, despite our proposal to accept SPT's request to remove the Quad Booster from the project scope, SPT would nevertheless have generated an overspend of £1.15 million against the original allowance.

1.42. GHD's post construction expenditure report outlined that this overspend was in relation to the construction tendering process of the OHL works. This report evidences that SPT carried out a competitive tender for the construction of OHL works in 2013, which attracted six bidders. Following this process, SPT entered multiple rounds of negotiation to reduce construction expenditure. Despite SPT's attempts to minimise the costs of the OHL works, the results of the tendering process were higher than the original project allowance. It is therefore our preliminary view that the overspend of £1.15 million was due to an unforeseen increase in costs of the OHL works against the original forecast, rather than a result of the inefficient processes or behaviours of SPT.

1.43. The £42.55 million project allowance included funding for the Quad Booster, however we consider SPT's decision to remove the Quad Booster reasonable and therefore propose to remove this from the project scope. We have come to the preliminary view that the project outcomes have been effectively achieved within the original allowances. We recognise that the proposal to remove the Quad Booster from the project scope has mitigated additional and unnecessary overspend in the project, and upon consideration of the project as a whole, our preliminary view is that the OAV should remain at £42.55 million. This would mean that the overspend of £1.15 million will not be shared with consumers during the post-construction period.

- **The extent to which the licensee had complied with the output measures specified in Schedule C of the TIRG condition for the transmission investment project under consideration**

1.44. As well as the overall project output, which was to deliver an increased network capacity in the South West of Scotland, SPT's licence condition also includes a number of more disaggregated project outputs measures set out in Schedule C of the licence condition. We note that SPT has submitted an OMAE to account for the removal of the Quad

[21] The associated guidance document for the TIRG Licence can be found here: https://www.ofgem.gov.uk/ofgem-publications/56420/12320-27505-pdf

[22] Initial proposals for TIRG projects can be found here: https://www.ofgem.gov.uk/ofgem-publications/56519/8008-19604tirgippdf . The SWS project at this time was referred to as the Kendoon project.

Booster at Tongland from the project scope (Appendix C for the Output Measures and our proposed approach).

1.45. GHD conducted a review of the post construction technical report that SPT prepared, which determines if the project deliverables have been achieved. This report concludes that SPT have delivered all of the revised output measures. From our review of this we find the following:

Project scope	**Forecast capability post construction**			**Performance against project outputs**
Area connection infrastructure	Circuit voltage (kV)	Winter rating (MVA)	Summer rating (MVA)	
New Cumnock - Kilmarnock South	275	955	760	Construction of the double circuit 275kV overhead line on L8 Specification towers between Coylton and the new New Cumnock substations has been completed. Winter/Summer Ratings have been confirmed as 1490/1320MVA respectively. Coylton substation has been reconfigured to provide a split single busbar arrangement facilitating the connection of the 2 Coylton circuits to the existing 2 East Kilbride South and the Auchencross Circuits. The New Cumnock substation is complete and in service.
New Cumnock - Coylton	275	955	760	
New Cumnock 275/132 'SGT1'	275/132	240	240	At New Cumnock 2 275/132kV 240MVA Transformers, nomenclature SGT1 and SGT3a, have been installed, are in service and are fully operational.
New Cumnock 275/132 'SGT2'	275/132	240	240	

- **Whether an adjustment has been made to the average asset value or the depreciation value for the transmission investment project during the construction period**

1.46. No adjustment has been made to the average asset value or to the depreciation value during the construction period.

- **Any other information the Authority considers to be relevant to the determination**

1.47. We have reviewed all other relevant information, including the reports submitted to date by SPT in respect of the completion of its works for the project.

1.48. We have come to the preliminary view that on balance the costs incurred in the SWS project are efficient and in accordance with Special Licence Condition 3J.9, we consider that the Regulated Asset Value Period – the 15 year period starting in 2022/23 - will be based on the total expenditure of the SWS project, £43.7 million, as per the TIRG Mechanism[23].

[23] Please refer to the TIRG mechanism in Appendix A

Appendix E- SWS Project Delays

1.49. The GHD Post Construction Expenditure report outlines the events that contributed to SPT's late delivery of the SWS project. The 16-month delay materialised across three outputs including; the Coylton Substation, the OHL works and the New Cumnock Substation.

1.50. The delays associated with the OHL works were a result of SPT's contractor. Scottish Renewable Group (SRG), entering into administration and delays in obtaining planning permission from local landowners. The liquidation of SRG required SPT to establish a new quarry. The planning requirements for the new quarry as well as the planning consents required from the council, extended the delivery of this output by 11-months.

1.51. The delays associated with the New Cumnock substation stretched for the total of the 16-month delay for the SWS project. As part of this output, SPT proposed to use two refurbished Supergrid Transformers (SGT) and transport them to the New Cumnock site. SPT experienced delays in obtaining the planning condition to necessitate the transport of the SGTs. Once the planning conditions were received, SPT found that there were swallows nesting the SGTs which postponed the relocation of the SGTs by a further month.

1.52. Finally, GHD note a 2-month delay at the Coylton substation due to multiple minor variations against the agreed contract.

1.53. In summary, the delays in the SWS project were largely due to delays in obtaining planning permissions and the circumstances of their contractor entering into liquidation.

Appendix F- Revenue impact of delay adjustment of Option 1 and Option 2.

Option 1: Restating the historical allowed revenue and applying an adjustment using the general price control revenue recovery correction term

1.54. The table below indicates how we propose to move the post construction period to reflect the actual delivery period.

1.55. Our proposal is consistent with decisions taken in previous TIRG projects, including the B5 boundary and Beauly Denny, however under the current proposed approach we would make adjustments in years 2020/21 and 2021/22, rather than after the post construction period has ended.

1.56. This option applies two adjustments, one which accounts for the potential additional interest earned due to receiving the revenues early; this adjustment is highlighted in the 'Interest' row. Another adjustment is made to account for the fact that by shifting the post construction revenues to the years 2020-22, this revenue will be higher in nominal terms; this adjustment is highlighted in the 'Reprofiling only'.

1.57. The combined result of these adjustments is a payment to SPT of an estimate £0.46m, in nominal terms.

South West Scotland reinforcement Revenue		15/16	16/17	17/18	18/19	19/20	20/21	21/22
Post construction period	9/10 Prices	5.60	5.42	5.23	5.05	4.87		
Reprofiled revenue (2 years delay)	9/10 Prices			5.60	5.42	5.23	5.05	4.87
Impact of delaying post construction revenues	9/10 Prices	-5.60	-5.42	0.36	0.36	0.36	5.05	4.87
Assumed inflation		*1.20*	*1.23*	*1.27*	*1.32*	*1.36*	*1.40*	*1.44*
Impact of delaying post construction revenues	Nominal	-6.73	-6.65	0.46	0.48	0.49	7.08	7.03
Totals								
Reprofiling only		n/a	n/a	n/a	n/a	n/a	0.91	1.26
Interest		n/a	n/a	n/a	n/a	n/a	-0.67	-1.04
Total	£m nominal						**0.24**	**0.22**

Option 2: Making a NPV neutral adjustment to the allowed revenues through the rate of return applicable to the TIRG projects during the post construction period, 8.8%.

South West Scotland reinforcement Revenue		**15/16**	**16/17**	**17/18**	**18/19**	**19/20**	**20/21**	**21/22**	**Total**
Post Construction Period	9/10 Prices	5.6	5.42	5.23	5.05	4.87			26.17
Reprofiled revenue (2 years delay)	9/10 Prices			5.6	5.42	5.23	5.05	4.87	26.17
Impact of delaying post construction revenues	9/10 Prices	-5.6	-5.42	0.37	0.37	0.36	5.05	4.87	0.00
Discount Factor (TIRG WACC) applicable for 2019/20 adjustment		*1.401*	*1.288*	*1.184*	*1.088*	*1*	*0.919*	*0.845*	
Discounted revenue									
Post Construction Period	9/10 Prices	7.8	7.0	6.2	5.5	4.9	0.0	0.0	31.4
Reprofiled revenue (2 years delay)	9/10 Prices	0.0	0.0	6.6	5.9	5.2	4.6	4.1	26.5
Difference	9/10 Prices	-7.8	-7.0	0.4	0.4	0.4	4.6	4.1	-4.9
Required adjustment to Revenue	9/10 Prices					-4.9			
Assumed Inflation (illustrative forecast)	index	1.20	1.23	1.27	1.32	1.36	1.40	1.44	
Required adjustment to Revenue (illustrative forecast)	Nominal					-6.6			
Adjustment to Revenue, applying K Term (Illustrative forecast)	Nominal							**-6.9**	

1.58. The table above shows the methodology for calculating the adjustment to the 2021/22 revenues required under Option 2 of this consultation. In each year the difference between the amount of revenue actually received and the allowed revenue is calculated. These annual corrections are uplifted by the allowed rate of return in the TIRG mechanism for the post construction period, 8.8% pre-tax in real terms. The total difference is then calculated over the original post construction period (2015-20) and the reprofiled period (2017-22).

1.59. Under the TIRG mechanism, the adjustment will be made to allowed revenue for 2019/20, the 5th and final year of the post construction period as set out in the licence. As network tariffs have already been set for 2019/20, we anticipate that this reduction in allowed revenue for 2019/20 will flow through as an over-recovery, and hence be subject to the K Correction Term process. With the K Correction Term having a 2-year lag, SPT's allowed revenue is expected to decrease in 2021/22 by around £6.9 million in nominal terms.

Appendix G – Further information on the revenue recovery correction term and how it works

1.60. Within an individual year it is unlikely that a TO will recover exactly the revenue its licence allows for. For this reason, the calculation of total overall allowed revenue in Part E of Special Condition 3A of SPT's Licence includes the K_t term. This term operates as a correction term to annual revenues for over/under recoveries in previous years. This correction term rolls all historical over or under recovery into an adjustment to the current year's allowed revenue allowance. Depending on how far the collected revenue differs from SPT's allowed revenue, it adds on different levels of interest when consolidating the difference between the current year's allowed and collected revenue. This correction term also applies an interest rate that is based on the average value of the Bank of England's Official Bank Rate during the period in respect of which year the calculation is to be made.

1.61. The K_t term operates through the revenue return model. This return is submitted on an annual basis by each TO. It provides us with both the breakdown of each TO's allowed revenue for the year, and the level actually received from customers. The restatement of allowed TIRG revenues will alter SPT's historical under or over recovery position in the relevant years. The rolling correction term will then automatically adjust SPT's forward-looking revenue allowances across 2020-2022 to reflect the revenue received early.