SP ENERGY NETWORKS

Network Planning & Regulation

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Date:
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Dear Geoff

Proposal for amendment to SP Transmission special licence condition (SLC) 6F

This is an update to my original letter of the 14th October 2016 and it includes a summary of our discussions and updated responses to your questions from last week and additional information to the questions raised on Monday 7th November.

Overview of the Issue

We expect to deliver additional outputs of 4229MVA incurring expenditure of £374m[1] in shared use infrastructure over the RIIO_T1 period to enable new generation to connect to the network. We have a licence condition to provide these connections and a broader obligation under the Electricity Act to ensure these are economic and efficient.

We believe this constitutes efficient over-delivery of outputs and can be provided for by licence condition 6F. However, we are aware the basket of goods included in the licence condition 6F to calculate the associated allowance for a given MVA output is limited in the options it provides. We are designing and constructing economic and efficient solutions that use assets not included in the licence condition. The MVA output is being delivered but the licence does not provide enough clarity on how to calculate the appropriate allowance. Our proposal recommends a change to the licence.

The gap in the basket of goods and the actual solutions we are deploying results in a significant divergence on potential allowance. If the non-licence assets are excluded entirely this is equivalent to under performance of approximately £50m (-19.5%) against overall expenditure. If we use our proposed unit costs to calculate an appropriate allowance this would achieve an out performance of approximately £30m (8.9%). These figures incorporate our forecast expenditure including our forecast outperformance 38% to achieve the baseline target of 1073MVA.

[1] (in 15/16 prices, £311m in 09/10 prices)

Options to resolve the Issue

We understand Ofgem consider that an alternative solution to our proposal is to only provide allowance where the specific assets described in the licence are utilised. This is based on a view that if we have outperformance in related areas this can mitigate the cost of the additional outputs. However, this does not seem consistent with the principles of the RIIO-T1 agreement for the scale and significance of the additional outputs we will deliver.

In terms of scale, to achieve the 4229MVA of output, an additional £148m of expenditure we forecast to be incurred delivering outputs that do not directly map onto the basket of goods. In terms of price control principles for example, the RIIO handbook section 10.6. states: " *efficiency incentives are about risk-sharing. Investors and consumers will share the benefits when the company delivers outputs for less money than Ofgem envisaged when setting the price control. Similarly, investors and consumers will share the additional costs if the company spends more money than envisaged. These arrangements will be specified at the price control review, through the 'efficiency incentive rate'. This has sometimes been called the 'sharing factor'."*

The sharing factor is not intended to provide for funding of additional outputs or allow non-delivery of outputs to act as a subsidy. Our understand is that the sharing factor is intended to incentivise efficient delivery of specified outputs.

This principle would indicate that appropriate use of the shared use infrastructure volume driver allowance in 6F is that it should be applied to calculate the allowance for providing a solution using only the items in the basket of goods. Any over or under recovery against actual costs however they may be delivered, so long as they are economic and efficient, would be shared 50:50 with the consumer.

Our proposal however, is to improve the existing licence to include all of the most common solutions we are actually utilising to deliver these load related outputs. We do not consider it appropriate to design and build solutions only using the basket of goods although that approach would also avoid the need for a licence change.

Worked examples

I have also attached slides illustrating typical examples of the extent to which we are delivering more economic solutions than the current basket of goods provides for. These show a conventional reconducturing solution compared to a new build option providing a 55% saving. Using the innovative HTLS reconductoring solution would achieve a 73% saving. Similarly using a wood pole 132kV line compared to the equivalent 6F solution would also deliver nearly 74% saving. In terms of a substation extension compared to the 6F condition which only has a complete new substation the saving could be approximately 60%

Overall Consumer Benefit

To go through each existing shared use project in turn to calculate the nearest applicable allowance will take more time but these examples highlight potential 50% - 75% expenditure saving may be achieved against the existing allowance using the solutions we are delivering. As our forecast expenditure on non-licence items is forecast at £148m we expect consumers could benefit from approximately £75m-

£100m of reduced allowance if we update the licence condition as we propose compared to the funding that would be allowed using the existing basket of goods. However, If we retain the existing allowance we would still see customers benefit up to £50m through the sharing factor.

By way of comparison, SPT's original RIIO-T1 allowance for Shared-Use Infrastructure can be considered equivalent to a volume driver figure of circa £144k/MVA2 (2009/10 prices). In this (hypothetical) example, delivery of 4229MVA of new capacity would translate to an equivalent allowance of £609m. On the basis of the forecast costs identified in the aforementioned table (£311m) this would generate an indicative out-performance of circa £298m (49%).

Appendix 1 provides an update to our responses to our questions of 3rd November with changes indicated in footnotes and an additional response (item 12) as per our action at the meeting on Monday.

Kind regards

Alan Kelly
Transmission Commercial and Policy Manager
Network Planning and Regulation

[2] This is based on total forecast project costs of c£155m (2009/10 prices) to deliver 1073MVA of new capacity (of which, £112.2m is incurred in RIIO-T1).

Appendix 1: SP Transmission MPR parallel work - SPT proposal for changes to licence condition 6F

Ofgem Questions – Reference: Arun Quayum email 3rd November 2016

In relation to the 1073 MVA threshold:

1. *How much has SPTL spent to deliver the 1073 MVA threshold?*

   SPT has not yet exceeded the target threshold, therefore, all schemes are currently funded from the baseline allowance. On current forecast SPT expects to breach the threshold that triggers the volume driver of connecting 1073MVA in 2017/18. At the end of 2016/17, SPT anticipate being close to the target with a forecast output (cumulative) of 913MVA. In 2017/18, when the target will be breached, SPT expects to add a further 1281MVA of new capacity, through completion of eight schemes.

   The schemes that achieve this are listed in Table T4.2 of the 2015/16 RRP & Table 5 of SPT's letter dated 14th October 2016. In RIIO-T1, SPT is forecast to invest c.£89m[3] (2015/16 prices) to achieve the baseline threshold. Please note that this can be subject to change as it depends on the actual delivery date of relevant schemes.

2. *What was the split between licence asset spend and off licence asset spend to reach this threshold?*

   The investment on schemes to achieve the threshold target of 1073MVA is funded from a baseline allowance of £112.2m (2009/10 prices), which is not subject to the uncertainty mechanism.

3. *What was your spend on reconductoring and HTLS lines in reaching this threshold?*

   The investment on deployment of HTLS conductor is funded through an IRM allowance (Ofgem decision Sep 2015) and is excluded from LSpC6F forecasts.

   The inclusion of this type of solution under Shared-Use Infrastructure is for potential future applications – post-IRM – including possible use at 132kV. This may not occur until early RIIO-T2.

[3] Figure revised based on figures in T4.2 (excluding RPM).

RIIO-T1 period to date:

4. *How much have you spent on shared use connections?*

   In the first three years of the price control a cumulative RIIO-T1 total expenditure of approximately £124m[4] (2015/16 prices) has been incurred on Shared-Use Infrastructure connections.

5. *What is the current split between spending for off licence and on licence assets in share use connections?*

   SPT's current split over the first three years of the price control is that approximately £105m (84%) is associated with the assets stated in Table 1 of LSp6F. The balance of c£19m is anticipated to be met from an extrapolated asset table as indicated in our letter of 14th October 2016.

6. *What is your current spend on reconductoring and HTLS lines?*

   Please refer to our response to question 3 above.

7. *How much MVA have you currently delivered?*

   As of the 2015/16 RRP, SPT has delivered 240MVA of new firm capacity. This is stated in Table 6.10 (Shared-Use Infrastructure) of the RRP and is due to the commissioning of Moffat 400/132kV substation (TORI 015/16) in 2013/14.

For your forecast to the end of the RIIO-T1 period:

8. *What is your total forecast spend on shared use connections?*

   A total forecast expenditure of circa £250m (2015/16 prices) is anticipated over the remaining five years of RIIO-T1. If the first three years actuals are included this is equivalent to a total investment of £374m[5], including schemes in the baseline.

[4] SPT have reviewed the forecast costs in its letter of 14th October against the forecast stated in its 2015/16 RRP. The letter overstated actual costs by c£5m (due to inclusion of RPM).

[5] The original forecast of £389m, as stated in SPT's letter, inadvertently included costs associated with IRM schemes due to a formula error. These have been removed in this updated response to Ofgem and following meeting of 7th November 2016.

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9. *What is your forecast spend split between spending for off licence and on licence assets in share use connections*?

SPT's estimated split, based on the aforementioned costs forecast is that approximately £121m (48%) could be met from the original basket of goods (Table 1 of LSpC6F). The forecast balance of £129m (52%) is forecast to be met from an extrapolated basket of goods – as indicated in Table 5 of SPT's 14th October 2016 letter.

In overall terms, including actuals for the first three years, the aforementioned positions translates to approximately £226m (60%) being met from the original basket of goods. The balance of £148m (40%) is anticipated to be met from an extrapolated basket of goods, as above.

10. What is your forecast spend on reconductoring and HTLS lines?

On the basis of SPT's 2015/16 forecast, there are no schemes currently envisaged to deploy HTLS conductor at 275kV (to uprate existing OHLs) beyond those funded under the IRM decision.

At present, there are potential applications for uprating 400kV and 132kV OHLs using standard conductor. There are also two schemes at 132kV where design consideration is being given to the deployment of HTLS conductor at this voltage. They were at early stage of development and excluded from the current forecast. One or more could potentially be delivered in late RIIO-T1 and may feature in future forecasts.

11. To what extent does expanding capacity via reconductoring involve the HTLS line discussed in the September 2015 IRM decision?

The capacity of XY and YY routes will be achieved through the deployment of HTLS conductor, which is funded through the IRM Allowance agreed with Ofgem (Sep 2015). It is included – as a reference – in LSpC6F for future 'business as usual' type applications (ie. post-IRM trial).

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12. SPT were requested to quantify the allowance forecast and indicative value of out/under-performance associated with delivering the forecast

output of 4229MVA; assuming that allowance is calculated based solely on those assets included in the original basket of goods.

As discussed at the meeting, it can be recognised that there are three potential outcomes:

a) A strict application of existing licence means no funding for outputs delivered where they have involved assets not in the existing basket of goods. SPT will only be funded for schemes involving original basket of good items,
b) An interpretation of the existing licence that would seek to recover appropriate allowance based on an equivalence method between original basket of goods assets and those that are forecast to achieve the required connection,
c) A modification to the existing licence that would can apply bespoke allowance for additional solutions that reflect proposed designs

It is not currently possible to derive an allowance based on outcome b), as no methodology has been agreed with Ofgem.

The overall RIIO-T1 position for Shared-Use Infrastructure, based on potential outcomes a) and c) is summarised in the table below (2009/10 prices):

Category	**RIIO-T1 Allowance**	**RIIO-T1 Forecast**	**RIIO-T1 Variance**	**RIIO-T1 Variance**
(2009/10 prices)	**£m**	**£m**	**£m**	**%**
Shared-Use Infrastructure Outcome a)	260.3	311.1	-50.7	-19.5%
Shared-Use Infrastructure Outcome c)	341.3	311.1	30.2	8.9%

Where, in both cases, the allowance figures include the baseline allowance of £112.2m. The figures are based on delivery of schemes that will increase capacity by 4229MVA. In the case of outcome c), it must be noted that an indicative allowance for assets not in the original basket of goods is based on the figures stated to Ofgem in the 2015/16 RRP forecast (T2.3a). These figures are subject to further scrutiny from Ofgem - to establish an agreed Unit Cost Allowance (UCA) - in the event that such an outcome is accepted. Therefore, the prospective level of out-performance must be noted with caution.

It should be noted that under outcome c) – SPT's preferred option – the

forecast level of RIIO-T1 out-performance is lower than the indicative level of outperformance in achieving the baseline target of 1073MVA (£38m (34%) (2009/10 prices)). SPT consider that its preferred approach constitutes a fair and transparent modification to the existing licence – relatively minor in nature – which represents good value to consumers.

By way of comparison, SPT's original RIIO-T1allowance for Shared-Use Infrastructure can be considered equivalent to a volume driver figure of circa £144k/MVA[6] (2009/10 prices). In this (hypothetical) example, delivery of 4229MVA of new capacity would translate to an equivalent allowance of £609m. On the basis of the forecast costs identified in the aforementioned table (£311m) this would generate an indicative out-performance of circa £298m (49%).

[6] This is based on total forecast project costs of c£155m (2009/10 prices) to deliver 1073MVA of new capacity (of which, £112.2m is incurred in RIIO-T1).