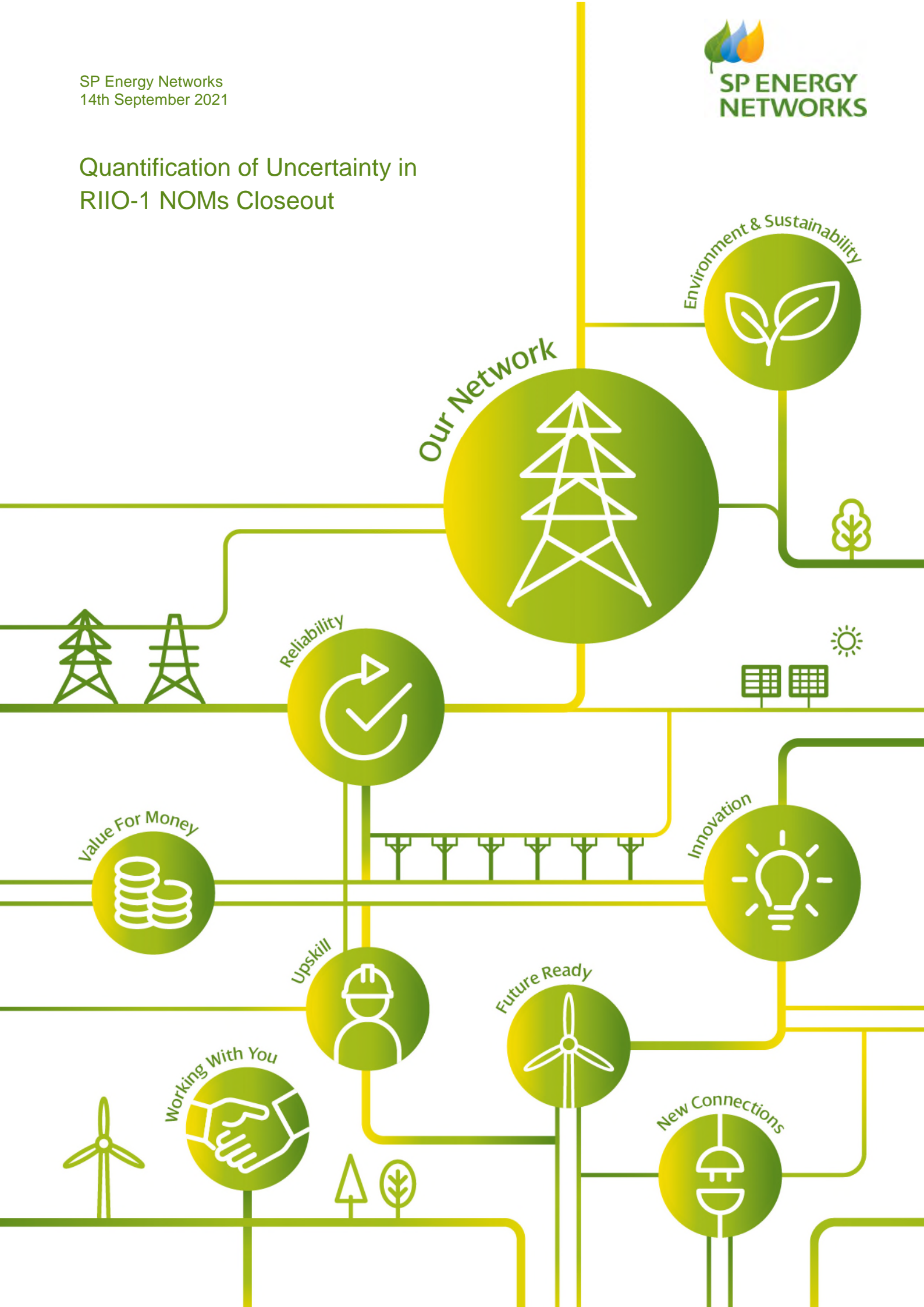


Quantification of Uncertainty in RIIO-1 NOMs Closeout



1. OVERVIEW

SPT submitted the RIIO-1 NOMs Closeout Data Template and accompanying Stage 1 & 2 Performance Report to Ofgem on 30th July 2021 in accordance with Special Condition 7.10.3 of the SP Transmission Ltd Electricity Transmission Licence. This submission provided details of Stage 1 (Relevant Risk Changes and Impact on Performance Against Targets) and Stage 2 (Performance Against Targets) in accordance with the NOMs Incentive Methodology.

Subsequent to the 30th July 2021 submission SPT responded to a round of supplementary questions (SQs) from Ofgem, providing further details as was required to further aid understanding and analysis of the submitted documents.

SPT received notification by email on 16th September 2021 of Ofgem's view on setting a materiality threshold around the RIIO-1 Closeout Position. Ofgem stated that "Our intention therefore is to set the deadband for the sector to at **least 5%**, and are minded to set the **final deadband at 10%** unless licensees are able to provide a **robust quantitative case** for setting the deadband at the lower (5%) level.". Further to the notification on 16th September a bi-lateral between Ofgem and SPT was held on 24th September where Ofgem set out their observations on the NOMs Closeout process thus far, including observations on the SPT submission.

2. QUANTIFICATION OF DEADBAND

2.1. SPT Response

Following consideration of the points raised at the meeting on 24th September SPT presented a response to Ofgem on 7th October at a second bi-lateral discussion. SPT set out its intention to pursue the case for justification of a lower value of deadband than the minded to position of Ofgem in response to Ofgem's comments, principally those relating to data quality issues. This response included consideration of the qualitative case for a large deadband due to uncertainty related to:

1. Data Quality Issues
2. Chance Selection of Assets
3. Other Imperfect Modelling Assumptions.

SPT went on to provide an assessment of the quantification of material uncertainty within the RIIO-1 NOMs closeout submission, including a flow diagram of where it is believed that potential uncertainty may reside.

2.2. Identifying and Quantifying Material Uncertainties

An assessment by SPT has identified that there are areas where uncertainty could reside within both the target and delivery values of the RIIO-1 NOMs closeout submission. Consideration of the treatments applied, both within the modelling and the reporting of relevant data sets, has identified that almost all of these areas for potential uncertainty are found to be free of material uncertainty because of the methods used. Areas in which there is the potential for uncertainty to have occurred have been quantitatively assessed. The high-level approach to this assessment is set out in Figure 1.

It should be noted that while the values set out in the approach are indicative, final values will be provided following a full data assurance as required following feedback on this document by Ofgem.

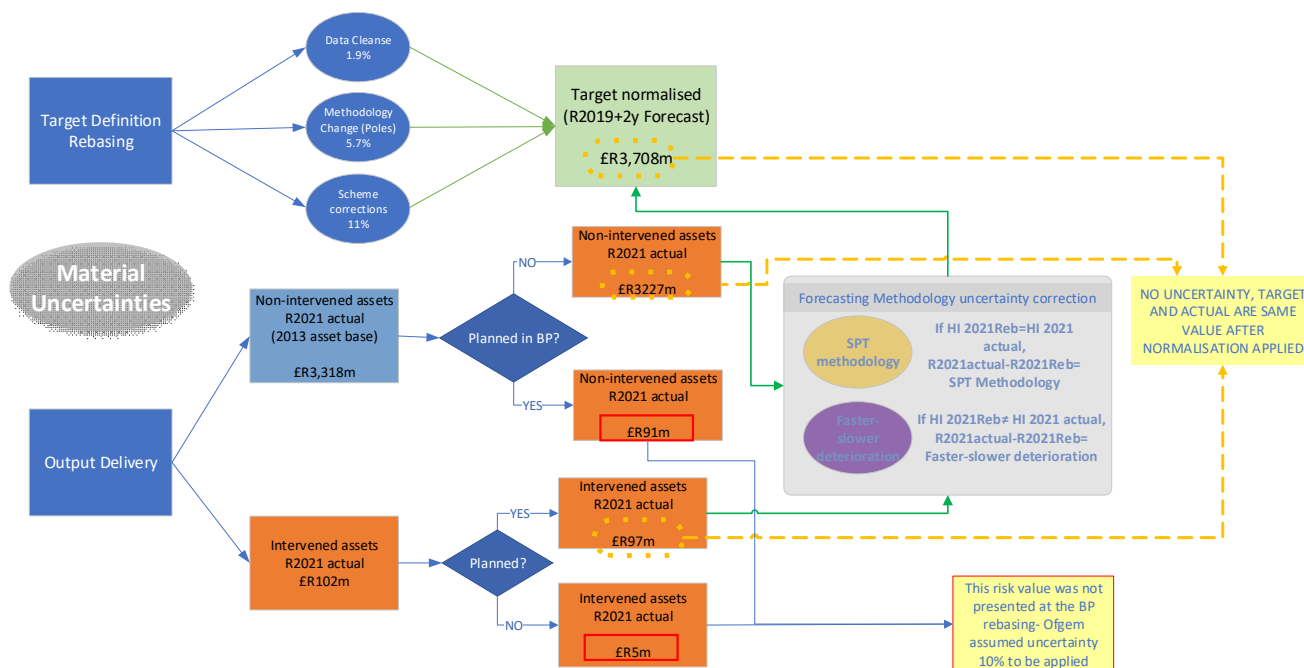


Figure 1 SPT Quantification of Scope for Material Uncertainty

2.2.1. Relevant Risk Normalisation

As part of the data assurance undertaken by SPT in preparation of the 30th July submission, and in line with the reporting requirements, certain normalisations were made to the RIIO-1 Targets. The rationale and details of all relevant risk changes quantified by SPT were set out in Chapter 6 of the Stage 1 & 2 Performance Report. When considering the normalisations applied, they can generally be split in to two drivers, namely the target definition and the output delivery. It should be noted that all normalisation other than the impact of COVID Scheme Delays were applied to modify the target in line with the RIIO-T1 NOMs Closeout Submission Guidance.

2.2.2. Target Definition

An assessment of the potential for uncertainty in the target definition has been made as follows:

- **Data Cleanse**

Where the need to data cleanse has been identified the normalisation applied to the target is the difference between the pre and post data cleansed value. Details of the data cleanse normalisations are provided in the closeout report. Normalisation has been applied here to bring the target in to line with the value reported at close out and as such the target and reported value take on the same absolute value for impacted assets and therefore there is no material uncertainty.

- **Methodology Change**

Although there have been no methodology changes since the rebased targets were established, there is a different understanding of the treatment of asset risk for pole structures in overhead lines. This change in reporting, following engagement with Ofgem, resulted in the decision to remove wood poles from the target and performance. Further details of the methodology change normalisation are provided in the closeout report. Normalisation has been applied here to bring the target in to line with the value reported

at close out and as such the target and reported value take on the same absolute value, that being zero risk for wood poles, and therefore there is no material uncertainty.

- **Scheme Correction**

The details of the normalisation applied for scheme correction are set out in detail in the closeout report and relate to the original volume and replacement priority targets. It should be noted that this normalisation was not to materially alter the data and risk values used in the calculation of the target or delivery but was to ensure alignment with the original intent of the SPT RIIO-1 Business Plan. Normalisation has been applied here to bring the target in to line with the value reported at close out and as such the target and reported value take on the same absolute value for impacted assets and therefore there is no material uncertainty.

2.2.3. Output Delivery

In the reporting of output delivery by SPT, the risk remaining value reported can be considered to be comprised of those assets which were not subject to intervention during the RIIO-T1 period and those which were. The potential for material uncertainty within the reported risk remaining position can be broken down as follows:

- **Non-Intervention Assets**

For assets that were not part of an asset intervention during the RIIO-T1 period and did not form part of the SPT RIIO-1 Business Plan, the risk reported by SPT in the closeout submission can be directly compared to the target. Any potential for material uncertainty in the value reported here is accounted for by one of two methods, both of which are valued at zero.

Where the asset is in the same health index band in 2021 as it was previously forecast to be then all variation is accounted for by the SPT Methodology normalisation. This normalisation is applied to the target and results in the target and delivery having the same absolute value and therefore there is no remaining material uncertainty.

For assets where the health index band in 2021 is variant from that previously forecast, all variance in asset risk is reported under the faster or slower deterioration normalisation. The value of faster or slower deterioration is valued at zero and as such forms no part of the assessment of performance against the target.

For those assets which originally formed part of the SPT RIIO-T1 Business Plan but were not actually subject to an asset intervention, the without intervention risk was previously only reported within the “Without Intervention” tables in the NOMs Closeout Data Template. While the modelling of these assets remains consistent with comparable data sets, it is recognised that the risk reported for these assets was not previously part of the NOMs target. As the without intervention risk was not included in the target reporting SPT recognise that some uncertainty may remain in the modelling of these assets without intervention. This is because there is no previous benchmark and as such it may be appropriate to apply an uncertainty consideration to these. The absolute value of risk remaining accounted for by assets which were part of interventions in the original business plan which were not completed is £R91m. SPT recognise the 10% uncertainty bounds proposed by Ofgem and advocate the application of this uncertainty to the risk remaining value, giving an uncertainty circa R£9.1m

- **Intervened Assets**

For assets which were part of planned RIIO-T1 interventions the risk remaining reported in the closeout submission will be the same as previously captured within the modelling of that asset within the “with intervention target”. For a small number of assets an element of SPT Methodology or faster or slower deterioration may exist in these assets, for example where an intervention was forecast to take place in

2021 but was completed in 2020. In this case the target normalisation will bring the target and delivery to the same absolute value and as such there is no remaining material uncertainty.

For assets that were subject to intervention in RIIO-T1 but did not form part of the originally planned business plan, the first reporting of these assets as part of the RIIO-1 close out process was in the 30th July Submission. These assets have been fully modelled in line with the approved NOMs methodology and subject to the same rigorous data assurance. However, SPT recognise that some uncertainty may remain in the modelling of these assets. This is because there is no previous benchmark and as such it may be appropriate to apply an uncertainty consideration to these. The absolute value of risk remaining accounted for by assets intervened on which were not part of the original business plan is £R5m. SPT recognise the 10% uncertainty bounds proposed by Ofgem and advocate the application of this uncertainty to the risk remaining value, giving an uncertainty circa R£0.5m

2.3. Summary

Given that the quantification of uncertainty within the reported RIIO-T1 performance has been shown to be sufficiently small (at total of £R9.6m or 0.28% of the normalised risk remaining) SPT believe that the case has been made for a materiality threshold smaller than the minded to position by Ofgem and that a maximum deadband of 5% is justified.