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Your ref

Our Ref

Date

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Dear Chris

**RIIO-ED1 econometric models - suggested adjustments to Modern Equivalent Asset Value (MEAV) to compensate for SP Manweb regional cost adjustments**

I am writing to follow up on some of the points raised in my letter dated 6<sup>th</sup> October and our conversation on Friday 10<sup>th</sup> October. Following our telephone conversation I have reviewed the points you made and have discussed these with relevant colleagues. I must reiterate that the approach that is being proposed has significant risk of discriminating against SP Manweb.

You will recall that my letter and our discussion covered two topics:

- 1) It is inappropriate to adjust the MEAV used in the cost modelling to compensate for the SPM regional costs being set aside from the modelling at this stage of the process; and
- 2) Our growing concerns that we had no evidence or information that provide comfort that Ofgem are assessing the evidence supporting our 132kV programme with a view to establishing if modelling gaps are justifiable differences and as such merit qualitative adjustments to the model outputs.

**Appropriateness of adjusting SPM MEAV to compensate for SPM regional cost treatment**

During our telephone discussion you stated that your team were still reviewing our submission and the report from NERA, but were also working through the SPM regional case to try to identify an appropriate MEAV adjustment.

You will recall I raised concerns regarding the availability of information to enable Ofgem to make appropriate positive and negative MEAV adjustments associated with the incremental costs captured in the SPM regional case, and you requested that our teams liaise directly. As discussed, I am happy to facilitate our teams working together to ensure there is common and comprehensive understanding of the SPM regional costs case and it's limited incremental nature.

SPEN does not agree with the proposed adjustment to SPM's MEAV, in the event that an adjustment is made, similar adjustments should also be made to the MEAV of other DNOs in order to avoid potential discrimination against SPM. For example, I have specifically referenced the higher MEAV that London Power Network (LPN) will benefit from simply as a result of its

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network being predominantly underground cable, and the relationship with regional adjustments for LPN. As a result of the predominantly urban nature of the area that LPN serves, the LPN network has a much higher proportion of LV and HV underground cables than any other DNO.

These underground cables will cost 3 to 4 times more than an equivalent overhead line, and consequently serve to materially increase LPN's MEAV relative to all other DNOs. We also note that Ofgem is considering a number of LPN submissions requesting regional adjustments for higher costs, and Ofgem's Draft Determination proposed a regional wage adjustment for LPN.

**Ofgem process to establish if econometric modelling gaps are justifiable differences and make qualitative adjustments to model outputs**

You committed on Friday to write to me on Monday or Tuesday of this week to provide some assurances of the process that Ofgem are following with regards to reviewing and taking account of relevant evidence, such as differences in scope of works arising from differences in asset condition.

I will review and respond separately to your letter when I receive it, but thought it would also be helpful in the meantime to provide some additional detail that was discussed at our bilateral on the 19<sup>th</sup> September, to help provide some additional context for our concerns.


This detail is attached as an appendix to this letter and covers the cost assessment of:

- 132kV Overhead Line(OHL) Refurbishment
- 132kV Switchgear Issues:
  - o 132kV Switchgear Other
  - o Outdoor Switchgear Unit Cost
- Civils

Our concerns on these points have also been raised in our 26<sup>th</sup> September response to the Ofgem Draft Determination consultation.

I look forward to your response to this letter and my letter of the 6<sup>th</sup> October, and would ask that you do not hesitate to contact me if you have any questions regarding the contents of either of these.

Yours sincerely



Jim McOmish  
Head of RIIO-ED1 Programme  
SP Energy Networks

Attachment: Appendix 1: Examples of areas that we have not received further SQs but which were discussed at the Ofgem – SPEN bilateral on 19<sup>th</sup> September

**Appendix 1: Examples of areas that we have not received further SQs but which were discussed at the Ofgem/SPEN Cost and Outputs bilateral on 19<sup>th</sup> September**

- 1.0 132kV Overhead Line(OHL) Refurbishment
- 2.0 132kV Switchgear Issues:
  - 2.1 132kV Switchgear Other
  - 2.2 Outdoor Switchgear Unit Cost
- 3.0 Civils

**1.0 132kV Overhead Line Refurbishment**

As we have consistently explained, we are very concerned about the impact of the reductions indicated in the funding for our 132kV OHL refurbishment programme. The output of the disaggregated model is a 67% reduction, from our submission of £89M to £29.5M.

We explained in detail at the bilateral meeting on 19 September how we have built up the scope of our refurbishment work. Our proposals are based on extensive condition assessment for above ground elements of the OHL circuits and our experience of foundation inspection and refurbishment on previous tower lines in our SPM and SPT licensed areas. In developing our cost estimates, we have also taken into account detailed consideration of project specific factors, such as the number of road and rail crossings. Some of this detail was presented for a number of example schemes in the presentation given at the bilateral meeting on 19 September.

Our plan is based on the same asset management approach as we deploy on our similar 132kV tower lines in our SPT licence in Scotland. This approach, which was fast tracked in RIIO-T1, has the objective of replacing ageing tower line conductor prior to the point at which it degrades to the extent that it can no longer be replaced by the most cost-effective technique, which relies on the residual strength of the conductor being adequate to pull the new conductor into position. Once this point is passed, the cost of replacement increases significantly.

Driven by this conductor replacement programme, our approach sets out to ensure that we undertake a comprehensive refurbishment of all of the other components of the overhead line system so that we deliver a life extension of at least 40 years, subject only to relatively minor interventions such as routine painting over its extended life. In order to be able to deliver this outcome, our work scope is extensive and addresses the condition of all associated fittings, steelwork and foundations.

Ofgem's unit cost benchmarking approach for tower line refurbishment has used a median cost and we do not believe it adequately addresses the variability in scope of work across DNOs' 132kV overhead line programmes. From our analysis of other DNOs' proposals, we are strongly of the view that there are material differences in the scopes of work being undertaken and consequently also the benefits being delivered by these investments.

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We have not seen any evidence that you have considered this issue since the draft determination and are therefore very concerned that the relative benefits of the investments being proposed are not being taken into account alongside the costs. We believe that qualitative adjustments must be made in your modelling to take account of the extent and longevity of the refurbishment scope being undertaken. Without this being the case, DNOs making the lightest interventions are likely to be rewarded, regardless of the cost effectiveness of the approach being adopted.

## **2.0 132kV Switchgear issues**

### **2.1 132kV Switchgear Other**

At the bilateral meeting held on 19 September, we pointed out that in the draft determination, the disaggregated modelling has reduced our expenditure for 132kV Switchgear Other by 77% from £3.4M to 1.0M. We believe that this is solely due to ambiguity in the RIG definitions for this asset type, which has resulted in our asset volumes being significantly understated compared to other DNOs. We took from that meeting that you would seek to understand how DNOs had applied the definition to assess if was the case.

As we said at the meeting, our approach has been to group together the costs for non-defined consequential Switchgear Other asset replacements, such as CTs, VTs and surge arrestors associated with prime asset plant items (Disconnectors and Earth switches) and include them in the prime asset volume counts. This resulted in us submitting 71 asset changes in this category in CV3 at a unit cost of £66k. In reality, our plan includes for the replacement of a total of a minimum of 189 individual items, and if they had all been counted as Switchgear Other assets in CV3, the unit cost would have been £25k. The changing of these components is an essential aspect of our switchgear and transformer modernisation plans and we are therefore looking for you to take our interpretation into account in your final determination assessment. If it would help, we would be more than happy to resubmit this element of our CV3 data to reflect a more granular interpretation of the RIG definition.

### **2.2 Outdoor AIS Circuit Breaker Unit Cost**

We are of the view that the unit cost being proposed by Ofgem for Outdoor AIS Switchgear is unachievably low. We raised this subject at the Bilateral and it was our understanding that Ofgem and their engineering consultants shared our view that the unit cost of £144k was insufficient to undertake the full scope of work required to replace the existing circuit breaker, circuit protection(s) and control equipment, along with associated busbars and earthing connections. By contrast, the Ofgem expert view for replacement of an indoor AIS circuit breaker is more than double the cost of an outdoor unit, for what is essentially the same equipment.

In ED1, we are scheduled to replace three AIS outdoor circuit breakers at two sites (Gateacre and Speke), these three circuit breakers control eight separate circuits and five grid transformers for which there is significant additional equipment to that utilised in a standard bay design at a double busbar substation. The cost of the additional complexity is reflected in our unit cost £610k. The funding suggested in the draft determination leaves our projects £1.4m short.

### **3.0 Civils**

The civil expenditure associated with our SPM 132kV programme was reduced through your disaggregated modelling by 55%, from £18.2M to £8.2M. The vast majority of this reduction (approximately £9M) is due to civil costs associated with our main plant replacement programme being removed.

We made the point at a number of our bilateral meetings that we do not see how Ofgem have linked the assessment of CV3 and CV6 to integrate costs at a scheme level. For example, in our CBAs for our GIS projects, we have set out the economic cases for the projects based on the total costs of the schemes.

However, the mechanism to report these costs within the BPDTs requires us to split the costs down, creating the potential for them to be modelled separately. This can, and in our opinion, has resulted in a situation that does not reflect the real world, where all of the funding elements must be utilised to deliver the project – it is illogical for instance to fund the switchgear replacement but not the associated building works. We believe that this is significant issue in respect of the following projects:

- Birkinhead GIS
- Aberystwyth Transformer Replacement
- Gateacre AIS and Transformer replacement
- Speke AIS and Transformer replacement
- Rhyl Transformer Replacement
- Woodside Transformer replacement and AIS modification

Similar issues exist with 'Plinth and Groundworks', and to a lesser extent with 'Enclosure and Surrounds' categories associated with 132kV asset replacement, where we have not been provided with the funds to complete the necessary civil work for the projects.

We are also concerned that if not addressed, this issue could also affect our Lister Drive and Crewe switchgear replacement schemes, which, as we hope, you now agree are best progressed as GIS off-line replacement projects.

