

MEMO

TO: SP Energy Networks
DATE: 14 August 2014
FROM: NERA Economic Consulting
SUBJECT: Regional Wage Adjustments in Ofgem's Benchmarking Analysis

1. Introduction

This note expands on our previous arguments on Ofgem's application of regional wage adjustments in its benchmarking analysis. Section 2 summarises and expands on our previous arguments regarding the regional wage adjustments in the fast-track cost assessment, which demonstrate that regional wage differences exist outside of London and the South East. Section 3 responds to the argument Ofgem has presented in favour of its previous approach to regional wage adjustments in its slow-track assessment. Finally, Section 4 examines the impact of alternative regional wage adjustments on Ofgem's benchmarking results for SPEN.

2. Controlling for Regional Wage Variation

2.1. Alternative Approaches to Regional Wage Adjustments

As described in Section 2.2.7 of our review of Ofgem's fast track cost assessment, Ofgem has provided DNOs with three alternative means of accounting for regional wage variation. One method applies different regional wage factors for 11 regions of the country, another applies different regional wage factors for 3 regions (London, the South East, and everywhere else), and a third applies different regional wage factors for 2 regions (London, and everywhere else). We show the differences between these indices in Figure 2.1.

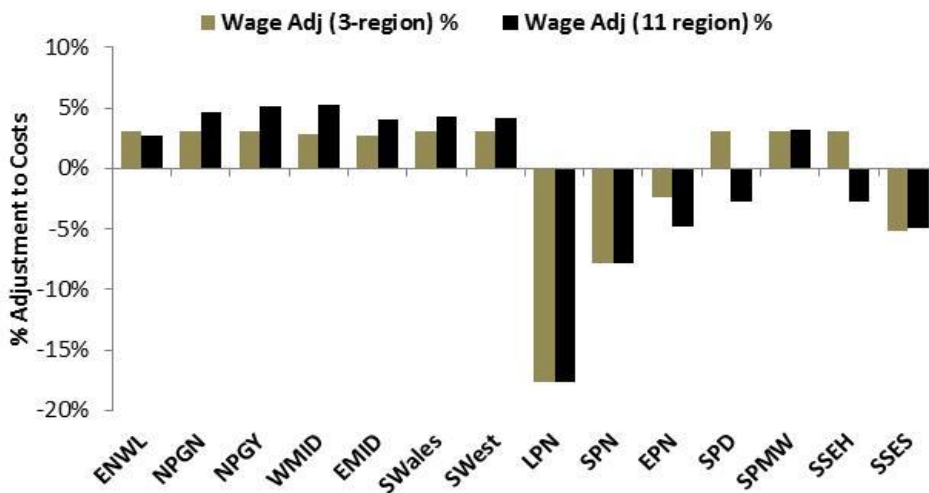
For its cost assessment, Ofgem has used the "3 region" adjustment, so has only allowed for wages to vary from the rest of the country in London and the South East. Given that it accepts the principle of regional variation in wages, and it has reliable data from which to calculate regional wage variation, it is arbitrary and discriminatory not to apply similar adjustments to other DNOs.

We note that the difference between the two regional labour indices is particularly important for the SPD network area, as the choice of method determines whether SPD's regional wages are judged to be above or below average:

- by using the "11 region" method, Ofgem recognises that labour costs in SPD's network area are higher than average and makes an allowance for this by applying a negative adjustment to SPD's costs before its efficiency assessment; but

- by using the “3 region” method, Ofgem assumes that SPD’s labour costs are the same as those faced by all DNOs outside of London and the South East, which it reflects by making a positive adjustment to SPD’s costs before efficiency assessment.

Figure 2.1
3-Region versus 11-Region Labour Cost Adjustments



2.2. Variation in Labour Adjustments Over Time

Ofgem’s labour rate adjustments are based on 2nd level SOC codes using ONS Annual Survey of Hours and Earnings (ASHE) data. In response to questions about its approach to regional wage adjustments at a recent cost assessment “teach in”, Ofgem gave the following explanation for not using the 11-region indices:¹

“Ofgem looked for significant differences in the indices. The information for other areas is relatively volatile. In addition there is a significant economic literature highlighting labour market differences for London and the South-East. This approach is consistent with that adopted for RIIO-GD1.”

To test this assertion, we applied the methodology Ofgem used to estimate the 11-region wage adjustment index, i.e. using the same ONS data and the same industry mapping. As Figure 2.2 shows, over the period since 2002,² there is clear evidence that wages in London and the South

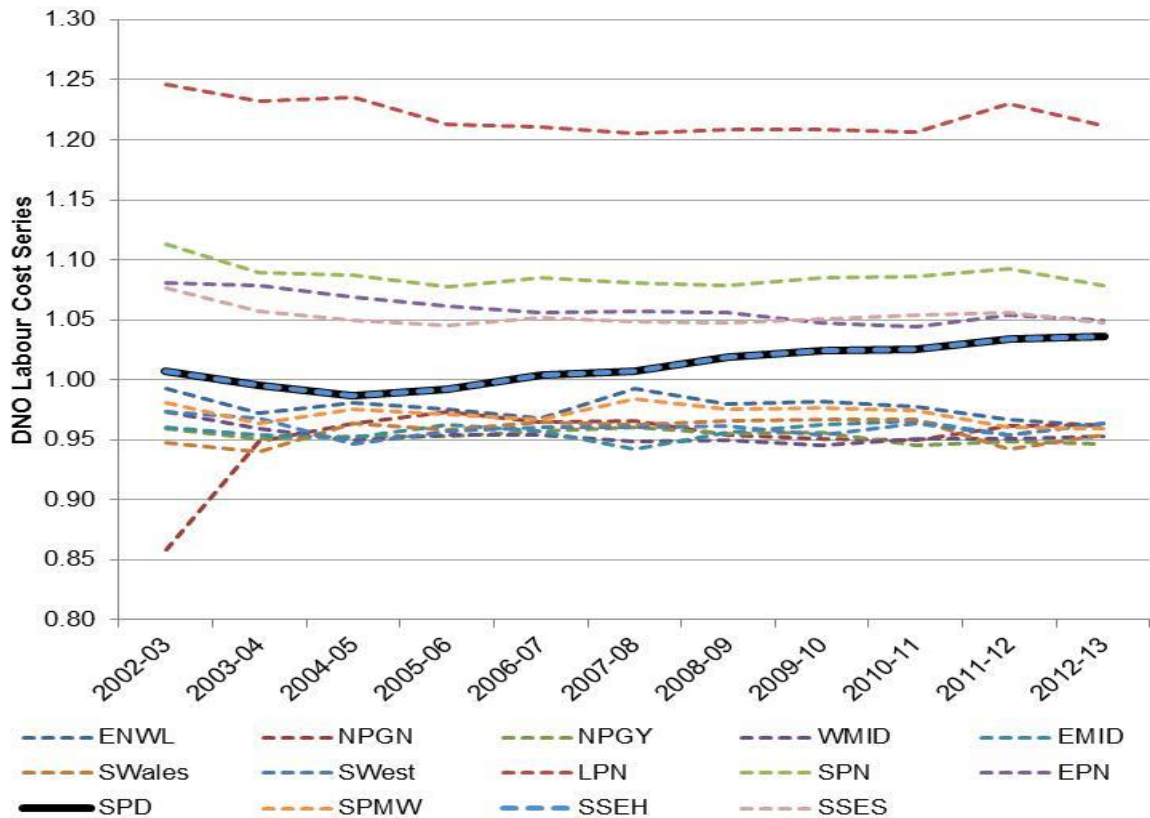
¹ CA Teach in Minutes 17 Jan 14, para 4.4

² We were not able to go back further than 2002, as the industry classifications changed.

East have been consistently higher than those in the rest of the country. However, the figure also shows that wages in Scotland (i.e. in the SPD and SSEH network areas) have been consistently higher than wages in the rest of the country outside of the South East. In fact, over time, the gap between Scottish wages and those of other DNOs outside the South East has grown.

Hence, in contrast to Ofgem's claim, this figure suggests there is evidence to support regional wage adjustments for the Scottish DNOs, as well as for the London and South East DNOs. The premium between Scottish wages and those in the rest of the country outside the South East has been consistently positive, and is growing over time. Hence, Ofgem's assertion that "*the information for other areas is relatively volatile*" does not seem to be justified on the grounds of variation in data over time.

Figure 2.2
DNO Regional Labour Cost Indices Using 2nd Level SOC Codes



2.3. Sensitivity to SOC Level

We also considered how estimated regional wage variation would change if we were to use 3rd or 4th level SOC codes.

Figure 2.3 shows the DNO specific wage indices generated by using 3rd level SOC codes, and Figure 2.4 presents the DNO wage indices using 4th level SOC codes. Both figures show greater volatility at the beginning of the period since 2002, which is probably related to data quality issues at the disaggregated SOC level (e.g. small samples).³ For this reason we place a higher weight on the results in the more recent years, when estimated wage rates using 3rd and 4th level SOC codes broadly confirm the conclusions we reach based on the 2nd level SOC codes in Section 2.2 above.

³ Note that the same data issues apply to the Scottish DNOs and other regions including London; LPN's labour cost index exhibits high volatility using 3rd and 4th level SOC codes.

In all cases DNOs based in Scotland (SPN and SSEH) face persistently higher wage indices than all other DNOs, excluding those whose mapping is based on some share of activities in London - LPN is 100% London-based, EPN (21%) SPN (19%) and SSES (13%).

Figure 2.3
DNO Regional Labour Cost Indices Using 3rd Level SOC Codes

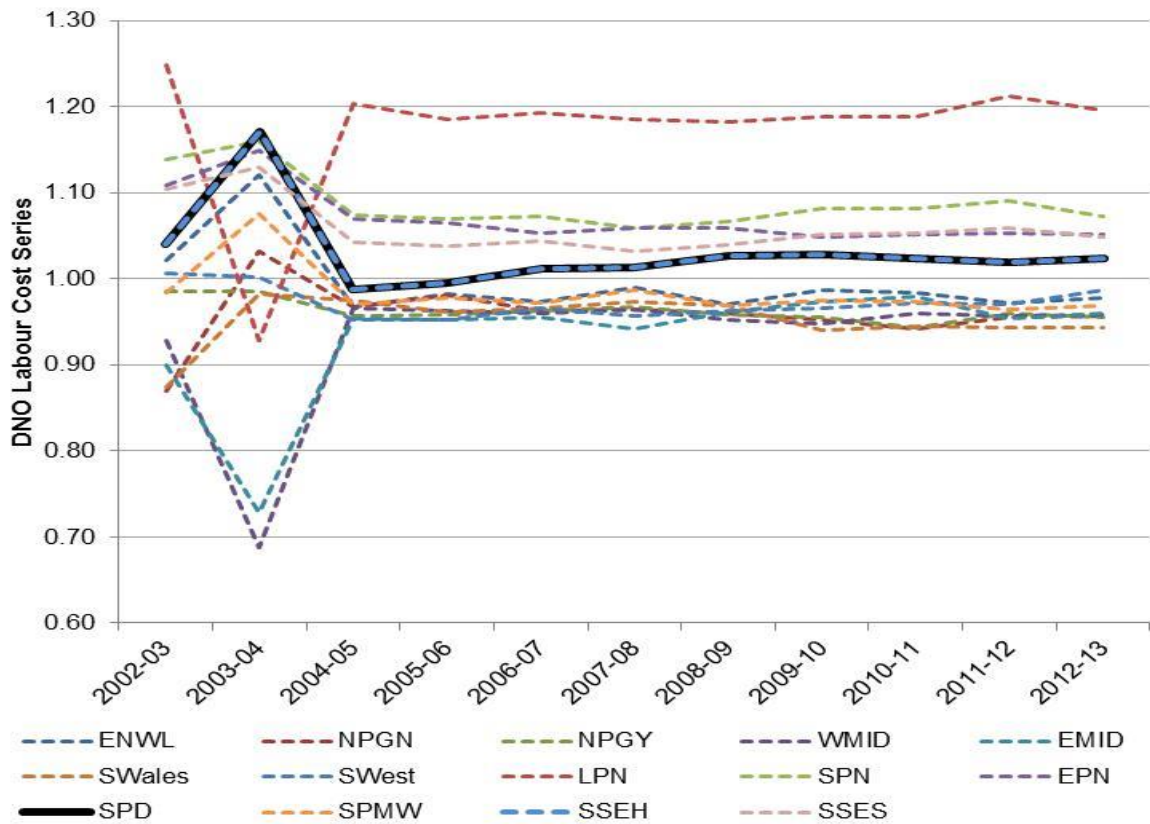
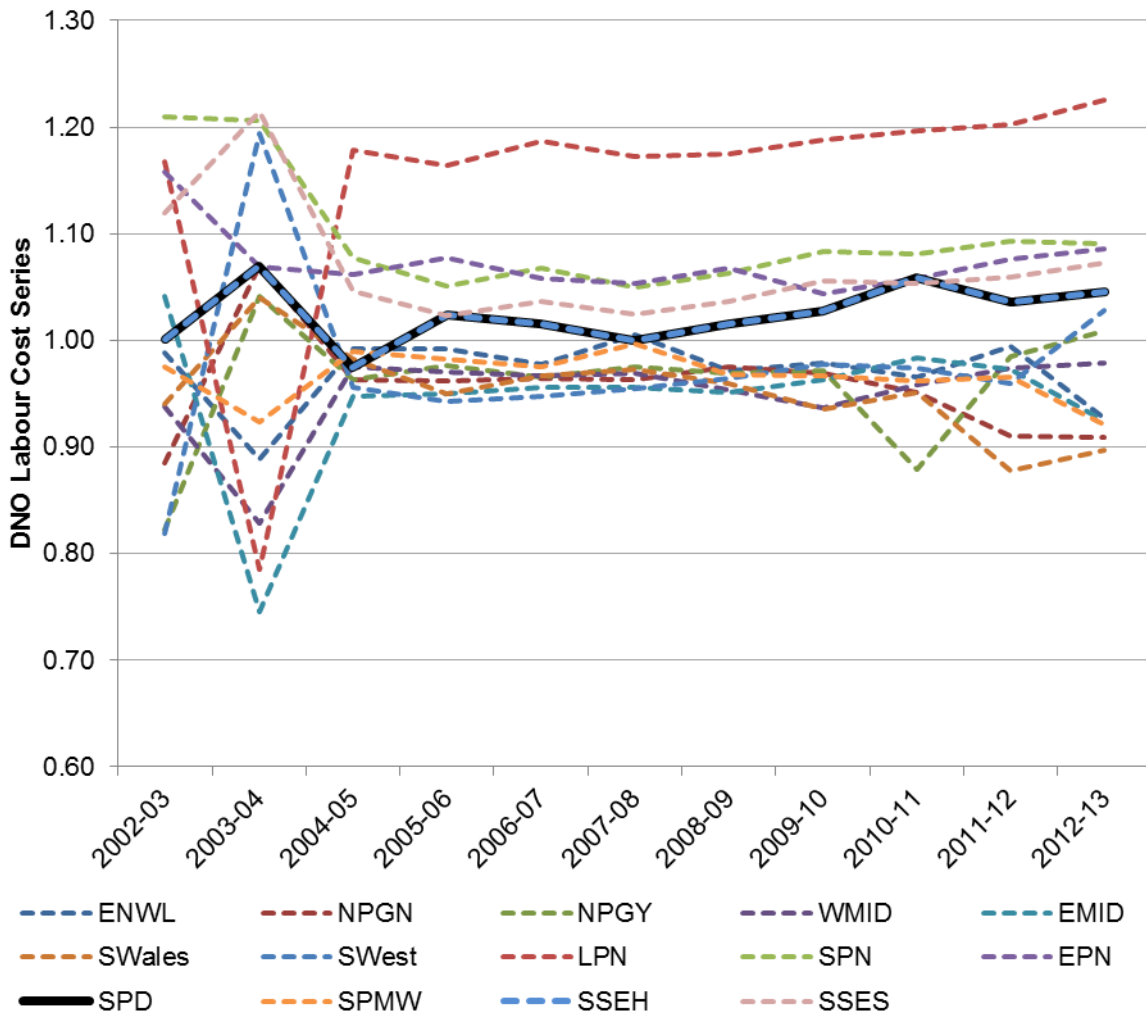


Figure 2.4
DNO Regional Labour Cost Indices using 4th Level SOC Codes



2.4. Conclusion

As described in this section, there is no apparent basis for Ofgem’s decision to award labour cost adjustments to only those DNOs in the South East of England. This decision appears arbitrary and discriminatory. Moreover, our analysis suggests there is a material wage premium for the Scottish companies, which is visible when we examine wage data using 2nd, 3rd and 4th level SOC codes. The data also suggest that the Scottish wage premium is growing over time.

3. Ofgem's Stance on Regional Wage Adjustments

3.1. Ofgem's Response

In the slow-track cost assessment, Ofgem acknowledged the above arguments put forward by some DNOs for an 11-region approach to regional wage adjustments. However, Ofgem maintained its “3 region” approach, as applied in the fast-track assessment. Ofgem published only the following two sentences in defence of this decision: “*This is consistent with the approach we used in RIIO-GD1. We do not consider that there is sufficient evidence to support applying regional wage differentials for each region of the UK given the mobility in the labour market*”.⁴ We examine each of these sentences separately:

3.2. Consistency with RIIO-GD1

Ofgem expresses a desire to maintain consistency in its labour cost adjustment mechanism. Using consistency in this way presents the following issues:

1. During the period when Ofgem was setting the RIIO-GD1 price control, labour costs were consistently higher for Scottish DNOs. The data set out above therefore suggests it was a mistake to not give Scottish DNOs a labour cost adjustment in RIIO-GD1. Ofgem has an opportunity to correct this error at RIIO-ED1. As our analysis has shown, the Scottish wage premium has grown over the past several years, so allowing a Scottish labour cost adjustment is even more important now than it was during the RIIO-GD1 process.
2. Consistency hasn't been a priority for Ofgem in other areas. Ofgem has changed views in other areas of the price control process in response to new evidence submitted by companies and changes in market data. Ofgem's decision to cite consistency just for the labour cost adjustments is, in fact, inconsistent with a number of other parts of the price control process.
3. Consistency should always be of secondary importance to good policy. Ofgem has the resources to construct a statistically-sound assessment process that is fair to all DNOs.

3.3. Labour Mobility and Wage Differentials

There are several issues with the Ofgem claim that labour mobility prevents the existence of wage differentials:

1. This is the first time Ofgem has used this labour-mobility argument to defend the “3 region” approach and it does not provide any evidence to support it. Actually, there is strong evidence to suggest that labour is not as mobile as Ofgem believes. The OECD (2005) states that the labour markets of European countries react very slowly to regional disparities

⁴ Ofgem (2014), “RIIO-ED1: Draft determinations for the slow-track electricity distribution companies – Business plan expenditure assessment”, p27

in unemployment in terms of inter-regional migration. European workers “*tend to leave the labour force in response to a decline in labour demand in their region rather than migrate to another region.*”⁵ Specific to the UK, Elliott and Lindley (2006) note that “*the reluctance of British workers to migrate geographically in response to changes in demand is generally well documented.*”⁶ Lindley et al. (2002) conclude that:

“[British] labour (even highly skilled labour) is relatively immobile between regions. For whatever reason, the costs of relocation are clearly high even when regions are hit with negative demand shocks. This result is of course well known, as illustrated by the continued discussion of regional disparities in unemployment and wages.”

They also find that UK migration rates are “*low in comparison with other OECD economies.*”⁷

2. As presented in Section 2, there is compelling evidence demonstrating that there *are* regional wage differentials beyond London and the South East. We have also shown that wages in Scotland have been consistently higher than in the rest of the UK (excluding London and the South East), and that that differential is growing. Ofgem’s claim that these wage differentials cannot exist in theory is simply not supported by this evidence.
3. Ofgem already acknowledges that some regional wage differential exists outside of London by categorising the rest of the South East separately in this regard. It has not provided evidence as to why the British labour market should be less mobile in London and the South East than elsewhere.
4. There are numerous reasons for regional wage differentials. Even if there were perfect labour mobility, regional wage differentials would likely still exist. For example, with perfect labour mobility, we would still expect wages to be higher where cost-of-living is higher as well as where there are few amenities. It is unreasonable to assume that the whole of Scotland, Wales and most of England are identical in either of these regards.

3.4. Conclusion

The data shown in this note, which uses Ofgem’s approach to calculating region wage differentials shows clearly that Ofgem’s “3 region” approach does not reflect wage data, is arbitrary and discriminatory. Furthermore, we have demonstrated why its response to our previous submission

⁵ OECD (2005), “OECD Employment Outlook – Chapter 2”, p92

⁶ Elliott, R and Lindley, J (2006), “Skill Specificity and Labour Mobility: Occupational and Sectoral Dimensions”, *The Manchester School*, Vol 74, No 3 (June), p390

⁷ Lindley, J, Upward, R and Wright, P (2006), “Regional mobility and unemployment transitions in the UK and Spain”, *Leverhulme Centre for Research on Globalisation and Economic Policy, University of Nottingham*, p28-29

on this matter was inadequate. We therefore see compelling evidence that Ofgem should abandon its previous decision in favour of the “11 region” approach.

4. The Impact on Scottish Power

We provide three charts showing the impact on SPEN from an “11 region” approach compared to the “3 region” approach in the slow track assessment. Figure 4.1 shows the impact across the three cost assessment methods and split between SPD and SPMW.

Figure 4.1
Impact of 11-Region Approach by Assessment Method

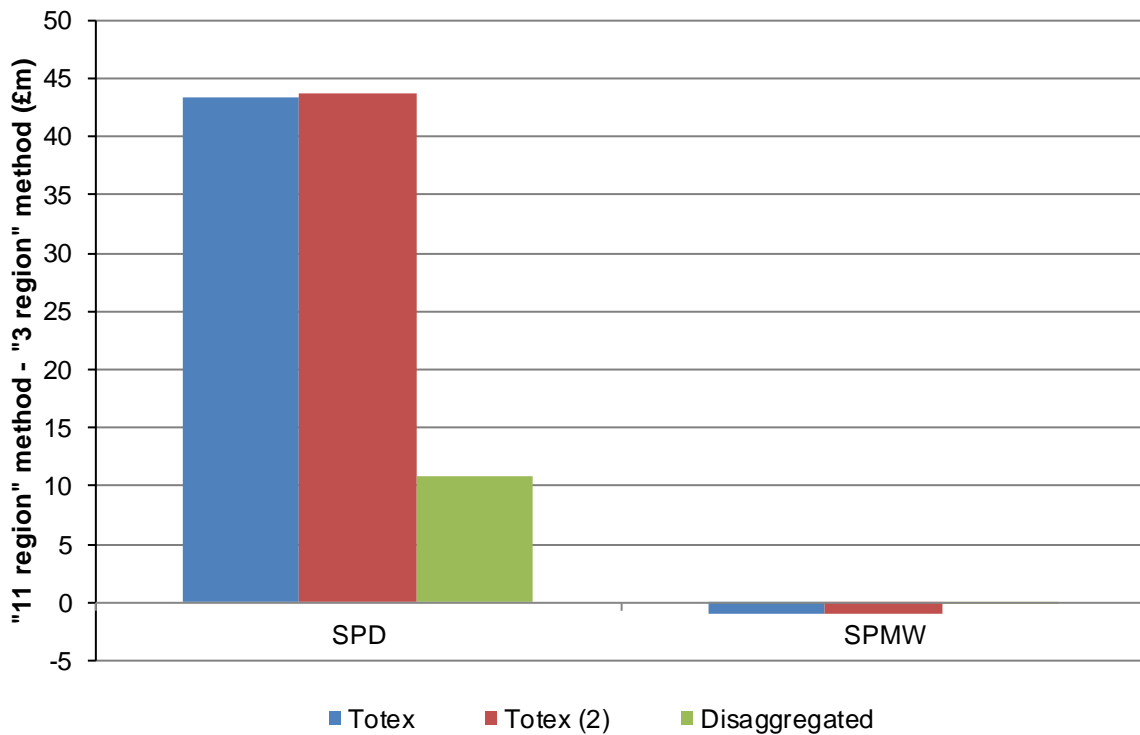
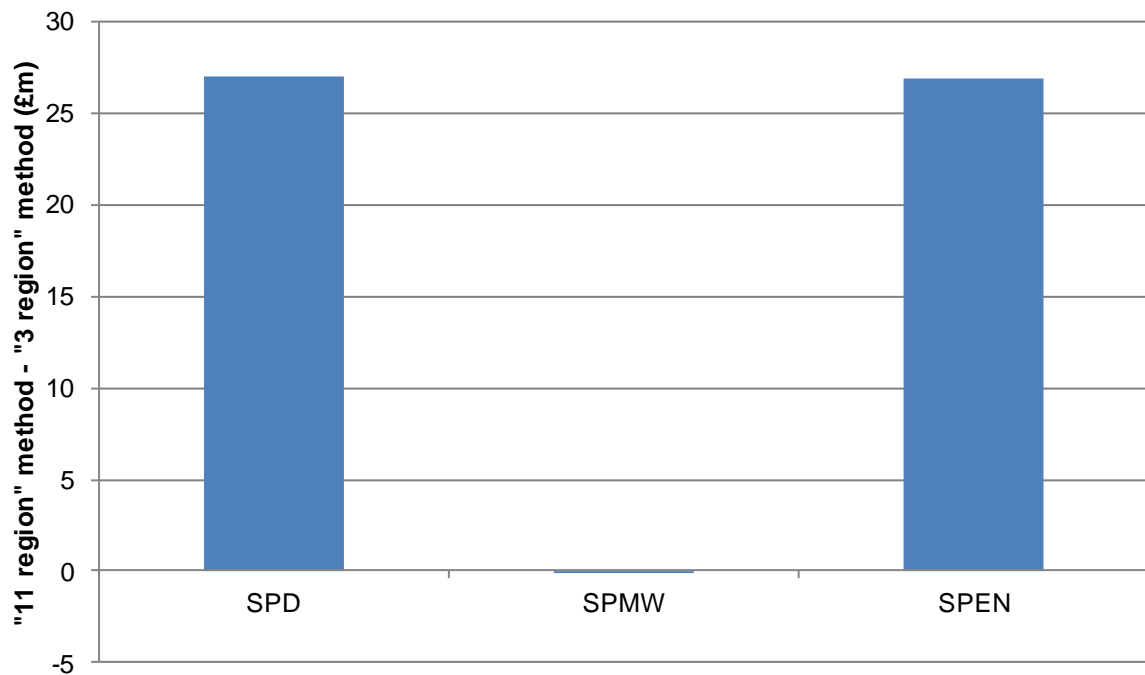


Figure 4.2 aggregates the values from Figure 4.1 and applies the upper quartile adjustment.⁸

⁸ The upper quartile efficiency score increases slightly in the “11 region” approach, making the small negative impact of the switch on SPMW negligible.

Figure 4.2
Impact After Application of Upper-Quartile Adjustment



Finally, Figure 4.3 applies the same RPE and smart grid adjustments as in the draft determination standard track assessment, then weights the Ofgem cost assessment (75%) together with the companies assessments (25%) to evaluate the impact on the final allowance from applying the 11-region approach. **We calculate that SPEN's allowed costs would increase by around £20.2m in additional allowances if Ofgem adopted the 11-region wage adjustment.**

Figure 4.3
Change in Final Allowance Due to 11-Region Approach

