

# RIIO-ED1

## Response to Draft Determinations for Slow Track DNOs

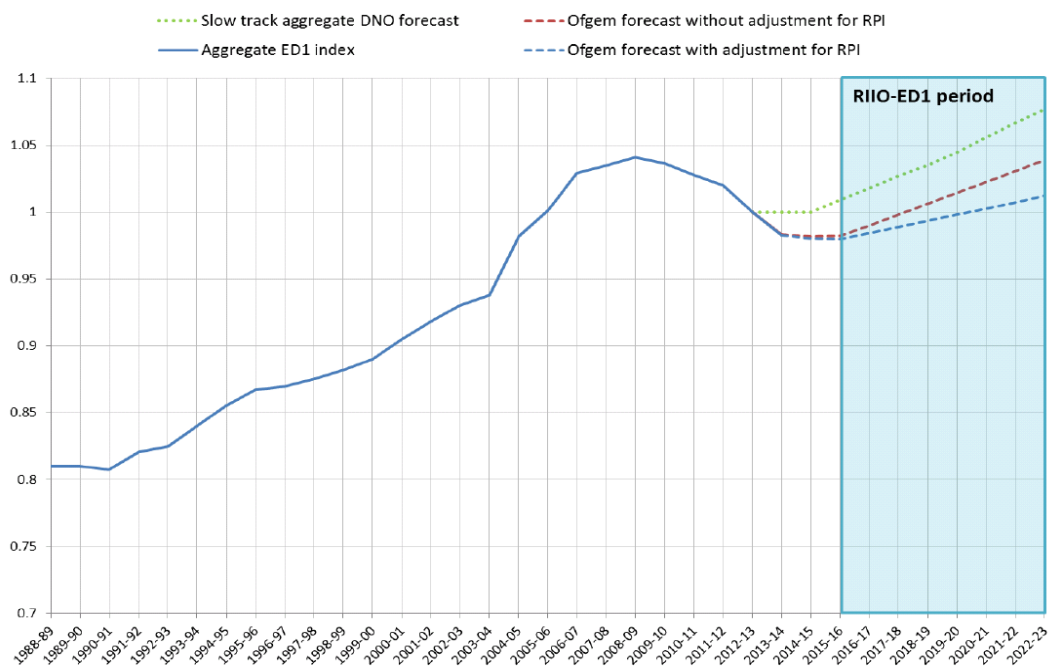
### 1 Real Price Effects

This section is our response to Ofgem’s approach to Real Price Effects (RPEs) in their Draft Determinations (DD) for Slow Track Distribution Network Operators (DNOs). Our response to the RPE consultation is included in a separate document addressing the specific consultation questions. Both responses should be read in conjunction.

#### 1.1 Background

Ofgem adopt a highly conservative view of wider economic growth in the DD and, as a consequence, a negative view of RPE growth on average across the ED1 period. Ofgem’s conclusions suggest there has been a structural break in the growth of RPEs due to the global financial crisis and subsequent recessionary period commencing in 2008. It appears to be Ofgem’s view that historic growth rates will not be recovered as we move into the post-recession period; this is in marked contrast to previous post-recession trends. This is reflected by the recent trend of RPEs (Figure 1.1 below in the figure below extracted from the DD).

**Figure 1.1 – Historical and forecast movement in RPEs with and without the adjustment for the RPI step change**



Source: Ofgem Draft Determinations, Expenditure Assessment, Page 120

Ofgem are consulting separately on the RPEs mechanism due to the perceived uncertainty on the trajectory of RPEs over the course of ED1. The consultation is addressing whether the risks associated with forecasting complexity can be mitigated through an uncertainty mechanism instead of providing an ex-ante allowance. However, as we outline in our response to that consultation<sup>1</sup>, the ex-ante approach maintains a better balance of risk towards the DNOs rather than customers (assuming Ofgem correct for their errors outlined below). This is a more appropriate allocation of the risk, recognising it is more effectively managed by DNOs, while maintaining the incentive properties for cost savings that are shared with customers.

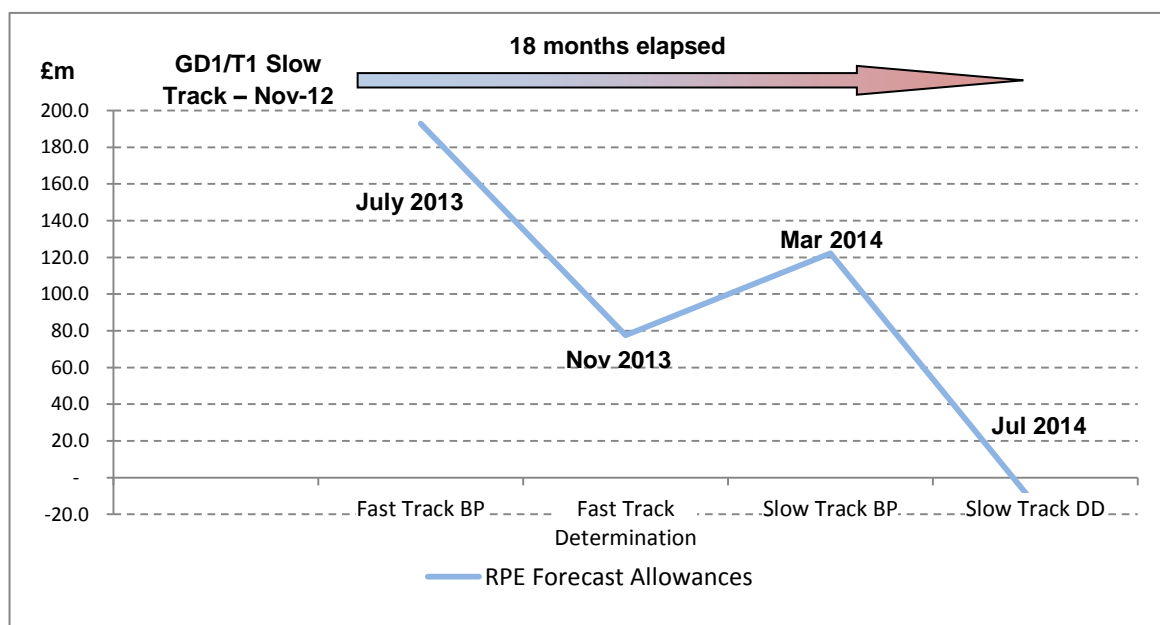
***As a result, it is critical that the allowances reflect the level of cost pressures which DNOs will face, especially over an eight year period where RPEs will be significantly higher than Ofgem's recession-biased view of economic growth.***

Ofgem's view of economic growth and the impact on RPEs is at the lower end of recent comparable forecasts and there are several adjustments required to their methodology for forecasting RPEs justifiably. We do not believe such a pessimistic view and, effectively, sub-inflationary cost forecasts are credible due to the cost pressures likely to be experienced by our industry<sup>2</sup>. We address the adjustments required below.

## 1.1 Consistency of Economic Outlook

The DD approach to RPEs represents a significant downward adjustment in the level of allowances for slow track DNOs compared to GD1, T1 and fast track. In our view, nothing significant has changed in less than two years since final determinations for GD1 and T1 to justify the scale of the reduction in RPE forecasts for the forthcoming eight year price control period. The movement is illustrated in Figure 1.2 below.

**Figure 1.2 – Movement in RPEs from Fast Track to Slow Track DD**



<sup>1</sup> SSEPD – Response to Ofgem's Consultation on Real Price Effects for RIIO-ED1 Slow Track DNOs

<sup>2</sup> See footnote 5

## SSEPD Supplementary Appendix 1 Real Price Effects

We have jointly commissioned a report with Scottish Power Energy Networks (SPEN) from First Economics<sup>3</sup> that provides an analysis of the movement in Ofgem's approach between T1, GD1 to slow track ED1. Table 1.1 below captures the movement between forecasts used by Ofgem in ED1 and accepted in T1<sup>4</sup>.

**Table 1.1 - RIIO-ED1 and RIIO-T1 long-term annual average, 'steady state' RPEs**

Input category	RIIO-ED1	RIIO-T1, restated with 0.4% adjustment	RIIO-T1, original
General labour	0.4%	0.9%	1.3%
Specialist labour	1.0%	1.8%	2.2%
General materials	1.3%	1.1%	1.5%
Specialist materials	0.8%	1.8%	2.2%
Plant and equipment	(1.3%)	(1.1%)	(0.7%)
Transport	(0.4%)	(0.4%)	0%
Other	(0.4%)	(0.4%)	0%

Sources: *First Economics Report for SPEN and SSEPD - Ofgem (2014), RIIO-ED1 draft determinations for the slow-tracked electricity distribution companies, business plan expenditure assessment; and Ofgem (2012), RIIO-T1/GD1 real price effects and ongoing efficiency appendix.*

First Economics find that *"it is very difficult to believe that Ofgem has uncovered evidence that warrants a fundamental rebasing of the RPEs that electricity networks will encounter over the long term"*. First Economics highlight that medium to long term estimates of economic expansion both in the UK and globally are unchanged since December 2012, with only 19 months having passed the UK economy has been recovering faster than most other developed economies. Additionally, they note that Ofgem cannot credibly claim to have learned anything new about wage and material cost inflation that would evidence a non-reversion to mean or *"steady-state growth"*.

The substantial adjustments to 'steady state' RPEs appear to arise from flawed analysis. For example, Ofgem's general labour forecasts are confounded with methodological issues and assumptions which are unjustified (see section 1.3), and Ofgem's view of specialist materials has more than halved by using only two more annual data points for what is considered *"notoriously volatile set of indices"*<sup>5</sup>. It is of concern that the approach Ofgem adopts in their economic outlook for the forthcoming eight year price control is significantly different to its own recent alternative forecasts without sound justification.

***We therefore believe a more appropriate approach is to select a credible consensus view of economic forecasts and correct for errors made by Ofgem.***

<sup>3</sup> First Economics Report for SSEPD and SPEN, *"RIIO-ED1: Real Price Effects"*

<sup>4</sup> Implicitly, Ofgem also used these forecasts for GD1 with minor adjustments reflected for industry differences

Source: table 1.6 on p.13 <https://www.ofgem.gov.uk/ofgem-publications/48159/5riiogd1fprpedec12.pdf>

<sup>5</sup> This is para-phrased from the First Economics Report for SSEPD and SPEN on *"RIIO-ED1: Real Price Effects"*

## 1.2 Asymmetrical Economic Cycles and Mean Reversion

Ofgem's long standing approach to RPEs has been to use long run historical averages in the indices selected to inform its view of future growth rates. To achieve this, Ofgem has previously recognised the importance of using the longest data set available. A different approach has been used for the DD. This is highlighted in a report by NERA<sup>6</sup> as commissioned by the ENA, in section 3.3. When utilising the longest data set possible the forecast RPEs is significantly higher due to an increase in the historical long run averages. Ofgem has not justified change in its approach. When adjusting this calculation through using the longest data set available, the RPE percentage for specialist labour increases by nearly 50bps from 2016/17.

Supplementary to this, the shorter period used in Ofgem's new calculations has the effect of depressing historical averages as the period includes two recessionary periods and one growth period. This has the effect of lowering the average increase above inflation thereby understating forecasted RPEs in ED1. First Economics highlight that in RIIO-T1, recognising this issue, Ofgem took a conscious decision to take historical averages up to and including 2009/10. This was justified by Ofgem as follows:

*"In deriving RPE assumptions for Initial Proposals our general approach for establishing a forecast of input prices is to draw on the long-term real trend of relevant indices. We have calculated the long-term trend based on data for c. 20 years. We have calculated the long-term trend based on data up to and including 2009/10. We excluded the last two years of data from the long-term average because the impact of the global recession over these years could result in an historical trend which understates the expected growth over the longer-term."*

*Source: extract from FE report, quoting T1 Initial Proposals*

However, Ofgem are now including historical averages up to 2013/14 that now includes an additional two years of recessionary data. Therefore the averaging period now includes the 1990-92 recession, periods of trend economic growth between 1992 and 2008, and the recession between 2008 and subsequent aftermath up to 2014. This is captured in Table 2 in First Economics report reproduced below, through disaggregating long term historical averages between each period.

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<sup>6</sup> NERA report for ENA, "Review of Ofgem's approach Draft Determination of Real Price Effects for RIIO-ED1"

**Table 1.2 - Disaggregation of Ofgem's long-term historical averages**

	pre-1992	1992-2008	2008-14		Full period
General labour	n/a	1.1%	(1.8%)		0.4%
Specialist labour	0.2%	1.8%	(1.3%)		0.8%
General materials	n/a	1.1%	1.6%		1.3%
Specialist materials	n/a	1.3%	(0.5%)		0.8%
Plant and equipment	(1.2%)	(1.0%)	(0.9%)		(1.1%)

The impact of Ofgem's approach is perverse. As we enter a period of growth, the DD RPEs forecast is more representative of recessionary outcomes. This is clearly wrong.

In the report commissioned by the ENA, NERA identifies that with the use of comprehensive economic modelling, called ARIMA (or ARMA), the long term forecast for indices indicates a mean reversion. This modelling is consistent with a long run historical average, is more robust, and avoids application of subjectivity that may overly adversely impact on customers or DNOs. They compare this approach to utilising the arithmetic average, geometric average, and other similar averaging methods and conclude (in section 3) that the ARMA modelling approach is more robust for forecasting long term trends since alternative approaches ignore the potential for indices to revert to their underlying long-term trends as the economy recovers from the recent recession.

***As a result we advocate the use of the longest data series possible in indices selected and application of mean reversion in the long run forecasts. In our view, there is no evidence supporting the contrary approach Ofgem propose.***

***Overall, when factoring in this reversion to steady state (based on NERA's approach only) the RPEs should be increased by at least 29bps.***

### 1.3 Choice of Indices and General Methodology

Ofgem's approach is based on the selection of a range of representative indices of the industry and each cost category. There are a number of alternative indices which can be selected that may be considered more appropriate and NERA highlight that Ofgem should review its choice of indices, to represent the evolution of DNOs' costs.

One recommendation, we suggest, is to utilise of a basket of indices for each category to avoid bias or volatility in selection of indices but benchmark these against the experience of DNOs. This benefits both the customer and the DNOs by reducing risk to customers or DNOs and still maintaining incentive properties through benchmarking actual costs. This would inform future benchmarking exercises thereby grandfathering the benefits into future price controls.

Ofgem state that they have updated their indices for DD only. However, Ofgem have also applied a 0.4% RPI correction based on their view (in their decision on the Cost of Equity) that a formula effect existed meaning that RPI will be overstated by 0.4%. We summarise the evidence separately in section 1.6 below (with a more comprehensive summary included in the supplementary annex on Cost of Capital), that this adjustment is excessive and should be revised downwards. NERA concluded that at most an adjustment of no more than 15bps was warranted for the RPI formula effect as a result of Ofgem misestimating the formula effect and forthcoming changes anticipated to reduce the formula effect during ED1.

Ofgem also assert that transport and other categories will move in line with RPI without any justification. In the absence of appropriate evidence to justify that forecast there should be no adjustment to transport and other categories for the RPI formula effect resulting in a negative RPE of 0.4%.

Ofgem should seek to identify very specific industry indices or measures to benchmark forecasts against actual DNO costs. This will allow for industry specific factors and thereby avert overly generous allowances and prevent the risk of overly aggressive allowance reductions. For example, referring to historic union pay deals across the DNOs and wider utilities industry would inform forecast RPEs. It is also appropriate to take account of the known cost drivers such as the significant demand on materials, plant and equipment and skilled labour due to large scale infrastructure projects<sup>7</sup>. There is also a well accepted view that skill shortages, particularly in engineering, is expected to be more prevalent in the latter part of ED1<sup>8</sup>. We expand upon the use of union pay deals below in section 1.4.

## 1.4 Labour

Ofgem's approach suffers from a number of flawed assumptions around general and specialist labour which are presented below.

### 1.4.1 General labour

Ofgem have used the ONS average weekly earnings to forecast RPEs for general labour. The application of this index is inherently misleading due to the structural changes in the underlying data. The ONS comments that the trend in this data can be skewed by structural changes in employment such as: changes in part-time and full-time employment, and those entering and leaving the working population. This is explained in more detail in the First Economics Report. First Economics also highlight that the ONS' guidance notes explicitly

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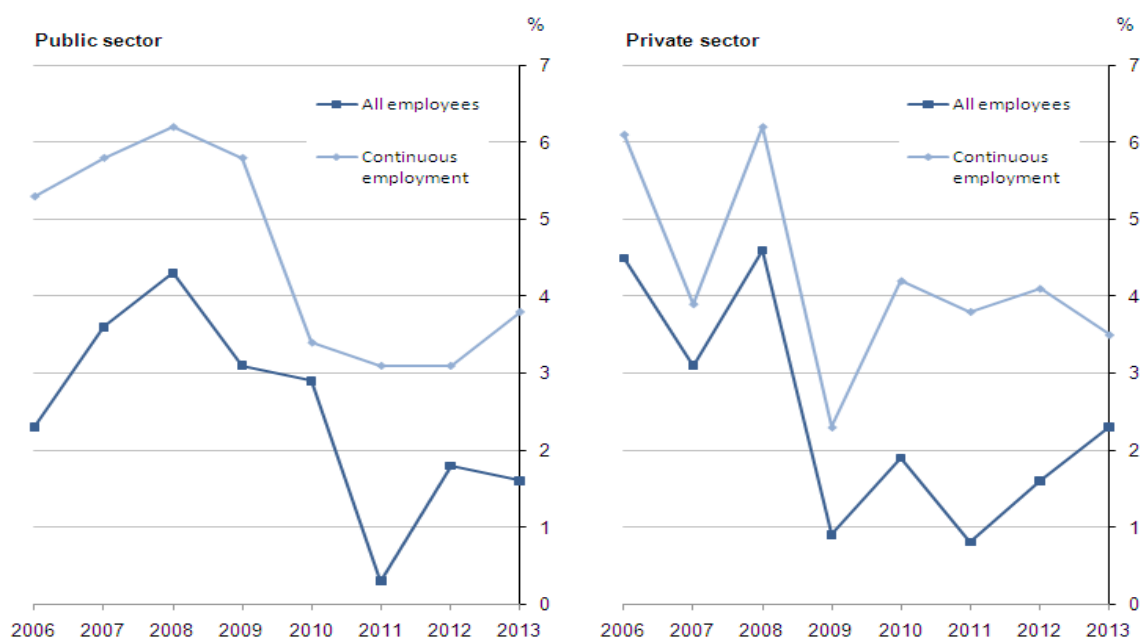
<sup>7</sup> The [transmission](#) and [gas distribution](#) price controls show a total of £38.2bn of spend required over the period to 2021. Accelerating investment in the UK's electricity generation capacity to replace ageing coal fleet, much of which will come to the end of its life over the ED1 period – or earlier. There are ambitious projects to develop major offshore wind developments, as well as new nuclear plants. Other UK infrastructure projects such as HS2 and the funding of the water industry which will act as competition for capital throughout the ED1 period and beyond. In 2009, an influential [Policy Exchange report](#) showed that the UK required £500bn of infrastructure investment by 2020. The [Treasury's own 2012 National Infrastructure plan](#) showed that spend between 2010 and 2012 averaged at £33bn per annum, and is increasing.

<sup>8</sup> Various citations identified in particular from the Department for Business, Innovation and Skills, Social Market Foundation, the CBI and the Royal Academy of Engineering.

warn users to be aware of the potential effects of structure changes to avoid misinterpreting the data. The reliance on 2013/14 forecasts is particularly egregious given Ofgem have actual costs from DNO pay deals and can therefore remove this unnecessary forecast assumption from the calculation of RPEs.

As an example of disaggregating the ONS data, without advocating an adjustment to this index, a simple point can be made around the usage of continuous employment data versus all employees. The private sector should be the focus of establishing representative labour indices and the divergence between both data sets is clearly represented in Figure 1.3:

**Figure 1.3 - Annual percentage change in median full-time gross weekly earnings for public and private sectors for all employees and those in continuous employment, UK, April 2006 to 2013**



*Source: Annual Survey of Hours and Earnings (ASHE) - Office for National Statistics*

The continuous labour data is statistically significant enough to have confidence in as well as being representative of DNOs employee turnover. The percentage change has been 4% in continuous employment in the private sector with actual percentage changes falling between 4% and 6% pre-recession. SSEPD's employee churn is on average 4% per annum, which is comparatively low in the context of the broader private sector, and arguably the increases seen for continuous employment are reflected in recent DNO-union wage settlements.

First Economics highlight that when considering the methodology used by the CC in its decision on NIE, by referring to occupation data in the ASHE as a secondary check and considering union wage settlements, a more informed judgement can be made for 2013/14 (see table 3 and table 4 in the First Economics report). This illustrates above RPI pay increases and as First Economics highlights, reliance on this is not akin to a pass-through of costs which is why the CC relied upon this information to inform its methodology.

***NERA identify that the RPE for general labour needs to be increase by 0.1% in 2014/15 and 0.2% in 2015/16 and union wage settlements should inform Ofgem's view of DNO actual cost pressures.***

#### **1.4.2 Specialist Labour**

The skilled labour index forecasts do not reflect the premium compared to general labour. This was explained further in reports by NERA<sup>9</sup> (for the ENA) and First Economics<sup>10</sup> (for SSEPD and SPEN). The historical premium is 1% and therefore this should be applied in the forecasts which Ofgem have failed to do for 2014/15 and 2015/16 on the basis that short term forecasts on general labour were more appropriate than historical long term data. When comparing the long run historical data for general labour and specialist labour the premium on specialist labour has consistently been above general labour. Therefore it is highly selective and implausible that short term forecasts on general labour could act as an appropriate proxy for premiums, or lack thereof, on specialist labour.

***NERA and First Economics conclude that a premium must be added to skilled labour in 2014/15 and 2015/16 amounting to 1% over general labour increases. This is in addition to the 0.4% uplift on specialist labour when including the all data available in the indices.***

#### **1.4.3 Specialist vs General Labour Weightings**

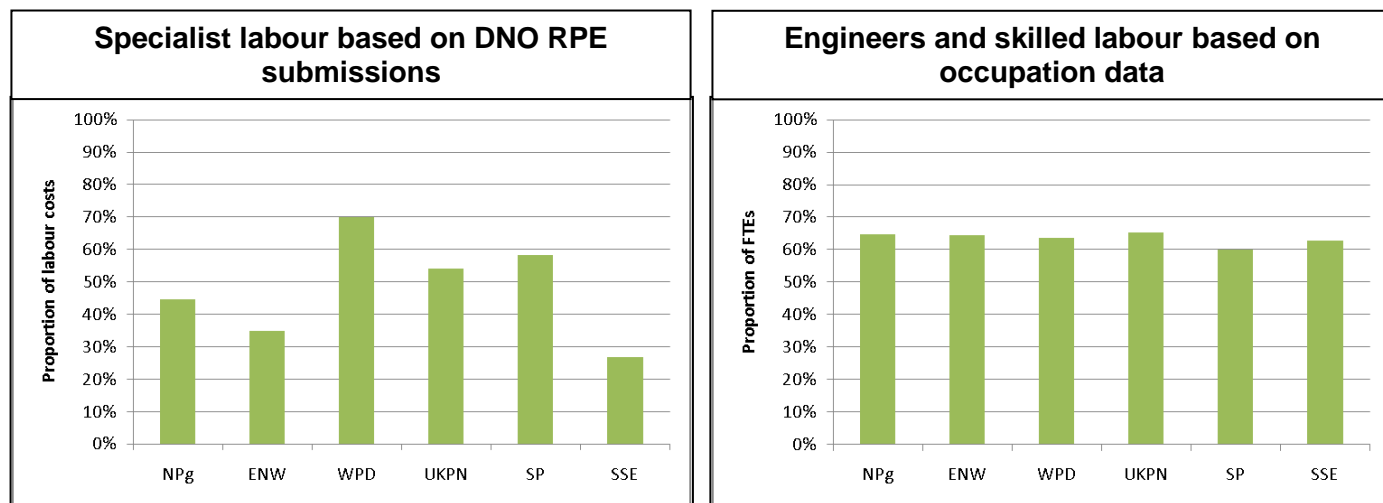
When reviewing each DNO's proposed proportion of skilled versus general labour it is quite clear that there is a definition issue across the DNOs. Some DNOs have assumed a significantly higher rate than others. This must be due to an inconsistency in definitions between DNOs specialist and general labour and must be addressed by Ofgem. For example, SSE arrived at a proportion of 28% compared to WPD who had 70%. Figure 1.3 reflects the DNO submission for slow track compared to that proportion of FTEs using occupation data.

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<sup>9</sup> NERA report for ENA, "Review of Ofgem's approach Draft Determination of Real Price Effects for RIIO-ED1"

<sup>10</sup> First Economics Report for SSEPD and SPEN on "RIIO-ED1: Real Price Effects"

**Figure 1.3 – Comparison of DNO skilled labour proposals vs occupation data**



This illustrates that a consistent application would result in broadly similar proportions of skilled to general labour which we believe is a more appropriate measure (or benchmark) for the proportion of skilled labour for DNOs.

***Application of this approach leads to a significant increase in RPEs over ED1 (calculated for SSEPD only).***

## 1.5 RPI Formula Effect

The scale and impact of the RPI formula effect adjustment applied throughout the DD is referenced in the Cost of Capital supplementary annex section 2.1.3. In summary, following on from a report from NERA, we believe that the RPI adjustment for the impact of the formula effect is excessive. Additionally neither the ONS, CMA, nor Ofwat recommend or apply any form of downward adjustment for the RPI formula effect, and Ofgem is an outlier in this regard.

***Due to the outlined reasons this adjustment should be revised downwards to no more than 15-20bps based on NERA's calculations, at no more than 25bps based on Wright and Smithers<sup>11</sup> recommendations on the cost of equity.***

<sup>11</sup> Wright and Smithers' provided Ofgem a paper to inform its Decision on Equity Market Returns methodology for setting RIIO price controls

## 1.6 RPE Base year should be 2013/14

At the time of DD only 2012/13 actual cost data was available. However, we have recently supplied the 2013/14 cost data to Ofgem and believe a more appropriate approach would be to apply the 2013/14 actual cost data as the starting point. We recognise this data was not available at the time of DDs but are concerned that it may not be utilised in setting final determinations. We believe that updating the starting point for RPE forecasts to 2013/14 will result in a more accurate forecast for RPEs during ED1.

***We therefore strongly advocate the usage of 2013/14 actual cost data as the starting point for RPE forecasts.***

In addition to this the DNOs have all reached pay settlements with their respective unions which should inform Ofgem's view. As we outline below, we do not believe this introduces a pass through for DNO pay deals but actually provide a benchmark of actual costs that DNOs can then aim to outperform. It is in both DNO's interests to have competitive pay settlements to both maintain cost levels and encourage productivity both of which customers benefit from through the totex incentive mechanism.

## 1.7 CMA Approach on NIE

The ENA commissioned Frontier Economics<sup>12</sup> to undertake an analysis of the CMA (formerly CC) approach in their decision on NIE and compare this approach to the one adopted by Ofgem. There are a number of methodological assumptions on how Ofgem could directly apply this methodology which is outlined in the report. In summary, however, it is clear from Table 1.1 below, that when using the CMA approach to RPEs the difference to Ofgem's DD is significant ranging from £160m to almost £450m for the industry (excluding WPD).

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<sup>12</sup> Frontier Economics, CMA RPEs methodology in the NIE inquiry – Application of CMA input indices to GB DNOs.

**Table 1.3 – Industry total RPE allowances when translating the CMA on NIE approach to GB DNOs  
Slow Track Draft Determinations only**

Approach	Industry total RPE allowances (£m)	Difference to Ofgem draft determination (£m)
Ofgem draft determination	-77.9	0
Headline result – CMA approach (i.e. DNO specific weights)	97.2	+175.1
CMA input indices, and industry average weights	87.4	+165.3
CMA approach, with adaptation to its estimation of RPI forecasts	265.5	+343.4
CMA approach, with 2014/15 wage settlements	173.0	+250.9
CMA approach, with NIE's materials split	138.2	+216.1
CMA approach, with adjustment to OBR's RPI forecast	369.3	+447.2

*Source: Frontier Economics, Table 2, page 3*

The report outlines assumptions on its application for the DNOs and in the context of Ofgem's DD. We do not believe this approach results in an unfavourable settlement for customers or derives the wrong behaviour on DNOs to manage allowances including RPEs efficiently as part of incentives. With reference to the usage of DNO's actual pay deals to benchmark nominal or real wage growth as mentioned above in section 1.4, this would provide DNOs a benchmark to outperform while closely matching DNO costs since DNOs would remain incentivised to reduce costs due to the totex incentive sharing mechanism. Over future price controls pay settlements would inform future benchmarks thereby encouraging DNOs to continue to manage pay settlements efficiently.

## 1.8 Conclusion

Overall Ofgem's approach has resulted in sub-inflationary cost reductions through RPEs for DNOs across ED1. We believe this is not credible particularly given the cost pressures expected on the DNOs, which is reflected when adjusting for errors in Ofgem's methodology for RPEs. We propose Ofgem make the adjustments identified above at least, thereby resulting in the following amendments to the RPE forecasts and resultant RPE value:

**Table 1.4 – Impact of NERA Recommendations**

Issue	Impact on RPEs from Implementing NERA Recommendations
Short term wage forecasts	+0.2% on General Labour in 2014/15-15/16 +1% on Specialist Labour in 2014/15-15/16
Estimation window	+0.4% on Specialist Labour from 2016/17
Estimation approach	+0.29% (on average) on Totex in each forecast year from 2014/15
RPI adjustment	Around +0.25% on Totex each year +0.4% on Transport/Other Costs each year

*Source: NERA Report for ENA as referenced*

When considering the various amendments to Ofgem’s approach, the total industry position can vary between £87m to £370m<sup>13</sup> across the industry when translating the CMA approach, or when using NERA’s recommendations, the total for the industry is £274m<sup>14</sup>. This is excluding using union pay deals in NERA’s recommendations (or as used in the CMA approach), or adjusting the weightings for specialist labour to align DNOs consistently, or excluding recessionary data (but relying on a reversion to mean over the long term).

***When reflecting these adjustments on our slow track business plan<sup>15</sup>, the RPEs between £90m and £120m. Therefore we assert our slow track business plan RPE allowances are reinstated.***

<sup>13</sup> Based on slow track DNOs only, and on allowances as set out in DD

<sup>14</sup> Based on slow track DNOs only, and on allowances as set out in DD

<sup>15</sup> Based on our slow track business plan as submitted and not on the allowances as set out in DD