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10 January 2014

Dear Hannah

Consultation on our methodology for assessing the equity market return for the purpose of setting RIIO price controls

Please find set out below and in the appendix UK Power Networks' response to the above consultation. This response should be regarded as a consolidated response on behalf of UK Power Networks' three distribution licence holding companies: Eastern Power Networks plc, London Power Networks plc, and South Eastern Power Networks plc. For convenience, the three licensees are collectively referred to as "UK Power Networks" throughout. Please note that our response is not confidential and can be published via the Ofgem website. We have also commissioned two external reviews of Ofgem's consultation; one from Oxera which was commissioned jointly with a number of other DNOs (which is being submitted by them) and one from First Economics which was commissioned solely by UK Power Networks and is attached to this response. Our key points on the consultation are detailed below and our answers to the specific questions are detailed in the appendix attached to this letter.

1. It is not appropriate for Ofgem to adopt the CC's approach to the cost of equity for RIIO-ED1

We believe there are a number of material issues which makes the adoption of the CC's provisional approach to the cost of equity inappropriate for RIIO-ED1.

(i) The proposed change would represent a late stage fundamental change in the RIIO framework

We are concerned that the proposed change in methodology, at this late stage in the RIIO ED1 process, is inappropriate. We also believe that Ofgem's consultation on this issue is premature as the CC's views on this issue are at the provisional stage. If Ofgem adopts the CC approach it will break the linkage between the various RIIO price controls and undermine the perception of both regulatory stability and predictability that the RIIO process has developed. This will have a negative impact on both investors and rating agency perception of the regulatory framework which could ultimately lead to higher financing costs for the sector. This would not be in customers' interest.

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(ii) Adopting the CC's provisional approach for the cost of equity only would be highly selective

If Ofgem were to adopt the CC's draft approach to the cost equity this would be a highly selective analysis of the CC's provisional determination. In its analysis the CC has looked at all the components of the allowed return, and with respect to the cost of debt and the asset beta has derived values which would have yielded a higher allowed return than the RIIO-ED1 parameters. However, Ofgem is only consulting on the CCs cost of equity methodology. This is the only aspect where the CC have produced a lower value than the RIIO-ED1 financing parameters. There is no rationale in the Ofgem consultation as to why the CC's position on the other elements of the allowed return has been ignored. The CC has provisionally determined an allowed return for NIE of 4.1%. In our business plan we have effectively proposed an average allowed return of 3.9% over RIIO-ED1. The value of this lower allowed return is £1.40 (12/13 prices) per customer per year over the RIIO-ED1 period. On this basis our plan is good value for customers compared to the equivalent CC decision.

A key difference between the CC and Ofgem approaches is that all the RIIO price controls use a 10 year trailing average debt index whereas the CC cost of debt allowance takes into account embedded debt costs. Under the Ofgem approach we believe that on average over RIIO-ED1 we will underperform the debt index by 0.3%. The consequence of this is that our actual return on equity will be 0.55% below the 6.7% proposed in the business plan. In addition, the CC has allowed NIE debt issuance costs on new debt which Ofgem has consistently refused to incorporate in its debt index. The impact of both of these factors would more than offset the impact of applying the CC cost of equity methodology.

(iii) The responses to the CC's provisional determination have highlighted a number of methodological problems with its approach to the cost of equity

It is important to recognise that Ofgem is consulting on the CC's provisional views. The CC November document was a consultation seeking views from interested parties. It is not the final position. We note that a number of responses to the CC's provisional determination have raised methodological issues with the CC approach. These include:

- The assumption that a reduction in the risk free rate implies a reduction in the overall market return is not supported by the evidence;
- The CC is confusing current realised market returns with the underlying cost of equity capital. In addition, it does not take into account that the UK stock market return in 2013 was circa 14% which demonstrates how volatile current realised returns are and why they should not be used for determining the underlying cost of equity capital and a longer timescale is necessary; and
- The CC has considered a narrow range of evidence in determining its judgement on the future equity risk premium and alternative forecasts e.g. Bank of England latest equity risk premium projections which produce a higher value.

We would expect the CC to consider all evidence presented to it in coming to its final position. If that final position is different to the provisional findings it is not clear how Ofgem will take this into account.

As Ofgem itself notes, it has structured the RIIO-ED1 price control to take a longer term view of financeability which has been informed by stakeholder consultation. The CC is explicit in its provisional determination that it is forecasting the required return for the period 1 April 2012 to 30 September 2017 i.e. a forecast period of 3.5 years. Ofgem are, however, forecasting the required

return to March 2023, a forecast period of 9 years. When the time horizon under consideration more than doubles there will naturally be more uncertainty as to whether short term conditions will persist. Consequently, there is a significant likelihood that recent market data, especially when it is influenced by the current abnormal macroeconomic policy environment, will not be representative of the cost of equity in the RIIO-ED1 period, particularly towards the latter end.

2. We do not believe a reduction in the cost of equity below our proposal of 6.7% is justified

(i) A reduction to the cost of equity to 6.3% for slow tracked companies is a surprise and is not equitable

In Appendix 2 of its consultation Ofgem sets out the basis for its 6.3% cost of equity central case which it is proposing to adopt for slow tracked companies whilst fast track companies will receive 6.7%, subject to the outcome of this consultation. We are concerned that Ofgem are not consulting on this point given that it has not been discussed with stakeholders during the RIIO-ED1 process. This approach was not signalled in the Strategy Decision document and results in a further increase in additional revenue for any fast tracked company, whilst having a negative impact on stakeholders' perception of both the stability and predictability of the RIIO-ED1 framework. Ofgem has not set out why this approach is equitable across companies or in the interests of customers.

(ii) Ofgem's arguments for a proposed 0.4% reduction in the cost of equity are problematic

We believe that Ofgem has misinterpreted that data that it has used to justify the 0.4% reduction in the cost of equity. The basis for the reduction is an analysis of movements in the gap between RPI and CPI and the movement in index linked gilts. With respect to the former Ofgem has made the following methodological errors[1]:

- It has failed to take into account that CPI and RPI use different weights. The correct comparison should have been to RPIJ. This reduces the difference by 0.13%
- The impact of the 2011 Localism Bill means that council tax will rise more slowly in the future. This creates an offsetting structural break. This reduces the difference by a further 0.16%; and
- Ofgem had already increased its long term view of inflation from 2.7% to 2.8%. This reduces the difference by 0.1%

Our conclusion is that this is a factor which does not need to be adjusted for.

(iii) Market and other evidence does not support a material reduction in the allowed cost of equity

We also remain convinced that the market data supports a market return in excess of 7.0%. At the recent cost of equity workshop Ofgem's advisor presented an analysis of the US market return and the movement in Treasury Bills.[2] The analysis showed that the 30 year geometric average return has been 6.0% which when converted into an arithmetic average would imply a market return in excess of 7.0%. It also demonstrates that the market return has been stable despite significant

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[1] Northern Powergrid presentation "Appendix 2 to the consultation" Ofgem cost of equity workshop 7 January 2014

[2] Stephen Wright (Birbeck College) Ofgem cost of equity Workshop 7th Jan 2014

movements in the yields on Treasury Bills i.e. the risk free rate. This analysis illustrates that a reduction in the risk free rate does not imply a reduction in the market return.

At the recent cost of equity workshop some parties also expressed concern that the premias to RAV which have historically been paid for distribution businesses indicated that the allowed cost of equity was too generous. This is overly simplistic. A premium to RAV will reflect the purchaser's view on the level of cost and incentive outperformance it expects to deliver and acquisition cases almost always take a positive view on outperformance. It will also reflect the fact that the purchaser will buy future RAV growth (i.e. capex) at par value. For example, assuming a 2.5% outperformance on return on regulatory equity from incentives and cost efficiency (which is well within the range shown in figure 3.2 in the financial issues annex to Ofgem's RIIO-ED1 strategy decision document of March 2013) and 1.5% pa real terms growth in RAV implies a market value premium to RAV of 17% under a simple growing perpetuity formula, without assuming any premium for the allowed cost of equity over the actual cost of equity.

3. Conclusion

The CC's work is incomplete (i.e. at the provisional stage), faces important methodological concerns and applies to the allowed return as a package. For Ofgem to adopt the CC's cost of equity approach only would represent a highly selective interpretation of the CC's provisional decision and a very late stage change in the RIIO-ED1 process. We are concerned that the proposed change, if implemented, would materially undermine the perception of regulatory stability and predictability of the RIIO framework which has been developed over the recent RIIO-T1 and GD1 price controls. This could ultimately raise the sectors' financing costs. We do not believe that such an outcome is in the interests of customers. Therefore, we believe that it is inappropriate for Ofgem to adopt the CC approach to determining the cost of equity.

If you have any queries on the above or the further detail in the appendix please do not hesitate to contact either Keith Hutton or myself.

Yours sincerely

Ben Wilson,
Director of Strategy & Regulation & CFO, UK Power Networks

Copy:

Keith Hutton, Head of Regulation
Colin Nicholl, Head of Business Planning
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Appendix 1: UK Power Networks response to Ofgem's questions on the cost of equity methodology

1. Do you agree with our direct translation of the CC's equity market return estimate to DNO cost of equity allowances?

We believe that only to consider the CC's provisional cost of equity approach is a highly selective interpretation of the CC's provisional determination. In its analysis the CC has looked at all the components of the allowed return and with respect to the cost of debt and the asset beta has derived values which would have yielded a higher allowed return than the RIIO-ED1 parameters. However, Ofgem is only consulting on the CCs cost of equity methodology. This is the only aspect where the CC have produced a lower value than the RIIO-ED1 financing parameters. There is no rationale in the Ofgem consultation as to why the CCs position on the other elements of the cost of capital has been ignored.

We do not believe Ofgem has correctly translated the CC's equity market return to the DNO cost of equity allowance. The table below sets out our view of how the CC's cost of equity should be translated across for the DNOs.

	CC (Period: April 2012 to September 2017)	**UK Power Networks CC re-geared**	**DNOs' RIIO-ED1 business plans (Period: April 2015 to March 2013)**
Gearing	50%	65%	65%
Risk-free rate	1.0% to 1.5%	2.0%[3]	2.0%
Equity-risk premium	4.0% to 5.0%	4.0% to 5.0%	5.25%
Asset beta	0.40 to 0.45	0.40 to 0.45	0.38
Debt beta	0.1	0.1	0.1
Equity beta	0.70 to 0.80	0.96 to 1.10	0.9
Cost of equity (range)	3.8% to 5.5%	5.8% to 7.5%	–
Cost of equity (point estimate)	4.8%	~6.8%*	
Adjust for the impact of different treatment of debt costs		0.55%[4]	
Revised cost of equity		**7.35%**	**6.7%**

* 6.8% is the 60th percentile in the range, consistent with the CC's positioning of its point estimate. We note that Ofgem has put forward a slightly different point estimate in its December 2013 consultation document.

A key difference is that the CC's current interpretation of UK listed utilities asset betas is higher than Ofgem's recent decisions. The CC's equity beta range is derived from the same comparator set of five companies that Ofgem has tended to refer to in its work, but comes out as slightly higher numbers due to the statistical methods used (e.g. the inclusion of weekly data as well as daily data in the estimates). As a consequence, it is not tenable for Ofgem to claim that the CC's provisional findings does not qualify Ofgem's estimate of the DNOs' beta. In particular, we note that Ofgem's 0.38 asset beta sits noticeably below the mid-point of the CC's overall 0.26 to 0.55 range and below the narrowed down 0.40 to 0.45 range.

The CC's risk free rate has been derived for the period to March 2017. In deriving this figure the CC has had to factor the negative real gilt yields of the last year and half directly into its cost of equity calculation, leaving it to take a forward look only for the last four years of the control period. The CC's 1.0% to 1.5% risk-free rate and the 5.0% to 6.5% expected market return in a sense therefore average across known (low) and forecast (higher) data. The implication of this average

[3] Adjusted for the longer RIIO time period

[4] Adjusted for the cost of debt underperformance which the CC compensates for in the cost of debt allowance

view is that the risk free rate must be exiting the NIE control period at a value higher than the average given that it starts the period at zero or marginally below. A simple extrapolation of the exit value, as a constant, would imply a risk free rate for the period post 2017 in the range 2.0%-3.0%. Due to the basic nature of this extrapolation we have adopted a point value towards the bottom of the range.

2. **Can you provide evidence on the impact of giving greater weight to contemporary market evidence on perceived systematic and regulatory risk?**

The implicit assumption in this question is that current market return data is the best proxy for the underlying required cost of equity capital is the CCs definitive view on this issue. Ofgem should remember that the CC is consulting on this approach and that it may not be the final position that it adopts. We note that a number of issues with the CCs approach have been raised by respondents to its consultation and hence there must be a possibility that it will amend its position. It is not clear to us how Ofgem would accommodate any change in the CCs position.

If Ofgem adopts the CC approach it will break the linkage between the various RIIO price controls and undermine the perception of both regulatory stability and predictability that the RIIO process has developed. This will have a negative impact on both investors and rating agency perception of the regulatory framework which could ultimately lead to higher financing costs for the sector. This would not be in customers' interest.

Setting returns based on current market data also increases pro-cyclicality i.e. systematic risk and beta. Under the existing regulatory framework, we have estimated our asset beta to be 0.38. Approximately 10% of our revenues come from the allowed return element of the price control allowances. If this element were to become entirely correlated with the wider economy then the beta for this element of our cash flows would rise to 1.0 (or more after the operational gearing effect of our operating and capital costs, assuming our costs have a beta of less than 1). For simplicity, assuming a beta post-operational gearing of 1.0, this would imply an increase of around 0.06 in our overall asset beta, i.e. from 0.38 to 0.44, and an increase in our equity beta at 65% gearing from around 1.0 to 1.16. Assuming an equity market risk premium of 5.25%, this would increase the cost of equity by around 0.84% points. This is an approximate calculation but serves to illustrate the potential very material scale of such a change

3. **Do you think changing our methodology for the equity market return would impact on interest costs for DNOs? If so, how would this need to be accommodated in our approach to the financial package or the regulatory package more widely?**

A reduction in the costs of equity to 5.5% would result in a material squeeze on our cashflows. Our analysis shows that with this cost of equity the adjusted interest cover metric would fall to between 1.1 to 1.2 (on average over ED1) across all our DNOs[5]. Such a reduction is likely to be viewed negatively by the rating agencies. The latter coupled with any perceived increase in the regulatory risk mentioned above could lead to a downgrade and hence an increase in our financing costs. As Ofgem has noted in its consultation one approach would be to reduce the overall gearing by 10% i.e. to 58.5%. This reduction in gearing would increase our business plan allowed return from 3.9% to 4.1%. The other approach would be to change the split between fast and slow money. We would expect the proportion of slow money to have to fall to significantly less than the current 70% in our business plan for us to remain financeable.

[5] Based on updating the Ofgem financial model for UK Power Networks forecast of both the iBoxx index and actual cost of debt over ED1. Revenue has been left unprofiled as profiling the revenue disconnects the regulatory depreciation from the allowed revenue which impacts on the calculation of the adjusted interest cover metric.

4. **How do you consider that the choice of methodology for determining the appropriate equity market return impacts on investment incentives? Is there any evidence that you can provide?**

If Ofgem were to only adopt the CC's methodology for the cost of equity it would impact investment incentives in two ways. Firstly, as we have previously stated applying such a highly selective interpretation of the CC's provisional decision, at this late stage of the RIIO-ED1 process, is likely to produce a negative view of both the stability and predictability of the regulatory framework. This will damage investor appetite for the sector. Secondly, setting a cost of equity below a fair level of 6.7% risks setting an investor perception that incremental capex destroys value and hence creating an incentive not to invest. Given that significant investment will be required in distribution networks over RIIO-ED1 to support the Government's transition to a low carbon economy such an outcome cannot be in stakeholders' interests.

5. **To what extent do you think the merits of the alternative approaches to the assessment of the equity market return are affected by the eight year RIIO price control period?**

The length of the price control period has a fundamental impact on the choice of methodology. The CC is in effect only forecasting for a period of 3.5 years. Consequently, the impact of an error in the cost of equity estimate is much smaller whilst still remaining significant. However, Ofgem is forecasting for a period of eight years starting in 12 months time. There is a significant risk that contemporary market data, especially when it is influenced by the current macroeconomic policy environment, will not be representative of the cost equity in the RIIO period, particularly towards the latter end.

We are also concerned that the change in methodology is undermining the longer term approach that the RIIO framework is meant to embody. The approach to the RIIO financing parameters were extensively consulted on as part of the RIIO-T1 and GD1 process and the financing methodology was expected to be consistent across all regulated energy networks. If Ofgem adopts the CC approach it will break the linkage between the various RIIO price controls and undermine the perception of regulatory stability that the process has developed. We do not believe that this would be in the interests of customers.