

lan Rowson Project Lead Cost of Capital Working Group UK Regulators Network

Ms Jenny Pyper CEO, Utility Regulator Queen's House 14 Queen Street Belfast BT1 6ED

22 June 2017

Dear Ms Pyper

Peer review of the Utility Regulator's estimate of the cost of capital for RP6

I write on behalf of the UKRN Cost of Capital Working Group (the working group) to report the conclusions of our peer review of the Utility Regulator's (UR) estimate of the cost of capital for its sixth price control for the transmission and distribution operator in Northern Ireland, Northern Ireland Electricity Networks Limited (NIE). For short, it is known as the RP6 price control.

The RP6 review covers the six and a half year period from 1 October 2017, ending on 31 March 2024.

We have carried out the review in accordance with the terms of reference we agreed with the Utility Regulator and which I attach to this letter. The specific purpose of the review is to provide experience, insights and comparisons from regulators represented on the working group.

Your staff kindly provided us with copies of published documents including the March 2017 draft determination and the advice from First Economics attached as Appendix J to the draft determination. They also provided us with copies of relevant submissions from NIE comprising three letters from Eddie Byrne to Brian McHugh dated 20 December 2016, I February 2017 and 9 March 2017, two reports from NIE's advisers Frontier Economics dated April 2016 and 31 January 2017 and NIE's 19 May 2017 response to the draft determination. We have not reviewed, or sought to review, other submissions and responses.

The members of the working group met on 17 May 2017, 31 May 2017 (by phone) and 14 June (also by phone) to consider the issues relevant to UR's cost of capital estimates, and reviewed drafts of this letter in the last two of those meetings.

I summarise the UR's cost of capital estimates in its draft determination as:

- a real (RPI-indexed) post-tax cost of equity of 4.45% at a gearing ratio of 45%,
- a real cost of debt assumption informed by
 - NIE's current debt interest costs
 - a forecast cost of new debt subject to an adjustment mechanism that reflects 80% of the variance to prevailing rates when NIE issues new debt
 - deflated by an RPI inflation assumption of 3.2% based on OBR forecasts



Estimating the cost of equity

We note that the UR's post-tax estimate of the cost of equity of 4.45% at a gearing ratio of 45% corresponds to a post-tax estimate of 5.98% at a gearing ratio of 65%, the gearing ratio assumed by Ofgem for the GB electricity distribution networks in its RIIO-ED1 price control. This is close to Ofgem's 6.0% estimate for the cost of equity in its RIIO-ED1 slow track decision in November 2014¹. This correspondence is based on the convention used by the UR and its advisor, First Economics, for translating between an underlying asset beta assumption and equivalent equity beta estimates, with the assumption of a 0.1 debt beta component. We also calculate that, taking account of the effect of gearing assumptions on allowances for corporation tax, the overall pre-tax allowances on a re-geared basis to 65% would be slightly lower than the UR's draft determination proposals.

The cost of capital advice received by the UR in the First Economics report attached as Annex J to the Draft Determination considers the key components of the conventional cost of equity assessment and reaches a judgement on the appropriate estimate for each component. The Draft Determination itself broadly reflects First Economics' conclusions.

The First Economics' conclusions on some of these components, notably the asset beta estimate and the risk-free rate estimate, are significantly influenced by earlier assessments by other UK regulators and by the Competition and Markets Authority or, its predecessor, the Competition Commission. If the weight attributed to these precedents is appropriate, the overall conclusions of the UR are not exceptional. They lie within the envelope of relatively recent regulatory decisions.

However, there is a potential danger for the UR's estimate, and indeed any regulators', that undue weight ascribed to previous regulatory decisions could render those estimates insensitive to new market-related information relevant to the decision.

Recent regulatory estimates of the risk-free rate are higher than current and forward yields on index-linked debt and closer to longer-run average yields historically. Forward yields on index-linked gilts for tenors of 10-25 years have been below zero for a number of years and around -1.5% since the EU referendum. Despite some apparent steadiness in the market's forward yields, there is considerable uncertainty around the future path of the yields on index-linked debt and the extent to which regulators should reflect these in their estimates of the risk-free rate and the total market return. The UR's draft determination estimate of the risk-free rate lies about 2.75 percentage points higher than current and forward yields on index-linked debt².

The UKRN cost of capital working group has identified that current market conditions, in both the market for bonds and the market for equity in regulated networks, have diverged significantly from the norms prior to the financial crisis. There is a danger that giving much weight to regulatory precedent in these circumstances could risk perpetuating a situation where regulatory decisions are increasingly out of kilter with market evidence.

¹ The UR makes a similar point in its draft determination.

² The First Economics report seeks to explain this difference on the basis that the Bank of England's quantitative easing process will have distorted yields observed in the market. It refers to analysis carried out by the Bank of England in 2011 that the effect of this may have been be a reduction of up to 1% in bond yields. First Economics also points out that the quantitative easing programme has expanded since that analysis.



To address this danger, a subset of the UKRN regulators, including the UR, is in the process of commissioning a study by expert academics and consultants that will update a jointly commissioned study³ in 2003. The study's conclusions will come too late to inform the UR's final determination.

We cannot at this time speculate as to the conclusions of such a study. We can, however, highlight that there is some significant uncertainty surrounding the estimation of the cost of equity.

Cost of debt

We note the UR's proposal to adopt a cost of debt adjustment mechanism to reflect prevailing interest rates at the time that NIE issues any new debt. The UR's approach broadly mirrors the approach it took for its GD17 price control review for Northern Ireland's gas distribution networks. The 80:20 sharing between consumer and the company (on a symmetrical basis) of the variance between the benchmark in the month of a debt issue and the price control assumption arising in the event of a new issue of debt would have the effect of retaining some exposure to movements in the debt market for NIE. However, we note that use of actual debt issuance in the mechanism would tend to make it more closely tailored to NIE's circumstances than comparable sector-wide mechanisms, for example that adopted by Ofgem in its RIIO-ED1 review. Ofwat's approach to Tideway's financing costs is another example of a more tailored mechanism.

The UR made clear its estimate of the underlying cost of debt is provisional and subject to a further review of the market conditions and inflation forecasts prior to making its final decision. We are unable to judge whether the weighting ascribed to the cost of new debt and the cost of existing debt is appropriately calibrated and would echo First Economics' recommendation that the UR review its weighting assumptions at the same time.

We hope you will find this letter helpful. I should emphasise that the terms of our review relate to the cost of capital and we make no comment on other issues, including financeability.

Yours sincerely

Ian Rowson

On behalf of the UKRN Cost of Capital Working Group

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The UKRN Cost of Capital Working Group includes the following members:

Martyn Andrews, Ofwat Andy Causby, Ofcom Gordon Cole, ORR Alan Craig, UREGNI Ben Johnson, SSRO Maggie Kwok, CAA Elinor Mathieson, Ofwat PJ McCloskey, CAA Dave Nanda, Ofgem Matthew Rees, SSRO Ian Rowson, Ofgem

³ 'A Study into Certain Aspects of the Cost of Capital for Regulated Utilities in the UK', Stephen Wright, Robin Mason and David Miles, 13 February 2003



Terms of Reference: UKRN peer review of the RP6 cost of capital

I. Background

- 1.1. The UK's economic regulators have joined together in the UK Regulators Network (UKRN) to ensure effective cooperation between sectors.
- 1.2. Without cutting across the independence or specific goals of each regulator, UKRN will strengthen work across sectors. It will explain and take account of the differences between sectors, while maximising coherence and shared approaches in the interests of consumers and the economy.
- 1.3. Working groups have been formed to carry out the project work of the UKRN. The cost of capital working group has agreed terms of reference⁴ and a set of principles⁵. Participating regulators have also identified a number of ways that they can work together⁶ to support and further the cost of capital principles including supporting one another during decision periods through peer reviews.
- 1.4. RP6 is the first draft determination to be published since this agreement and the UR has agreed with Ofgem they would lead a review under the remit of UKRN cost of capital working group.

2. Information to be provided

- 2.1. RP6 Approach7
- 2.2. RP6 Draft Determination document and annexes.8
- 2.3. NIEN submissions to the UR on cost of capital.
- 2.4. Other information as deemed relevant to the review following initial engagement and discussion on the documents above.

3. Purpose

- 3.1. The cost of capital working group believes there is merit in engaging other regulators on the development of relevant cost of capital decisions. This will lead to better informed decisions, facilitate cross sector comparisons and allow opportunities for future cross sector work to be identified.
- 3.2. The specific purpose of the review is to ensure the UR's decision is informed by the experience and insights of the regulators represented on the working group.
- 3.3. Particular focus should be made to sense check the methodology and analysis presented as part of RP6 draft determination.

⁴ http://www.ukrn.org.uk/?page_id=575

⁵ http://www.ukrn.org.uk/?page_id=983

⁶ http://www.ukrn.org.uk/?page_id=429

http://www.uregni.gov.uk/publications/RP6_approach_document1

⁸ http://www.uregni.gov.uk/publications/gd17_draft_determination



4. Deliverables and Timing

- 4.1. A report addressed to the UR that summarises the key findings of the review and outlines how the lead reviewer has engaged with other members of the working group to reach those findings.
- 4.2. The report should be available by 26 May (to be discussed) to ensure it can be considered sufficiently prior to the final determination.