



To distribution companies,
transmission companies,
generators, suppliers, consumers
and their representatives,
government policy makers and
any other interested parties

*Promoting choice and value for
all gas and electricity customers*

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Date: 19 April 2011

Dear Colleague,

Open letter consultation on the RPI indexation of allowed revenue in the forthcoming RIIO price controls (T1 and GD1) and the TPCR4 rollover.

National Grid¹ (NG) have brought to our attention that our proposed approach to indexing allowed revenue in RIIO-T1, RIIO-GD1 and the TPCR4 rollover may not provide the intended protection against economy-wide inflation. The methodology in the licence that provides protection for inflation has been part of the regulatory regime since privatisation but may now be inappropriate due to recent patterns in inflation. This issue was raised at the end of March so it was not possible to include it in the March RIIO strategy decision publications or the April TPCR4 rollover policy update publication.

If NG are right then a failure to address the issue could lead to network companies not being able to recover their efficient costs as assessed by us through the price controls. Accordingly, we see this as a matter that falls under our principle objectives under the Gas Act 1986 and the Electricity Act 1989.

This consultation sets out our thoughts on how this issue might be resolved and the options that we have considered. We welcome views on our proposals and suggestions for any improvements/alternatives by **1 June 2011**. We aim to publish our decision in late June, prior to the network companies' submission of their RIIO-T1 and RIIO-GD1 business plans.

The issue with our current approach

We discuss our current approach to indexing allowed revenues in the supporting paper on uncertainty mechanisms published as part of our March 2011 RIIO strategy decision.² The intention behind the approach is to provide the network companies with protection against economy wide inflation. The problem identified by NG arises due to the lag applied in the indexation of revenues by growth in the Retail Prices Index (RPI).

The price control reviews for RIIO-T1 and RIIO-GD1, and the TPCR4 rollover will set allowed revenues in 2009-10 prices. The licences – that set the revenues that can be recovered in each charging year – include formulae to inflate these prices by growth in RPI. There is a lag in the RPI data used to do this so that we do not need to use forecast RPI data in order to set prices. This lag creates a mismatch between the inflation period included in the licence to inflate allowed revenues and actual RPI inflation between the base year (2009-10) and each of the charging years in the price controls.

¹ On behalf of National Grid Electricity Transmission (NGET) and National Grid Gas (NGG NTS).

² <http://www.ofgem.gov.uk/Networks/Trans/PriceControls/RIIO-T1/ConRes/Documents1/T1decisionuncert.pdf>

For example, under our existing approach for the first year of the RIIO price controls, financial year 2013-14, allowed revenues would be indexed by the growth in annual average RPI between 2008 and 2012. This incorporates four years worth of RPI growth, reflecting the time elapsed from the price base year to the year in which revenues are collected.

RPI growth was unusually low/negative between 2008 and 2009. This means that the inflation included in the licence calculation would be materially less than actual RPI inflation between 2009-10 and 2013-14. This issue will be present for each year of the price control and will not correct itself. The network companies would not be able to recover our assessment of efficient costs. We estimate that the current method is likely to underestimate inflation by 3-4 per cent annually leading to revenue shortfalls of this order in the TPCR4 rollover and in each of the eight years of the RIIO price controls. Historically there have been occasions when network companies have gained and occasions in which they have lost but these gains and losses have been small compared to those predicted over the forthcoming price controls. It is unlikely that future price controls will include the large swings in the other direction necessary to even out the losses that network companies may experience over the RIIO price controls and TPCR4 rollover.

Annex 1 illustrates the issue with the current approach in a diagram and in a numerical example.

This issue is also relevant to the regulatory funding arrangements in place for Transmission Investment for Renewable Generation (TIRG) and Transmission Investment Incentives (TII).

Our proposed solution is to remove the lag in RPI indexation as applied in the licence. This would involve using forecasts of RPI growth to calculate allowed revenues and a subsequent true-up to allowed revenues at a later date once the relevant RPI data are available. This would give the desired protection against general inflation risk. In the sections below we set out options of how this might be implemented and alternatives that we have considered to address the issue.

Proposed approach – use forecast RPI growth with an ex post true-up

Description of the approach

Our proposed approach would be to remove the lag in RPI indexation as applied in the licence. This would require the use of a forecast for RPI growth and an ex post adjustment to account for any differences between the forecast RPI and the outturn RPI. For example, in setting allowed revenues for 2013-14, it would work as follows:

- Allowed revenue would be adjusted for the percentage change in average RPI between April 2009 - March 2010 (actual data) and April 2013 - March 2014 (forecast data).
- There would be an annual true-up adjustment, operating with a two-year lag, in order for actual data to be available for the full financial year when the adjustment is made. Ie actual RPI data for 2013-14 will not be available until April 2014 and so it would be too late to feed into allowed revenue calculations for 2014-15. Therefore charges for 2015-16 would include the true-up adjustment for RPI growth for 2013-14.

This option provides full protection for the network companies against inflation and would contribute to a lower cost of capital, than under the current approach. Although there is a risk of some increase in volatility in allowed revenue, and therefore in charges, we believe that the use of an RPI forecast from a widely available and reputable source will provide transparency to suppliers when they set their charges.

Choice of RPI forecast

As set out above, to operate this mechanism a forecast of RPI is required. There are several sources for RPI forecast data. We welcome stakeholders' views on which forecast should be used and if there are other forecasts we should consider.

Potential RPI forecasts include:

- HM Treasury Forecast for the UK Economy
 - This monthly report provides an average of independent forecasters' predictions for RPI. Five-year RPI growth forecasts are provided on a quarterly basis (in February, May, August, November).³ We propose using the average of the "New Forecasts" as published in the November issue for each year ahead.
 - This index represents an average of RPI forecasts from the City and independent consultants and is visible to all.
 - The forecast is a calendar year average, we propose to pro-rata this to a financial year average. For example, inflation for 2013-14 would be calculated as $0.75 * (\text{Forecast RPI growth for 2013}) + 0.25 * (\text{Forecast RPI growth for 2014})$.
- Bank of England Inflation Report
 - The Bank of England publishes a quarterly report (in February, May, August, November) on inflation.⁴ This only includes quarterly forecasts of the Consumer Price Index (CPI). The November forecast could be used for the year ahead.
 - The mean forecast of CPI could be used as a predictor for RPI by adding 0.5 per cent to the forecast.⁵ There is no guarantee that the difference between the two measures will always be 0.5 per cent, but network companies are further protected for actual inflation by the true-up adjustment.
- Ofgem commissioned forecast of RPI
 - Ofgem could commission an independent forecast of RPI inflation in November of each year to be used for charge setting.
 - This would have the advantage of forecasting RPI on a financial year basis. However, we do not think this is necessary as we do not think there would be much deviation from the approach outlined above using the HM Treasury publication and any differences would be picked up by the true-up adjustment.
- Each network company chooses its own forecasts
 - We do not think it is necessary for each network company to devise its own forecasts. We also think this approach would be burdensome on suppliers who would need to take into account a range of RPI forecasting approaches when setting their charges. We do not propose to pursue this approach.

Our initial view is that the forecasts contained in the HM Treasury publication would be most suitable.

True-up adjustment

We propose including a true-up adjustment to allowed revenue to account for the difference between the forecast RPI and the outturn RPI. This will provide protection to network companies for actual inflation. In order for this adjustment to work, we believe that it is necessary for there to be a two-year lag. We propose that the adjustment be made annually. Therefore the first adjustment for gas distribution companies would be in April 2015. For transmission operators it would be April 2014, as it would include a true-up for the rollover year.

³ <http://www.hm-treasury.gov.uk/d/201102forecomp.pdf>

⁴ <http://www.bankofengland.co.uk/publications/inflationreport/ir11feb.pdf>

⁵ 0.5 per cent represents the difference between the two indices due to the formula effect.

The true-up would be symmetrical, ie adjustments would be made to reduce allowed revenue if the RPI forecast is above actual RPI and vice versa.

Discount/interest rate to apply

We propose that any adjustment made will be net present value (NPV) neutral. In line with our other RIIO proposals involving true-ups, we propose to use the allowed rate of return (WACC) as the discount rate.

Potential alternative approaches considered

There are a number of alternative options that we have considered. These are set out below along with our thoughts on their suitability:

- **Use a different base year but continue to use the current approach**, eg RIIO price control revenues could be set in 2010-11 prices instead of 2009-10 prices. This would not resolve the issue and our estimates suggest that this could lead to the network companies recovering three per cent above our assessment of efficient costs. The use of lagged RPI growth to set charges inherently involves a mismatch between actual inflation and inflation included within price limits which cannot be resolved by changing the base year.
- **Ex ante adjustment to allowed revenues for the expected size of the mismatch**, but continue to use the current approach to RPI indexation. For example, forecasts of RPI suggest that RIIO-T1 and RIIO-GD1 allowed revenues would need to be uplifted by around 3.5 per cent. This would remove the expected loss from the network companies but they would still face the risk that outturn RPI inflation could be quite different meaning they would still be exposed to an element of RPI inflation risk.
- **Ex ante adjustment to allowed revenues for the expected size of the mismatch, with a true-up included for actual RPI inflation**. This would be the same as the option above with a true-up included. The size of the true-up could be significant as the ex ante adjustment, which incorporates the forecasts of RPI, would be made at the time of the price control review.
- **Allowed revenues based on actual RPI growth (without a lag) and any under- or over-recoveries passing through the correction factor**. Under this approach the network companies would set their charges based on their own forecasts of RPI growth. Any deviations between these forecasts and actual RPI growth would pass through the correction factor. This would give the network companies an incentive to accurately forecast RPI growth (to avoid penal interest rates being applied) and would avoid the need for a separate true-up. The downside to this approach is that it requires that the forecasts will be different for each network company which would create difficulties for suppliers in terms of forecasting charges. RPI growth is not under the control of the network companies so it may not be appropriate to penalise the companies with penal interest rates if there is a large under- or over-recovery due to unexpected RPI growth.

Our assessment is that the proposed approach is the only one that provides the intended protection against economy-wide inflation while minimising the magnitude of any ex post true-ups for outturn RPI growth, but we welcome views on the suitability of the alternatives outlined above.

Revenues affected by this decision on RPI indexation

This issue affects revenues set by all of Ofgem's price controls. We propose that this decision apply to the revenues currently under review:

- RIIO-T1 and RIIO-GD1 base revenues from 2013-14

- TPCR4 rollover base revenue for 2012-13
- TIRG and TII revenues from 2012-13.

We do not propose any adjustment to the electricity distribution price control but would envisage employing any change as part of RIIO-ED1.

Views invited

We welcome views on our proposed approach to this issue, the potential alternative approaches set out above and any further options you feel we should consider. In particular, we would welcome views on the following questions:

- Do you agree that the current approach gives rise to a material issue that needs addressing as part of the upcoming price control reviews?
- Do you agree with our proposed approach as outlined above?
- If not, are there any improvements or adjustments that could be made to the proposed approach that would make you agree with it?
- If not, what alternative do you propose and why?
- If we were to implement our proposed approach, which forecast of RPI do you suggest is used for setting charges? Are there any better sources than those identified in this consultation?
- Do you agree that a true-up should operate with a two-year lag?
- Do you agree with the revenues (RIIO-T1 and RIIO-GD1, TPCR4 rollover, TIRG and TII) that we propose will be affected by our decision on this issue?

We welcome responses to this consultation by **1 June 2011**. Please email responses to Joanna.Campbell@ofgem.gov.uk. Unless clearly marked as confidential, responses may be published on our website. If you have any queries in relation to this consultation please contact Joanna Campbell on 020 7901 7094.

Yours faithfully,

Hannah Nixon
Partner, Transmission

Annex 1 – The problem with the current approach to RPI indexation

The figures below represent the issue that will occur in forthcoming price controls if the current method for RPI indexation remains unchanged. Figure 1 shows that due to the inclusion of four years RPI growth the lag term indexing revenue in the licence includes a period of negative inflation between 2008 and 2009. This is unlikely to be representative of RPI growth over the price control years. Figure 2 represents the materiality of the issue being faced. It uses actual data, and forecasts published in the HM Treasury Forecasts for the UK Economy monthly report. Under the current approach and based on the latest forecast, for every £100 of efficient costs that we allow network companies to recover they will only be able to recover £96.50.

Figure 1: Diagrammatic illustration

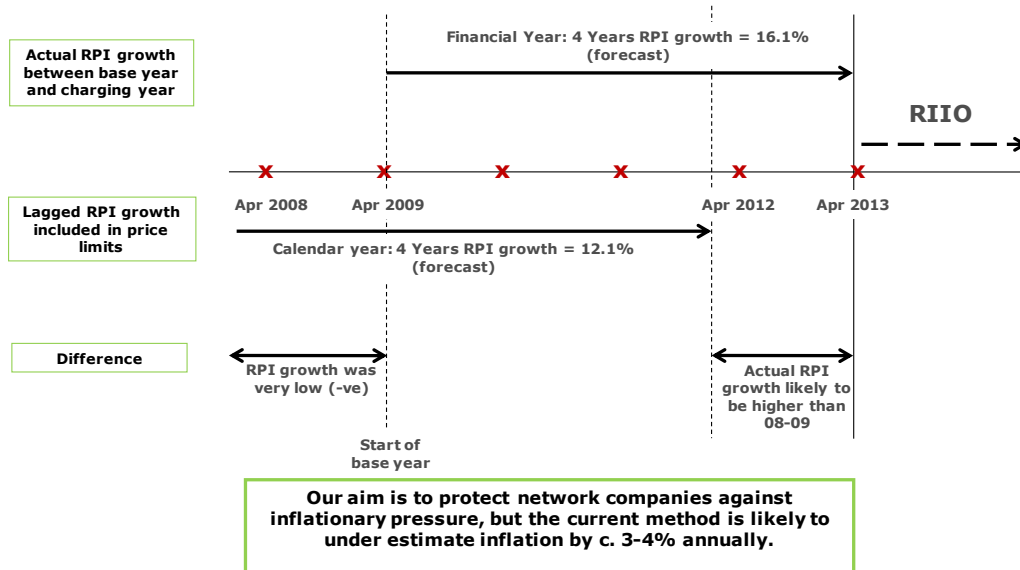


Figure 2: Numerical illustration

	2010-11	2011-12	2012-13	2013-14 (first year of the price control)
Efficient cost of activity in outturn prices				100
Annual inflation	5.0%	3.9%*	2.9%*	3.0%*
Deflate to 2009-10 prices (for inclusion in the licence)				86.5
Licence inflation (January to December average applied)	-0.5%	4.6%	4.2%*	2.9%*
Re-inflated cost included in allowed revenue outturn prices				96.5
Shortfall in cost recovery				3.5

*Numbers represent the average of new forecasts taken from HM Treasury Forecasts for the UK Economy, February 2011.

- £86.50 represents the allowed revenue deflated to 2009-10 prices (the base year). This is the value of allowed revenue that is then inflated in the licence to give an annual allowance. It is calculated by dividing £100 by compounded annual inflation since the base year.
- Licence inflation represents the growth rate between average RPI from January to December in one year with the year previous but there is a lag, ie for 2013-14 inflation of 2.9% represent the growth rate between January to December 2011 and January to December 2012.
- Using these figures, when £86.50 is re-inflated to outturn prices it gives an allowance of £96.50. This is calculated by multiplying £86.50 by compounded annual licence inflation since the base year.
- £100 of efficient costs today should result in £100 of allowed revenue, but using the current method there is a shortfall of £3.50.