

Meeting note

Wednesday 4 October 2017
 Darwin Room, 17th Floor, City Centre Tower
 1.00 pm to 3.30 pm

Bioresources workshop: forecasting incentive

Attendees	
Andrew Snelson	Anglian Water
Steve Riches	Anglian Water
Alec Llewellyn	Northumbrian Water
Angus Montgomery	Northumbrian Water
Rob Harvey	Severn Trent Water
Jim McLaughlin	Severn Trent Water
Alan Hobbs	South West Water
Jordan Brinsley	Southern Water
Nigel Heward	Southern Water
Garry Strange	Thames Water
Daniel Davies	Welsh Water
Dave Holthofer	Welsh Water
Ken Trussell	Wessex Water
Sarah Shaw	Yorkshire Water
Frank Grimshaw	United Utilities
Richard Brindle	United Utilities
Alison Fergusson	Ofwat
Colin Green	Ofwat
Nathan Warren	Ofwat
Jill Marsal	Ofwat
Justine Dade	Ofwat

Introductions

Ofwat welcomed everyone to the meeting. The aim of the meeting was to discuss the bioresources forecasting accuracy incentive that was presented in the PR19 draft methodology statement that we published on 11 July 2017.

Description of the forecasting accuracy incentive in draft methodology

Ofwat set out the definition of sludge that companies should forecast in their business plans. This definition had already been discussed as part of the sludge working group. Moving to the new definition of sludge will result in companies reporting different figures to what had been reported historically as part of the June Return Process. The aim is to move away from the regulatory side of things towards being more market focused.

Ofwat outlined the forecasting incentive mechanism. One attendee asked how we had calculated the percentages for the deadband and penalty rates of the forecasting incentive. Ofwat replied that the percentages had taken into account the analysis of sludge production measurement techniques and the level of penalties that Ofwat has applied in other areas previously. Ofwat welcomed evidence from companies on what other percentages would be more appropriate. It noted that companies had not suggested any different percentages as part of their company responses to the draft methodology.

Another attendee considered that the deadband of 3% deviation from forecast total dried solids (TDS) levels represents a tight level of accuracy on the revenue control. However, it was noted that this was based on the total across the 5-year price control, rather than annual variations.

An attendee sought clarification on how the penalty presented in the slides will be applied. Ofwat clarified that the 2% penalty rate applies to anything above 103% (i.e., a 3% variation) and increases, linearly, up to a 3% rate when volumes reach 107% of forecast (i.e., a 7% variation). Also, total revenue is capped at 107% of forecast.

Ofwat presented some worked examples with indicative figures of how the forecasting incentive mechanism would apply.

Ofwat summarised the consultation responses that had been received on our draft proposals for the forecasting incentive.

How the incentive works and its calibration

Anglian Water presented an overview of their thoughts and analysis on the forecasting incentive.

Anglian Water considered that it was reasonable to have a forecasting incentive mechanism. It looked at the potential benefits from gaming the forecasts at PR19. It concluded that a company could benefit from under forecasting its level of TDS. In doing so the company could be allowed a revenue that was much greater than it should receive if it had accurately forecasted its level of TDS.

Anglian Water assessed the impact the incentive would have on the revenues from having an incentive mechanism. It concluded that a company breaching the 7% threshold was very unattractive.

Some attendees raised concerns about applying the forecasting incentive to outturn volumes that are lower than forecasted. Under the mechanism outturn lower volumes would result in a double penalty to companies through lower revenues as well as the forecasting incentive penalty. It was considered that a WRFIM approach is not appropriate, as bioresources makes up such a small proportion of a customer's bill that changes in estimates would not result in volatility.

One attendee thought the incentive did not encourage companies to provide a central estimate. Another attendee considered that this mechanism incentivised companies to under forecast by 7%.

Another attendee suggested that allowed revenue could be based on a fixed and variable cost. This would remove the gaming opportunities available to companies to under-forecast their sludge production.

Anglian Water reviewed historical data to look at how likely companies' actual volumes of TDS would be greater than 7% of their forecast volumes. It concluded that whilst there is a possibility that companies could breach the 7% level it is unlikely as sludge volumes have not varied much beyond 7% in the past.

Anglian Water also presented the range of confidence grades that have been applied to TDS data as part of the recent cost assessment data submission. This showed that most companies had considered that confidence grades were 2, which means that it falls within 5% accuracy. Only one company had reported 3, which is up to 10% accuracy. However, it was noted that the confidence grades related to the accuracy of the data and not the actual forecasts.

Anglian Water looked at what external factors could cause sludge volumes to change. One particular sensitivity was the impact of quality schemes on the volume of sludge. It noted that an increase in quality schemes, such as iron dosing, could, as a rule of thumb, result in a 25% increase in sludge production.

Anglian Water discussed the practicality of measuring sludge at a typical sludge treatment centre (STC). As companies generally do not currently measure sludge at Ofwat's preferred boundary, the level of measurement error could be significant. Anglian Water considered that there was a case to allow changes to the forecasts over the period if companies changed their approach to measuring sludge.

The current definition of sludge allows some flexibility to companies over where they measure sludge. Ofwat allowed some flexibility in the measurement of sludge to allow companies to put in place infrastructure to measure sludge at the boundaries. It is important for companies to be able to measure at the boundaries as this is where companies' prices and trades are set.

Forecasting uncertainty, in particular the impact of wastewater phosphorus removal

United Utilities looked at the uncertainties that companies had in forecasting sludge production. Phosphorus removal is a significant uncertainty that companies will face over the next AMP period. As phosphorus removal is a relatively new requirement, there is less knowledge on how it will affect volumes of sludge.

At AMP7 there will be more low phosphorus schemes. This will require a lot more effort to meet the effluent standards and will result in even more sludge. Different phosphorus removal treatments are likely to give rise to different amounts of sludge produced. United Utilities estimated that the contribution of phosphorus schemes over AMP7 would result in an 11% increase in sludge.

Currently there is uncertainty over the phosphorus consents on sites, timing of scheme completions, and technology, amongst other things. This means that there is large uncertainty over the difference between sludge produced with no phosphorus schemes, and possible AMP7 schemes. There will be some indication through the release of WINEP3 in March 2018, but actual requirements will not be confirmed till 2021.

One attendee noted that companies have been putting in phosphorus schemes in the last 6-7 years, but have not seen the size of increase in sludge production that United Utilities has suggested. It was thought that the phosphorus consents historically had only impacted on a small proportion of overall sludge sites. It was

likely that the impact from phosphorus consents might have been swamped by other issues. It was also acknowledged that there is a substantial difference between what we estimate on an engineering basis and what we actually see.

United Utilities considered whether an additional mechanism was required to take into account the uncertainty over phosphorous consents. It presented different adjustment options to the forecasts of sludge. It was noted that the draft methodology allows companies to propose adjustments to their forecasts within the first two years. There should be greater certainty over the phosphorus removal schemes by this time.

Next steps

We are currently reviewing the responses in order to finalise our methodology on 13 December. We are taking on board feedback and looking at how to deal with issues that have been raised.