Minutes

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for energy consumers

Cost Assessment Working Group – Meeting 13		
From: Ofgem	Date: 9th March 2020 Time: 10:00 – 16:00	Location: Ofgem, London

1. Present

Ofgem
Cadent
NGN
SGN
WWU

2. Trend analysis

2.1. Ofgem discussed its intent to use the data submitted by the GDNs in their business plan data templates (BPDTs) to identify time trends for each regression activity, and subsequently to test the appropriateness of those costs for regression analysis by identifying any significant volatility and outliers. Ofgem briefly discussed trends at the cost activity level.

2.2. One stakeholder queried whether Ofgem had relied on the business plan narratives to understand why, in some cases, trend data was volatile or increasing. Ofgem confirmed that we are cross-referencing between business plan documents. This led to a group discussion on specific examples of activities causing distortions in the submitted data. Examples included the gasholder demolition programme, land remediation and IT migration. One stakeholder suggested that time-trends be looked at after normalising input costs, because the results are likely to be smoother.

2.3. One stakeholder highlighted the impact that the loss of meterwork contracts has on some GDNs' historic and forecast costs. They noted that as networks lose these contracts, emergency costs increase whilst workload stays constant, and this leads to

explainable increases in unit costs. The group discussed the varying impact that this transition has had on the various networks, with some experiencing a more abrupt loss of meter work than others. One stakeholder noted that if running a regression purely on historic emergency and repair costs, then these will inevitably include historic savings generated from meter work contracts. Therefore, if rolling these costs forward, these same levels of savings may not be achievable in RIIO-GD2.

2.4. One stakeholder noted that weather events and weather assumptions have an impact on emergency and repair costs, including by driving up workload, for example the need to conduct an increased number of repair jobs as a result of a severe weather swing. As such, it was important to understand what assumptions GDNs had made a future weather in their BPDTs. Another stakeholder explained that whilst repair costs will be impacted by the Repex programme (i.e. the repex programme has a downward impact on repair costs), the remaining network will continue to deteriorate. They also noted that maintenance costs are more fixed in nature, and not materially impacted by the repex programme.. This stakeholder also highlighted that historically, GDNs have had different repair risk targets, and therefore these differing target levels need to be taken into account when running regressions on historic data (possibly also forecast data).

2.5. Ofgem raised a previously discussed concern with the emergency and repair cost driver, and queried whether there was still an issue. One stakeholder noted that there were two factors to consider; the regional factor issue, and potential workload inconsistencies. They noted that two of the eight GDNs have historically seen higher internal callouts per customer.

2.6. Ofgem discussed the time-trend for maintenance costs. Ofgem noted that there was an apparent short-term increase in maintenance costs in London, which appeared to be driven by higher multiple occupancy buildings (MOBs) workload. Ofgem queried

whether it was more appropriate, in some cases, to assess opex costs together with capex costs. One stakeholder noted that non-routine maintenance was different by nature to routine maintenance, and supported the approach of assessing non-routine maintenance activities either in isolation or together with similar capex activities. Another stakeholder supported the approach of assessing non-routine maintenance together with capex, and pointed to a reporting inconsistency between networks relating to LTS spend. They gave an example of OLI runs (pipeline pigging), and highlighted that at least one company appears to be reporting this in opex, whereas other companies were reporting this in capex, as was agreed at some point in RIIO-GD1.

2.7. One stakeholder noted that their business plan included a forecast increase in MOB survey workload in RIIO-GD2, and suggested that this also needed to be removed from regressions for consistency. There was a group discussion on the way MOB riser costs have been reported in the BPDT, specifically to do with how maintenance riser costs are combined with maintenance services in the BPDT, so a supplementary question (SQ) may be required to be able to split these out.

2.8. One stakeholder highlighted that their finance team had indicated the potential to capitalise a larger proportion of maintenance opex costs relative to their current practice and the basis of their submission, and noted that this may be a source of inconsistency across the GDNs, which we may want to understand better for cost assessment.

2.9. One stakeholder noted that different GDNs have adopted different approaches to connections workload, particularly due to differing assumptions across GDNs. They noted that different assumptions may be legitimate in their own way, but that the inconsistencies needed to be addressed.

2.10. One stakeholder highlighted that their company had based their business plan on a P40 scenario, whilst other companies that had based their plans on a P50 scenario. They noted that their plan was stretching as a result, and that any differences in this regard need to be taken account of in cost assessment if relying on forecast data in the regressions. They suggested that one solution may be to rely more on historic data than forecast data when running regressions, and when rolling the costs forward, aiming to understanding the drivers for any changes in costs in RIIO-GD2 on a case-by-case basis. Another stakeholder agreed with the logic of relying more on historic data, but reiterated that this should be considered on a case-by-case basis rather than being applied throughout without looking at the nature of each activity.

2.11. One stakeholder noted that basing a regression entirely on historic data would fail to take into account changing types and levels of outputs/commitments in the future (ie commitments in RIIO-GD2 that weren't required in the past). One stakeholder noted that post-modelling adjustments could resolve this issue, at least in-part, by adjusting for future output scenarios. Another stakeholder suggested that regressions be run on both historic and forecast data, and the results compared. They suggested that if the results are materially different, then a deeper dive could be carried out to understand why.

3. Data adjustments

3.1. Ofgem presented the data adjustments process so far, and specified that there were some items unintentionally removed from the submitted repex. This issue will be addressed to make costs consistent with the synthetic cost driver.

3.2. Ofgem highlighted the need to undertake analysis on the loss of meter work, and the GDNs suggested that Ofgem send an SQ on this topic if necessary.

3.3. Ofgem stated that all of the GDNs treated repex stubs differently in their business plans, so will consider what the best way is to deal with this category. There was a discussion about the need for a common definition for stubs. One GDN proposed that stubs should be pulled out of submitted costs and then an approach be agreed to deal with them.

3.4. Ofgem presented a summary of the data adjustments made in the cost analysis work done so far. Ofgem clarified that it is currently making regional pay adjustments largely in line with the approach used in RIIO-GD1, but still needs to update some input assumptions.

4. SGN normalisations

4.1. SGN presented the findings of its analysis of the GDN Business Plans and data templates, highlighting the main areas of inconsistencies across GDNs that will require consideration for normalisation.

4.2. SGN highlighted clear differences in the way GDNs had classified some activities as bespoke outputs, and also noted that where there were similarities, the suggested level of output may differ. In particular, SGN had the greatest value of bespoke outputs with associated baseline totex (on average per GDN), followed by Cadent, NGN and WWU.

4.3. SGN highlighted differences in the application of uncertainty mechanisms across GDNs, and listed examples where some GDNs had included expenditure in baseline totex. In general, most GDNs did not include expenditure in baseline totex for uncertainty mechanisms.

4.4. SGN also suggested that LTS expenditure was significantly different across GDNs, and large projects should be assessed outside benchmarking based on engineering justification packs (EJPs). SGN suggested that projects greater than £5m in value

should be subject to a separate assessment. It noted that a similar adjustment should be applied to historical data for the purposes of regression analysis.

5. Regional Factors

5.1. Ofgem stated that following the last CAWG, an SQ has been sent out to the GDNs to quantify the sparsity impact, and that most responses have been received. One stakeholder asked if there has been a decision made on which areas to apply the sparsity factor to, and the scale of the application. Ofgem stated there has been no decision on this yet, but that their current intention is to apply the sparsity factor to emergency and repair. Ofgem added that they need to review all SQ responses on this topic before they can quantify the application of a sparsity factor.

5.2. In relation to company specific regional factor claims. There was some discussion on the cathodic protection regional factor submitted by Cadent. It was concluded that an SQ on this topic would be useful to provide more clarity on this claim. The group agreed that the response to this SQ should be shared with other GDNs.

6. Repex

6.1. Ofgem stated that the RIIO-GD1 approach to repex assessment, comprising a mix of regression and non-regression techniques, was the reasonable starting point for the development of RIIO-GD2 approach.

6.2. Ofgem presented a list of criteria for activities to be kept in the regression analysis, specifying that not all criteria necessarily need a pass score. About potential structural breaks, a stakeholder pointed out that step changes should not be a reason for excluding an activity from regression analysis, as there might be room for appropriate adjustments.

6.3. One stakeholder pointed out the category 'Other Policy & Conditions' could be treated similarly to Tier 1 activities, as there are no differences in terms of allocation across bands. Other stakeholders highlighted the presence of inconsistencies across GDNs, as

some of them are taking a different, more project-based approach to unit costs, whereas others smooth costs by diameter band across the different categories of mains replacement.

6.4. One stakeholder suggested looking at capitalised replacement to get a view on projects' capacity upsizing. Another one proposed to combine reinforcement and repex as an alternative option, although consistency issues were raised.

6.5. It was stated that in RIIO-GD1, non-rechargeable diversions were included in the regression analysis, while rechargeable diversions were excluded because costs are already covered by customers. The group discussed the possibility to include rechargeable diversions in the analysis, as unit costs are similar, bearing in mind that by doing so, Ofgem would be dealing with a mix of gross and net costs.

6.6. Ofgem presented the proposed approach to updating the synthetic unit costs. Stakeholders commented that, besides the proposed selection rules, it is important to check that the updated synthetic unit costs are in line with engineering logic.

6.7. Stakeholders welcomed the proposal to uplift iron mains unit costs to compute unit costs for steel. There was some group discussion on the split between cast and spun iron vs. ductile iron. One stakeholder suggested that ductile iron should have a higher unit cost.

6.8. The need to understand the difference between unit costs in RIIO-GD1 and RIIO-GD2 was highlighted, as it is unlikely due to efficiency gains only.

6.9. Stakeholders pointed out that, despite being a relevant cost driver, the replacement technique is not accounted for in the proposed approach. Ofgem replied that the quality of the available data is not good enough. To address this, it was suggested to look at potential step changes in RIIO-GD2 and see whether there is an engineering explanation.

6.10. Stakeholders also suggested to look at services not associated with mains replacement together with repairs costs, as it arises from an opex activity.

6.11. Ofgem presented the results of the repex regressions analysis. Stakeholders commented that engineering logic is more important than the R^2 value, and that the choice of the time series can only be made after Ofgem reach robust results at the bottom-up level. Stakeholders also highlighted the need to look more closely at streetwork costs, including for Productivity and Admin costs, as for some GDNs they are a relevant driver of repex.

6.12. The session ended with a discussion on repex policy topics. Ofgem anticipated some of the issues on price control deliverables (PCDs) to be discussed in more detail at the dedicated working group, and stakeholders gave their suggestions on how some of these issues could be presented in order for them to better understand the proposed mechanism.

7. Econometric modelling

7.1. Ofgem presented modelling results using various different sets of data. One GDN asked what the difference is between the CAWG 12 and CAWG 13 models presented. Ofgem clarified that the difference is in the adjustments (normalisations) that have been applied to the data.

7.2. One stakeholder said that there will be differences in GDNs' costs depending on which categories different items are put in, and that different levels of economies of scale will also affect the results.

7.3. Another stakeholder asked why many models were passing the RESET test when RIIO-GD1 data is used on its own and when RIIO-GD2 data is used on its own, but most fail when both datasets are combined. Ofgem stated that this could be because the time trend is unable to capture differences between the two price controls.

7.4. One stakeholder stated that there is still a lot of potential data adjustments to be made after CAWG 13, so it is difficult to draw any conclusions from the presented results.

7.5. One stakeholder wondered whether differences in cost trends between GDNs are causing the failures of the RESET test when RIIO-GD1 and RIIO-GD2 data are combined. Another stakeholder pointed out that certain components, such as gasholder demolition and some bespoke activities, were stripped out from the cost data before the RESET test was run.

7.6. One stakeholder suggested that some cost components from Operations Management could be moved to other cost groups. Another GDN said that some cost pooling options could deal with this. It was also suggested that an SQ be sent out to find out how the GDNs think different cost components should be grouped. Ofgem stated that it seems like once normalisations are settled, many issues will likely be solved.

7.7. One stakeholder asked why Ofgem concluded that Model 13 (Totex) could still be used even if it fails the RESET test. Ofgem replied that it was because the test does not appear to have failed due to the linear specification being wrong, thus, we cannot completely reject the model. Ofgem noted that Model 13 contained capex data for individual years at the moment, rather than the smoothed approach from RIIO-1.

7.8. One stakeholder stated that they thought all of the models exploited the panel nature of the data, and Ofgem replied that ordinary least squares (OLS) models do not. Another GDN asked whether Ofgem saw much of a difference between the OLS results and the results from the panel data models. Ofgem said that we do not see much difference, and noted that the advantage of a larger dataset is limited to the time dimension (the number of GDNs being the same). One stakeholder raised the point that efficiency differences across time would not give correct results in OLS. Ofgem

responded that including time dummies, or a time trend as in our models, would take account of these differences across time.

7.9. Ofgem illustrated advantages and disadvantages of two different approaches (industry spend vs. econometrics) to computing weights for composite scale variables, and stated the intention to use the econometric approach as a robustness check.

8. AOB

8.1. There was a brief group discussion on the modern equivalent asset value (MEAV) used in the latest analysis and modelling. Ofgem clarified that it was the same as presented at the previous CAWG, and that this excludes MOBs at present. One stakeholder highlighted that they have cost book data on embedded gas entry points, that could be useful for Ofgem to use in the MEAV calculations.