

RIIO-GT2 Cost Assessment Working Group

From: James Santos-Mansur

Date: 22-10-2018
Time: 09:30-17:00

Location: St Matthews
Conference Centre, 20 Great
Peter Street, Westminster,
SW1P 2BU

1. Present

Kiran Turner, Kelvin Hui, James Santos-Mansur (Ofgem)
Craig Molyneux (remote), Scott McDougall (remote) (Ofgem)

John Brookes, Shahid Mirza, Adele Hutchings, Winnie Cheong (National Grid)

Bill Reed (RWE Supply & Trading GmbH)
Julie Cox (Energy UK)
Eddie Proffitt (Major Energy Users Council)

2. Introductions

2.1 Participants were introduced. It was explained that all views and opinions will not be attributed in the minutes and it was made clear that all slide decks were intended to provoke thought, discussion, and information sharing of knowledge rather than representing fixed policy decisions.

3. Timeline for activities and deliverables

3.1. Timelines and milestones were covered, with a key takeaway being that Ofgem will try to deliver gas transmission (GT) working groups every five weeks or so coupled with an agenda being established prior to each session. The aim of today's working group is to inform National Grid Gas's (NGG) business plan, the data templates sought, and to establish the techniques required to understand NGG's future business plan submission.

4. Performance monitoring and data reporting

4.1 Ofgem wants to make sure that there is an observable link from NGG's stakeholder engagement feedback findings to its business plan, and how that business plan links to RIIO-GT2 output and incentives as well as the link to the Regulatory Reporting Pack (RRP). Ofgem will explore how business plan templates are constructed and that they are capturing the changing nature of RIIO-GT2. NGG are happy to work with Ofgem on reporting but they want to agree the right level that is required as change management in terms of data delivery is a big issue and there needs to be clarity in terms of what data is relevant for reporting. Common terminology (eg. non-operational

capital expenditure (capex) meaning the same thing across gas and electricity) is also something to aim for.

Stakeholders want to understand and have transparency of how TO investment and incentives feed into the SO part of the business. Discussions led stakeholders to agree that there is some disconnect between output and incentives and the annual reporting process. What is needed is a different structure for the Regulatory Instructions and Guidance (RIGs). NGG wants to know what questions Ofgem is trying to answer so that it can give them the most pertinent data. Stakeholders said that there needs to be enough leeway in the price control to incentivise NGG to continue to improve while also enabling Ofgem to maintain enough structure to be able to regulate. Stakeholders suggested that there is always a tension in this type of scenario and that the price control should not be designed in such a way that the reporting element becomes too burdensome and intrusive, yet also not so lax that Ofgem cannot be confident in saying that NGG earned the shareholder returns that they ultimately make. Ofgem said that when NGG submits their business plan they need to clarify why they want to do what they are suggesting (particularly against the SO side of the business), how they are justifying their case, that they can demonstrate all evaluation tools have been used, and then share this information with not only Ofgem but also with the wider stakeholder community. Ofgem said that in terms of data reporting, there is a need to understand why NGG has made the shareholders returns they have and this is where data reporting essentially comes into its own.

Action: Identify principles for what future reporting should and could look like. Propose how this would affect RIG and RRP reporting | Who: Ofgem and NGG | By: ASAP

4.2 Ofgem will set data assurance guidance (DAGs) expectations across sectors and formalise it.

Action: Contribute to setting DAG expectations across sectors and formalise it | Who: Ofgem | By: ASAP

4.3 Cross sector working groups are looking at how data is used across all four sectors going forward. These groups will drive policy. Having the right level of stakeholder involvement coupled with representatives from all network operators is important. Stakeholder feedback is that there needs to be a comprehensive cross sector calendar view of all meetings which will be taking place in order to decide which to attend.

Action: Produce a cross-sector stakeholder working group calendar view | Who: Ofgem | By: ASAP

5. Scenarios

5.1 Stakeholders want the Future Energy Scenarios (FES) as the main document used to look at the future. So, for future scenarios, always start with the FES as it's in the public domain, has the best view of the future, and has consistent scenarios between electricity and gas. Furthermore, the Industry uses it to understand how the Industry as a whole can develop. The Energy Network

Association (ENA) does have a view that differs from the FES but stakeholders feel using this will cause confusion.

5.2 Ofgem ideally wants to form some core over-arching principles and part of achieving this will be to use the ENA forum to discuss ideas around this. Stakeholders felt that this is a good idea, but again, start from the FES and work forward from there. Also, it is not just about the FES, it is about the paths followed too. For example, post 2025 shows divergence in the future for gas so it is important to understand the investments needed if that future does indeed develop. Cost scenarios should also be produced for each investment option with common costs making up part of the baseline allowance and other costs being covered by uncertainty mechanisms.

6. RIIO-GT1 cost assessment approach

6.1 NGG talked through their cost assessment document which presented cost categories, how these were assessed in RIIO-GT1, what drove these costs, the variation in these costs, using the FES to see if there were any sensitivities to the scenarios, and finally if the activity of the cost categories would increase or decrease during RIIO-GT2 compared to RIIO-GT1.

6.2 Discussions raised from NGG's cost assessment document:

- Flexibility
NGG's document shows a RIIO-GT2 column where cost categories are anticipated to either increase, stay the same, or decrease. One stakeholder pointed out that the capex program will be driven by flexibility as opposed to just maintaining capex in the current state. The stakeholder said that there will be a need for additional flexibility, particularly as new gas sources start coming through. The need to define baseline flexibility will be important as this was a really big issue over RIIO-GT1 which led to the Gas Future Operability Planning (GFOP) document that describes how the ever-evolving gas landscape may impact gas network operability, the aim of which is to set the direction for solutions that benefit all market participants.

Key conversation points:

- not easy to define flexibility into a single baseline number.
- being able to quantify it would be the most compelling way to justify it.
- quantifying it is the most important aspect from a consumer point of view. Also, flexibility is not just the pressure on the network and linepack, but also the general running of the National Transmission System (NTS). There is a need to have things that are measureable. NOMs does appear to capture some of this but it is too hard to read and understand.
- it is important to understand the reason and purpose behind a NOM but not the actual mathematical model.
- it is understood that NOMs are about asset health, but stakeholders struggle to have an opinion on it due to its complex nature.

- as asset managers, NGG take a static view and use NOMs to get value.
- RIIO-GT2 will be a different type of price control because the NTS is declining in usage even though it is more flexible in nature. If NGG invest in the network as it is today, will the NTS be flexible enough in the future? Maybe the investment test should just be over 15 years and not 25 years because there is no certainty about gas past 15 years even though the asset's life is over 25 years. Perhaps this is why a whole system view may be the best approach. Operability is driving everything within NGG's business: its signal is pushing the business and costs forward.
- recognition that NGG delivering value for money does not automatically mean applying a lowest cost possible approach. It is more nuanced than that.
- stakeholders agreed that value for money is key, though perhaps the test for this will be different going forward because the NTS is changing.
- uncertainty makes things complicated and difficult.
- one stakeholder mentioned that flexibility means being able to turn a system (eg. a power station) on and off when you want to.
- another stakeholder mentioned that flexibility is having the ability to turn gas on and off as and when you want it and the opportunity cost attached with doing so.
- one stakeholder mentioned that flexibility/resilience is of paramount importance and that it is currently managed by NGG's SO to a good standard.
- NGG and stakeholders continued discussing the topic of flexibility.

Action: Presentation on how to define flexibility | Who: NGG | By: 10.11.18

Action: Provide views on how to define flexibility | Who: Stakeholders | By: 05.11.18

- Cost Benefit Analysis

Stakeholders said that cost benefits analysis (CBA) was not used consistently in RIIO-GT1. For RIIO-GT2, the intention is to have better guidance and best practise.

Key conversation points:

- stakeholders broadly agree with the comment on inconsistent use of CBA during RIIO-GT1 and the need for improvement. A key improvement will be stating clear assumptions to minimise any possible disagreements over final outcomes.
- one question that was raised by the entire group was how to make good use of CBA without doing too many that would end up being invaluable. NOMs is the best current answer to solving complicated problems so Ofgem does not want to propose something that replaces this though Ofgem is happy to supplement NOMs if it makes sense to do so. Maybe there is a need for a materiality threshold before a CBA is undertaken. One stakeholder noted that CBAs do appear to be used for all decisions.
- there does need to be a needs case for general investment which does not occur at present. What could this look like? Maybe it would be a CBA looking at an investment area as opposed to a particular investment. Looking at an investment of around £500k may not be worthwhile but looking at an investment area where there are

100 projects each valued around £500k would be worthwhile and could be accomplished through the use of a single CBA.

- one stakeholder asked if Ofgem sees a CBA as an evaluation tool for projects or as a process that NGG goes through in presenting its investment case (ie. NGG would do a CBA to show that there is value in proceeding with a particular project and that this has value for society too).
- Ofgem replied that the pure CBA element (ie. the options process) provides only part of the justification process.
- one stakeholder asked if CBAs are needed for all investment decisions coupled with a choice being made by Ofgem or if NGG simply provide the top few options for Ofgem and Ofgem then decides which to fund? This was discussed.
- stakeholders mentioned that it would be good to have NGG consult about large investments that have a positive CBA which NGG want to pursue. There should be a detailed assessment of options: this is similar to the decommissioning argument that has been raised another time (ie. why should NGG maintain an asset in the ground? Is there a benefit to maintaining the asset in terms of NPV or societal benefit or both)? Also, understanding the capex program is one of the fundamental things Industry wants. One stakeholder asked if NGG could consult with the Industry on this point? So, say NGG needs a new compressor, here are some of the options currently being looked at, then us stakeholders can consult (eg. via something like a public hearing), give our opinion (ie. test and challenge as appropriate), and look to approach the process in this manner rather than the current way which is to submit the business plan to only Ofgem. Also, a better understanding of CBA thinking is needed and it would also be worth capturing this process in some type of document.

Action: Ask stakeholders for their opinion on making capex decisions / Who: NGG / By: In due course

Action: Propose a CBA decision making process document / Who: NGG / By: In due course

- Cost Comparisons

There is a column on NGG's cost assessment document called benchmarking.

Key conversation points:

- costs are benchmarked mainly through the use of consultancies. One stakeholder said that Ofgem needs to counter this.
- one stakeholder asked if unit cost benchmarking is done via an efficient operator model, an independent panel review, or some other type of benchmarking? Ofgem replied that in RIIO-1 it is more about using external consultancies.
- one stakeholder mentioned that another column is wanted on the cost assessment document: Efficient Operator Test. Ofgem has used this type of tool before when looking at certain projects that have come through uncertainty mechanisms. It was used as a sense check to decide on investment decisions. There is a challenge with

this which is the need for good data across operators and there is also a need for transparent information. One stakeholder suggested that benchmarking is open to transparency as an operator can be measured against other types of operators. An efficient operator test is needed to determine the right costs. Ofgem stated that the notion of an efficient operator is something that would be looked at but is difficult. One stakeholder suggested that it may just be needed for certain areas of high value decisions as opposed to all decisions.

- one stakeholder mentioned that there is a trade-off to be made between replacing and maintaining assets. There is also the need for efficient benchmarking to capture what the TO/SO trade-off should be. Could look at networks of equivalent size and complexity such as Network Rail.
- Ofgem mentioned that 'whole life cost' is key when doing an assessment. Ofgem currently does its own benchmarking and then compares the results with NGG's submission. Ofgem discusses the most appropriate tool to use and the expectation is that Ofgem will look at all the options and then see which is best. One stakeholder felt that NGG should do all the assessments and methodologies, and then Ofgem should do the same. The stakeholder would also like to see a public document that shows all options have been looked at and then a certain option was chosen. This would provide transparency. Or maybe publish the process that is undertaken to get to a chosen option. The main point the stakeholder was making is that by the time this information is presented in Ofgem's final proposal, it is too late for a stakeholder to be able to unpick the details and add much value. By the time final proposals are done, stakeholders feel like it is already a done deal.

Competition: is there need for a special purpose vehicle (SPV) that should be used when making large scale investments? What about financeability: should it be taken into account for big investments? Financing in-house versus using outside competition and the effect this would have on the cost of capital? Ultimately stakeholders said that they want the most efficient level of costs to be achieved and not necessarily the lowest. It comes back to wanting NGG to be as efficient as possible.

Action: Competition is currently being looked at within gas transmission | Who: Ofgem | By: 18.12.18

- Transparency

One stakeholder raised the points highlighted in this paragraph. Is there a need for two business plans? Look at asset health. The state of the asset and work that needs to be done requires justification. But linked to this is the justification of managing the system given the flexibility that will be required by the FES scenarios. So flexibility, deployment, and where investment is needed can be different and there is a need to see an efficient trade-off between operations and the maintenance of assets. Ofgem said that Network Output Measures (NOMs) captures this understanding. There needs to be a greater understanding about the TO/SO linkage and linking outputs and incentives year on year which is not

currently captured. Stakeholder sent the following via email to be incorporated into the minutes: 'Building on the experience of electricity and the electricity system operator (ESO) split from the TO, the roles and responsibilities of the SO function are clearly different from the roles and responsibilities of asset ownership. Therefore, in developing the cost assessment process it would be worth considering how to address these different roles, both in understanding the cost drivers and in reporting the relevant information. This is driven by the observation that much of the new investment over RIIO-GT2 will relate to changes required to accommodate gas flow across the transmission system both in relation to the entry and exit volumes and in relation to the within day fluctuations in gas demand. Developing the business plan to understand the drivers of investment that arise as a consequence of the requirements of the SO would be helpful. This could require an explicit plan from the SO which may include the forecast running regime of compressors, number of starts required, linepack requirements, impact on emissions, constraints, etc. This could then be translated by the asset owner into an investment plan which would distinguish replacements required for end of life assets, asset resilience investments such as duplication, new investments to meet the required flows, and investments to meet IED compliance for the expected running regime.'

More transparency regarding how large cost categories such as asset health are broken down. What components make up this cost category? And what are the drivers? For instance, the cost driver for compressor investment could be totally different than the one for pipeline investment.

To improve transparency, Ofgem are looking at how information is received from stakeholders in order to better present it to the wider stakeholder community. As part of this initiative, Ofgem are wanting to turn data into a live online dashboard that better reflects real time information and also makes it clearer and easier to understand. A couple of stakeholders already support this initiative and there is a desire to continue to widen its scope.

Action: Present greater understanding of cost categories for NGG TO and NGG SO as well as the cost drivers for each | Who: NGG | By: ASAP

- Uncertainty Mechanisms

Reopeners terminology not viewed favourably. Ofgem said that these are actually uncertainty mechanisms (UMs) and that the term reopeners is colloquially used within Ofgem to mean UM. In future, UM will be used for consistency. There is a strong process in place for a project to come through as an UM; it is not done on a whim. That said, stakeholders said that the Industry perception is that UMs tend to result in increased costs to the Industry. Ofgem suggested two options: (1) include the investment within the baseline allowance and have the project open to an UM, or, (2) have a standalone UM. Option (1) could see costs rise or fall whereas option (2) would likely see costs rise. One stakeholder suggested that the decision should be based around investment scale and

timing. That same stakeholder also brought up the issue for customers of who pays? For example, if a customer pays a surcharge one year due to some project that NGG is undertaking, but the next year that customer is no longer a customer of NGG, then that customer will lose any possible rebate that is due to them. In gas, with the changing scenarios illustrated in the FES and domestic customers changing too, it could become an issue. Furthermore, it is important to note that large customers are coming and going as well, so who ends up gaining?

Action: How to approach UMs in RIIO-GT2: baseline vs standalone, scale and timing too | Who: Ofgem and NGG | By: In due course

UM may need to be less defined in order to allow some flexibility in terms of what can come through an UM. For example, emissions reduction (Industrial Emissions Directive (IED)) is NGG's responsibility whereas network flexibility is open to a possible UM. One stakeholder highlighted that both are important, however, an investment decision did not go through because it included an emissions reduction element to it.

Action: Look at the possibility of more flexibility for UMs | Who: Ofgem | By: ASAP

- Miscellaneous
 - RIIO-GT1 spend column: RRP forecast for RIIO-GT1 was over the entire price control period and not just the annual spend.
 - Bespoke quote column: this is when NGG go to the marketplace with a specific job for tender.
 - Offtakes & Diversions are directly funded by customers.
 - NGG's cost assessment toolkit: the greyed out boxes indicate that option was not used.
 - Toolkit is too broad: there are too many ways to evaluate investments. Ofgem said that the decision on which tool to use is made based on the value of the investment. More scrutiny is applied when the investment value is higher. One stakeholder mentioned that capex was straightforward in terms of simplicity, but with multiple costs and multiple tools to deal with, the way evaluations are carried out becomes opaque.

7. Next steps/Actions

7.1 Ofgem and National Grid Gas

- Identify principles for what future reporting should and could look like. Propose how this would affect RIG and RRP reporting | By: ASAP
- How to approach UMs in RIIO-GT2: baseline vs standalone, scale and timing too | By: In due course

Ofgem

- Competition is currently being looked into within gas transmission | By: 18.12.18
- Produce a cross-sector stakeholder working group calendar view | By: ASAP
- Look at the possibility of more flexibility for UMs | By: ASAP

- Contribute to setting DAG expectations across sectors and formalise it | By: ASAP

National Grid Gas

- Presentation on how to define flexibility | By: 10.11.18
- Propose a CBA decision making process document | By: ASAP
- Present greater understanding of cost categories for NGG TO and NGG SO as well as the cost drivers for each | By: ASAP
- Ask stakeholders for their opinion on making capex decisions | By: In due course

Stakeholders

- Provide views on how to define flexibility | By: 05.11.18

8. Key dates

12th November – Gas Transmission Policy Working Group