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Dear Mick,

National Grid Gas Distribution: Response to Ofgem's Consultation on a potential RIIO-T1 and GD1 mid-period review

National Grid Gas Distribution welcomes the opportunity to respond on whether there is a need to initiate a mid-period review in Gas Distribution.

Summary

We agree with Ofgem's assessment that there are no issues which need to be addressed through a mid-period review process for Gas Distribution. We have not identified any material changes to outputs that are driven from any Government or HSE policy change or from our ongoing engagement with our stakeholders' that are not already facilitated by the ongoing framework (such as the revised fuel poverty connection targets we have agreed and ongoing development of further services to vulnerable customers). We have seen, as expected, some changes in the underlying asset health position based on our continued condition assessment and inspection work and hence our plans to manage these emerging risks are evolving. In particular we are seeing a significant emerging risk to our pipeline assets in our East of England network from shallow depth of cover and have provided a summary of this issue and how we are managing this in our response. We expect the management and prioritisation of these asset health issues to be a key part of applying the monetised risk trading element of our Network Output Measures methodology and hence, at this stage, we do not have sufficient evidence and costs to justify triggering the materiality threshold for consideration at the mid-period review.

We have made considerable progress with our stakeholders on exploring the changing future role of gas through renewable gas connections, shale gas developments, connections of installations to support gas for transport and hydrogen application. Our network and services will continue to need to evolve to meet the changing requirements and indeed we have

focused our innovation activities on these areas. Whilst we have not identified a material change needed to the output framework at this stage, we are continually monitoring these areas and they will be key considerations for the RIIO-2 period.

We believe there are some areas where confirmation of our understanding of how the RIIO principles would apply would be useful and we are committed to working with Ofgem to provide this further clarity to our stakeholders through our performance reporting and Network Output Measures methodology. However, we believe this should not fall within the scope of a mid-period review process. In addition, we have identified some additional work that could be undertaken by the Gas Distribution networks to develop measures that are more comparable and more understandable to customers for RIIO-GD2. We propose that alternative output definitions could be developed and monitored alongside the existing metrics for the remainder of RIIO-GD1 and considered for use in RIIO-GD2.

Purpose and Scope of a mid-period review

As background to the mid-period review, it is worth reflecting on the development of the RIIO framework and how it has been functioning to date. RIIO was established as a new framework which broke new ground in focusing on the outputs that network companies deliver for their customers rather than the inputs to achieve them. It also set out a longer contract of eight years and a focus on total costs as opposed to focusing on particular opex or capex solutions to allow flexibility, stimulate innovation and find new ways of delivering the outputs. It also placed a greater emphasis on stakeholder engagement and customer satisfaction and incorporating stakeholder needs into our decision making. The framework also includes transparent and extensive annual reporting to stakeholders on outputs and performance.

Under the RIIO framework we have invested in business improvements to deliver more effectively for gas consumers. The critical outputs for Gas Distribution of providing safe, reliable and sustainable networks that allow customers to meet their energy needs are being delivered and we have also seen improvements in customer and stakeholder satisfaction levels and environmental performance. There are some areas of continued focus and improvement surrounding repair risk, the length of interruptions and continuing to improve our customer service. However, in our opinion, the RIIO framework is incentivising behaviours that are in the interests of consumers. The framework has led to a significant drive for innovation and finding new and more effective ways of delivering outputs over the longer time frame. For example, the eight year approach has enabled us to invest in long term changes to our operating model such as our new strategic partnerships to deliver our replacement work. The ability to provide certainty over long term output requirements has

led to a different partnership model where innovation can be invested in to drive long term savings and better services to customers.

It is important that these key principles of the eight year nature of RIIO and proper assessment over that full period are maintained in any consideration of a mid-period review and that the networks are incentivised to continue to deliver great outcomes for customers. Therefore we agree that there should be a strong hurdle of materiality for considering reviewing the framework and introducing any uncertainty which might undermine long term cost reductions for consumers.

Q1 Do you have any views on the additional clarity we have provided on the RIIO-GD1 MPR scope?

We have considered Ofgem's proposed revisions and clarifications to the scope of the mid-period review. RIIO-GD1 Final Proposals defined the scope of the mid-period review to consider new outputs required as a result of changes in Government policy or new outputs desired by stakeholders or network users. There were also some explicit areas such as the iron mains safety risk reduction and asset health risk outputs that were to be reviewed on the basis of whether legislative policy had changed or asset health had materially changed from that assumed at Final Proposals.

We note that Ofgem acknowledge the proposed MPR scope, in this consultation, has been widened to include items not expressly indicated in the Final Proposals for RIIO specifically in relation to:

- a) the desire to provide additional clarification of rules that apply to output delivery; and
- b) widening the consideration of new outputs required for consumer or network users' needs to changes to existing outputs (including outputs that are no longer required).

For scope change a), we concur that there may be merit in now clarifying how the RIIO framework will apply at the end of the eight year period. However, we do not think this should be in scope of a mid-period review and could be done separately and made transparent through ongoing performance reporting and guidance notes. As an example we will be continuing to review and develop our Network Output Measures (NOMs) methodology. We believe this process should continue separate to any mid-period review, as based on our experience of the challenge of working through this complex area, we are concerned that the timescales of a mid-period review would inhibit the industry developing the best methodology for customers.

For the second proposed scope change b), we appreciate the intent to provide symmetry in the consideration of output changes but we note this is a widened definition and not one that might have been a reasonable expectation at the time of Final Proposals for review.

We think it is important to ensure a clear distinction between what outputs and outcomes we are committing to deliver and how we might deliver them. The scope of the review should not be reviewing whether a specific investment or input has been delivered but if there is any change to the outputs or outcome required. For example, our output commitments are expressed in terms of level of risk reduction rather than specific projects. It is essential that we update and revise our plans to ensure we deliver output in the most effective way taking into account the needs of our stakeholders and ensuring we meet all of our wider output commitments. This is one of the key principles of RIIO.

In addition, the RIIO framework is an eight year control with outputs largely defined as outcomes over that eight year period. We agree with Ofgem's desire not to create two four year price controls and hence the mid-period review process should not be used to adjust existing outputs or review how outputs are being delivered particularly if the outcomes still have to be delivered (which is the case for network output measures in particular).

Question 2: Do you consider the issues we have identified for RIIO-GD1 in this consultation fall within this scope?

We agree that the specific issues raised with regard to Gas Distribution fall within the scope of a mid-period review. We agree with the conclusions that none of these items merit further examination through the mid-period review process. There has been no legislative or HSE policy changes to the iron mains risk reduction programme that merit a review of the associated outputs. We have seen, as expected, some changes in the underlying asset health position based on our continued condition assessment and inspection work and we do have some material differences in some asset classes, such as the pipeline asset health assessment in our East of England network through emerging shallow depth of cover issues we mentioned above. Our plans to manage this and other emerging risks are still evolving and at this stage we are not in a position to trigger the threshold established to review at the mid-period stage. We are committed to the ongoing development of the NOMs methodology to support greater transparency on our asset health outputs and to show how we are managing the prioritisation of risk across the output categories. We expect the management of our emerging risks to be a key part of applying the monetised risk trading element of our network output measures methodology through the latter half of RIIO.

The innovation tax relief item covered in the cross sector issues section is not considered material for Gas Distribution (current assessment is impact of around £80k) and indeed our understanding is that this would be captured under an existing uncertainty mechanism around tax allowances.

Question 3: Are there any other issues within the defined scope that we have not included when assessing the need for an MPR for RIIO-T1?

Our ongoing engagement with our stakeholders has not identified any other areas that require new outputs at this stage. We have adapted our plans during RIIO to reflect our evolving stakeholder priorities around social, connection, customer satisfaction and environmental outputs. We see evolving needs to continue to address fuel poverty across our networks and continuing to improve and enhance the services that the networks and the wider industry provide to vulnerable customers. In addition, we are seeing the changing future role of gas through renewable gas connections, shale gas developments and in connections of installations to support gas for transport. Our network and services will continue to need to evolve to meet the changing requirements and indeed we have focused our innovation activities on these areas through our Network Innovation Competition projects on demonstrating the potential of Bio Substitute Natural Gas and in our project to create the first LTS connected Compressed Natural Gas filling station. However, we have not identified a material change needed to the output framework at this stage.

In addition, we have identified a number of the output areas where we think further work can be done to define measures that are more easily comparable across networks and provide greater transparency of outputs to customers, for example repair risk. We have suggested new definitions could be developed and monitored alongside the existing metrics for the remainder of RIIO-GD1 and considered for use in RIIO-GD2.

We outline our specific answers to the detailed questions relating to Gas Distribution in the Annex

I hope that you find this response useful. If you would like to clarify anything in our response please do not hesitate to let either myself or Richard Court (Richard.court@nationalgrid.com) know.

Yours sincerely



Mark Ripley
Director, UK Regulation

Annex: Responses to specific Questions relating to Section 4 & 5: Gas Distribution

Question 17: *Based on our current assessment we have not identified any material issues for RIIO-GD1 which we think would require further examination through an MPR. Do you agree with this assessment?*

We agree that there are no material issues which require further examination through a MPR. We have outlined our rationale to support this position below.

RIIO Framework - Output change mechanisms

As part of RIIO-GD1 a number of measures have been put in place that allow the price control period to run for the duration and ensure certainty for customers and networks. These are;

- **Uncertainty Mechanisms** – Specific mechanisms have been included within network licences should network companies experience a new requirement driven by government policy or material change limited to those which would deliver benefits for customers (in terms of a reduced risk premium) while also protecting the ability for networks to finance efficient delivery. For example, the change in funding arrangement for Xoserve and also smart metering roll-out, are likely to be triggered during the remaining RIIO-GD1 period.
- **End of Period Review** – Ofgem outlined the mechanism to review asset health / risk metrics (or network output measures (NOMs)) performance in RIIO-GD1 as part of RIIO-GD2 price control that would focus on output performance.

As set out in RIIO-GD1 Final Proposals these mechanisms are sufficient to protect customers and networks during the eight years of the price control period in delivering their existing output requirements, whilst providing some flexibility when faced with changes in either legislation or when new asset health issues are identified across the existing asset classes.

Mid Period review – Output change mechanisms

As outlined in Final Proposals, the mid period review for Gas Distribution Networks (GDNs) was to address either a material change in existing outputs justified by changes in government or HSE policy or the introduction of new outputs to meet the changing needs of network users. This potential review also allowed GDNs to request a change in outputs should a network be able to evidence that the proposals were informed by stakeholder views.

The materiality assessment for either a government, HSE policy change or network request is five per cent of average annual base revenues.

Iron mains safety risk reduction

As Ofgem have indicated the HSE have decided not to review the Pipeline Safety (Amendment) Regulations 1996 (PSR) in the current price control period. We would agree with Ofgem that this issue should not be taken forward through a Mid Period Review.

In addition, at this time we are not aware of any further government or HSE policy issue that would require a review of our existing output requirements.

New outputs to meet changing needs of network users

As part of RIIO-GD1, we have substantially increased our stakeholder engagement and listening to what our customers and stakeholders need network companies to deliver.

We have adapted our plans during RIIO to reflect our evolving stakeholder priorities around social, connection, customer satisfaction and environmental outputs. We see evolving needs to continue to address fuel poverty across our networks and to improve and enhance the services that the networks and the wider industry provide to vulnerable customers. In addition, we are seeing the changing future role of gas through renewable gas connections, shale gas developments and in connections of installations to support gas for transport. Our network and services will continue to need to evolve to meet the changing requirements and indeed we have focused our innovation activities on these areas through our Network Innovation Competition projects on demonstrating the potential of Bio Substitute Natural Gas and in our project to create the first LTS connected Compressed Natural Gas filling station. However, we have not identified a material change needed to the output framework at this stage.

In terms of safety, we engage with the HSE on a regular basis to ensure we are meeting our obligations. We have identified a number of asset health issues, which we have been managing and believe the mechanisms set out under RIIO-GD1, such as the end of period assessment can be utilised to adjust for any over or under delivery as well as provide an opportunity for network companies to take into account trade-offs in NOMs between asset classes.

Question 18: *Do you agree with our current assessment that there is no need to review the risk reduction output associated with the iron mains risk reduction programme, as part of an MPR?*

As highlighted in our response to Question 17, as the HSE have decided not to review the Pipeline Safety (Amendment) Regulations 1996 (PSR), we would agree with Ofgem that this issue should not be taken forward through a Mid Period Review.

Across our four networks, we are making good progress to deliver our primary and secondary output commitments for the RIIO-GD1 period associated with the iron mains risk reduction programme.

As can be seen through our innovation portfolio, we have been investing in new mains replacement technologies that will assist in delivering the programme and reduce the cost further. This will benefit customers both in the short term and long term through improved customer service and lower costs. Given that the HSE has decided not to review the programme, we believe the eight year needs to run in full to ensure we focus on these longer lead time innovation developments and it is important that our innovation investment programmes are allowed to deliver. We are currently reviewing our mains replacement plans for the remaining part of the price control period and seeing how these techniques can be deployed.

Question 19: Do you agree with our current assessment that we do not need to review the asset health and risk secondary deliverable as part of an MPR?

We agree that there is no need to review the asset health and risk secondary deliverables and have provided additional detail below to support our position.

Gas Distribution Networks have been progressing the Network Output Measure Methodology, which Ofgem consulted on during November 2015. We are committed to the further development of the Network Output Methodology that has recently been consulted on to ensure there is full transparency on the health improvements that network companies are delivering for customers.

By end of March 2016, we will have completed the tasks of data process, collection and analysis, which will allow us to report the health of our assets in a consistent way across all network companies. Using this methodology will assist in explaining to customers the improvements in our asset health and how we are ensuring we invest in the correct areas.

Monetised risk is a key component of the methodology and will help inform customers of how networks can manage emerging risks across asset classes and we see this as an important tool in delivering the health improvements agreed as part of RIIO-GD1 Final Proposals across our asset classes.

During an eight year price control, we had considered and outlined potential exogenous risks to our plans. Since April 2013, we have identified the following emerging risks that we are looking to assess and address during the remainder of RIIO-GD1. We believe the NOM Methodology and end of period review process remains sufficient to protect customers and network companies in assessing the delivery of outputs.

Shallow Depth of Cover for pipelines

Gas Distribution operates circa 5000 km of High Pressure (HP) and circa 3000 km of Intermediate Pressure (IP) pipelines. These HP and IP pipelines are line walked every four years and ten years respectively in accordance with policy. This represents circa 1500 km of combined HP and IP pipeline walked each year.

As part of our business plan submissions in 2010 and 2011, we had not identified a significant risk or change to this asset class, which would warrant upfront allowances to improve the pipelines health. However, through our programme of line walking, which commenced in 2013/14 (Year 1), we have identified the following lengths of pipeline having a

reduced cover <0.6 metres, which is below the current accepted policy threshold for these pipeline assets. This reduction in cover was not anticipated during construction and the changes have been driven, for example by the development of intensive farming methods of the land, ground movements driven by flooding and / or other environmental factors, with the impact being particularly prevalent in our East of England network.

- Year 1, 51 km HP and 63 km IP
- Year 2, 176 km HP and 43 km IP

Year 3 line walking is currently underway and is not due for completion until March 2016.

As this is an emerging risk that is being observed through the line walking process the pipelines with reduced cover have and will require further investigation and remedial action. Remedial action can generally take one of the following routes with each having different costs associated with them:-

- 1) Pipeline diversion or pipeline reburial
- 2) Full legal controls to restrict activities above the pipeline
- 3) Additional protection measures
- 4) Licence controls, either long term or short term.

Timescales to deliver remedial actions vary depending on which remedy is appropriate and acceptable to the landowner with, for example, pipeline diversions taking up to 3-4 years to complete following project sanction.

Our line walking output and the action to remediate any health risk posed by shallow pipelines are managed on a case by case basis and will be managed over the remaining period of the price control. As it is likely that different solutions will be used under different circumstances and timescales given the specific pipeline risk, we believe the only way to manage the change in output is to make an assessment using the End of Period review process. We believe the NOM Methodology developed by all GDNs will allow us to undertake the assessment of the risk and either consider trade-offs between asset classes or used to justify over delivery during the RIIO-GD1 period.

A review of the health of these pipeline assets during 2016 will not be able to deliver any further unit cost or workload certainty as time is needed to work through the individual solutions and costs will remain uncertain until we have deployed the corrective actions, which will identify the efficient cost to address the health issue.

London Medium Pressure

Ofgem Final Proposals (December 2012) provided £93m funding for an equivalent 69km of the London Medium Pressure Strategy project compared to the £165m and 98km we had put forward in our business plan. As a result of the difference, the strategy and options were reviewed in 2013 to decide the best solution to deliver the requirements over the RIIO period, consistent with the allowances and given that the RIIO-GD1 framework allows us to trade-off across assets and asset classes.

The preferred solution was to retain the 'core' part of the original 98km strategy, which enabled the replacement of the large diameter mains in the city centre. These mains pose the highest process safety risk due to their proximity to large highly populated buildings many of which have national importance.

This core city centre scheme, which has a positive Net Present Value of £80m and a Total Benefit of £166m equates to circa 28km of iron mains abandonment in RIIO-GD1 and 20km in RIIO-GD2.

Whilst there is a gap between the 69km agreed at Final Proposals and the 48km being delivered over two price control periods, we are currently developing our plans for the remainder of the eight year RIIO period to address the gap and therefore including this issue in the mid period review would not necessarily deliver any further certainty on pipe selection, costs or timescales to complete. We believe utilising the existing mechanisms, such as those related to delivering our NOMs utilising trade-offs between or within asset classes, will allow us to explore the right solution for our customers and minimise disruption to road users in our country's capital and is in our customers' interest.

Should there be a need for output deferral at the latter part of the price control period, we would expect this to be assessed with any potential over or under-delivery across all asset classes. As such, the mechanisms are already in place to make the necessary assessment of our delivery should there be a need to address any over or under-delivery.

Multiple Occupancy Buildings

Within our RIIO-GD1 business plans we articulated the emerging risk with pipework feeding Multiple Occupancy Buildings (MOBs) and asked Ofgem to consider a volume driver to manage the potential growth in workload to improve the health of assets feeding MOBs. Whilst supportive of this approach, Ofgem preferred to set a cost allowance across our four networks.

Within Final Proposals Ofgem indicated that MOBs could be considered as part of mid period review. However, given our current cost forecast is significantly lower than the materiality threshold of 5% of allowed annual revenues for a network driven reopener, we propose to manage within our allowance through monetised risk and / or as a justified over delivery of health improvements.

As anticipated the level of work in each Network differs from our allowances with North London having the majority of high and medium rise multi –occupancy buildings. The extent of work required to address asset health issues varies significantly depending on the construction location and use of the building. We are in the process of implementing new working practices and techniques which will enable us to deliver the improvements in asset health and customers will see the benefits of this approach over the remaining RIIO price control period.

The potential over delivery in this asset class does have an impact on our planned and unplanned interruption volumes as this work type was not included in our interruption volume calculations driven by;

- the level of uncertainty that existed; and
- our proposal to have a separate volume driver.

We believe this can be addressed by reporting our interruptions for MOBs separately and then be reviewed as part of the end of period assessment. In this way we will be able to demonstrate that the level of interruptions is justified when related to the workload that has been delivered in this asset category and is not due to separate operational issues in managing the supply of gas to our customers.

Question 20: *Do you agree that we should clarify some areas where it isn't clear how late or non-delivery will be treated? If so, which areas do you consider would benefit from such clarification?*

During the RIIO-GD1 price control framework development a number of Outputs were put in place to demonstrate delivery for our customers. Many of these Outputs, such as iron mains risk and percentage of repairs completed within 12 hours had been utilised across regulatory periods. Other output metrics introduced are relatively new to our customers, for example Repair Risk, Telemetered Faults, Pressure System Regulation fault response. The later output metrics sit within our safety and Reliability output categories. Unfortunately, these outputs are not easily comparable across networks, therefore it is not easy to assess if the levels being delivered are due to an efficient process or are at levels that reflect the existing configuration and / or Health of the individual network assets.

It is our view that we would like clarity on the over and / or under delivery of these metrics, however we believe further work is required to understand whether the outputs should be consistent across all networks and what an efficient level would be. Our proposal would be to work with other networks to clarify the merits of each metric and determine the potential impact the different levels of performance have on our ability to deliver value to our customers. We believe the work required needs to be carried out over the remaining RIIO-GD1 period to either set a benchmark for each network under RIIO-GD2 or be able to justify the differences across individual networks.

Given the above, we have highlighted a couple of metrics that we believe require further monitoring and potentially modification for RIIO-GD2 to ensure there is the ability to put in place comparable metric or at least to understand the drivers for the differences between networks.

Repair Risk

For the first two years of RIIO-GD1, we have been unable to achieve our Repair Risk output in London, North West and West Midlands networks. In 2015/16 we are on track to achieve our output and we have increased our cost forecast to deliver on this output commitment. Notwithstanding this performance, we have seen a reduction year on year from 2012/13 in the total number of repairs to our mains and services (excluding emergency control valves) driven mainly by our mains replacement activity and maintenance activities (mains spraying), which demonstrates that the health of our asset is improving and we are reducing the disruption to customers from our operations.

Repair Risk has been set using each network operators' outside gas escape prioritisation process mechanism. Each network operator has a different scoring mechanism, which we believe makes it almost impossible to compare underlying performance and therefore allow networks to assess if one network is more or less efficient than another.

We believe there would be merit in putting in place and monitoring a metric that is based on the same data from each network, which would allow customers to understand our performance in a more meaningful way. This would also assist in setting appropriate levels for RIIO-GD2, whether these are driven by genuine network differences in customer safety and / or recognised as the most efficient level of performance. With this and the Repair Duration metric we believe there would be better understanding for networks to be able to compare and drive appropriate efficiencies in addition to enabling networks to explain performance to customers. For example, a suitable alternative for consideration would be to monitor total cumulative duration allowed per annum with a normalisation for mains populations.

We would like to develop a metric and monitor alongside the existing Repair Risk during the remaining period of RIIO-GD1. We do not see this as being a requirement for a mid-period review, but do believe this will assist in understanding network performance relevant to each other in more detail, especially as we start to focus on the cost benchmarks that are being set by the networks.

Interruptions excluding MOBs

As stated in our response to Question 19, interruption duration and volumes for MOBs had not been included within our interruption proposals and therefore are not built into our interruption targets. We believe monitoring these separately will allow us to demonstrate as part of the end of period review that the increased level can be justified in relation to the output delivered for MOBs.

As with all our repair and replacement activities, it is appropriate to allow for a volume and duration of interruption and the volumes for other work types have already been included in our targets. The proposal to monitor and allow MOBs interruptions as a justified change at the end of the period review would just recognise the volume of workload delivered. Even with the changes driven by MOBs to interruptions, we will still be able to deliver and maintain our 99.999% reliability for our customers over the price control period for customers, whilst increasing the health of our assets.

Question 21: *How material do you consider innovation tax relief has been and is likely to be for the network companies? Do you consider this is an issue that we need to pursue as part of any MPR? We request that network companies provide estimates of the benefits accrued so far due to this tax relief as part of their response?*

We do not consider innovation tax relief to be an issue that needs to be reviewed as part of the mid period review. There is no need for corporation tax matters to go through the mid period review because there are existing uncertainty mechanisms in the RIIO framework that already adjust our tax allowances under a range of circumstances including, but not limited to, changes in legislation or HRMC interpretation. These are covered by the tax trigger uncertainty mechanism.

In addition, we do not consider this item to be in scope of a mid-period review as whether or not HRMC interpretation can be considered a Government change, there has not been a change in outputs.

Notwithstanding our views on the validity of being in scope for the mid-period review, we have set out below the estimated tax reduction benefits that we will achieve per annum.

It should be noted that expenditure within the “innovation stimulus”, due to the specific tax rules, may not qualify for enhanced tax reliefs and the annual expected permanent tax benefit for “innovation stimulus spending” across Gas Distribution is expected to be a reduction in tax payable of circa £80k. This is not considered material and we do not anticipate that there will be any significant change to this benefit going forward.

We do believe it is appropriate for networks to make appropriate claims if the expenditure is eligible for the enhanced reliefs.

