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Sent by email to: julie.chou@wwutilities.co.uk

Dear Julie,

Shrinkage and Leakage Model Review 2024 - Consultation

Thank you for the opportunity to respond to the above consultation. This is a non-confidential response on behalf of the Centrica Group.

Our response is focussed on our concerns in relation to the Shrinkage Profiling project, namely the lack of progress, the lack of engagement and the misguided choice to progress the project as part of the regulatory workstream of another project. We are concerned that potential distortions on wider gas market arrangements remain and are not being addressed urgently. We also comment on other areas relevant to the annual review of the Shrinkage and Leakage model (SLM).

There has been a lack of progress on developing a methodology for profiling shrinkage:

We first encouraged the gas distribution network companies (GDNs) in 2018 to develop and implement a methodology for profiling annual estimates of shrinkage volumes across the year.¹ We explained that the assumed 'flat' profile (that an equal amount of gas is lost through shrinkage in each day across the regulatory year) is unlikely to reasonably represent the profile of actual losses. We also explained that the 'flat' profile may lead to the misallocation of gas volumes between shrinkage and unidentified gas (UIG) over shorter time periods. We have encouraged the GDNs to develop and implement the profiling methodology in every submission to the annual SLM reviews since 2018.

Profiling shrinkage to reasonably represent the profile of actual losses does not have any impact on the annual estimates of shrinkage volumes and, as such, does not change the GDNs' financial exposure. However, retaining the 'flat' profile can have a material financial impact on consumers and shippers. We have also explained how the misallocation of shrinkage volumes can distort wider gas market arrangements and can lead to financial detriment for consumers and shippers. The potential financial detriment is unnecessary and is not inherent to gas market arrangements.

¹ In our submission to the 2018 Shrinkage and Leakage Model review.
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Rather, the potential financial detriment is a direct result of the choice made to assume that an equal amount of gas is lost through shrinkage in each day across the regulatory year.

Although we first raised this matter in our submission to the 2018 SLM review and in all our submissions since, the first time that the GDNs committed to developing the profiling methodology was in 2023: the GDNs stated “*target 2023/24*”.² As far as we are aware, there has not been any measurable progress during 2023 on developing the profiling methodology. It is unclear to us why there has not been any apparent measurable progress, especially since the GDNs have already set out a high-level solution:

*GDNs will continue to apply the SLM methodology and determine the annual volumes. Procurement of gas will remain as a flat daily volume, however system profiling of this gas volume would likely follow a typical demand profile taken from historic data trends.*³

Despite there not being any apparent measurable progress made by the GDNs during 2023, the Shrinkage Profiling project has been excluded from their list of proposed commitments during 2024.⁴ The three projects that the GDNs propose to focus on during 2024 are those whose impact on estimates of shrinkage volumes is unknown and, by extension, any resultant change in the GDNs’ financial exposure is also unknown. For comparison, the GDNs have already confirmed that profiling shrinkage does not change their financial exposure since there will not be an impact on the annual estimates of shrinkage volumes.⁵

It is unacceptable that there has not yet been any been any measurable progress made in developing a methodology for profiling shrinkage even though we have continually highlighted to the GDNs since 2018 the potentially distortive effects of the ‘flat’ profile. In every submission to the annual SLM reviews since 2019, we have encouraged the GDNs to reduce the risk of market distortions and highlighted their obligation to facilitate effective competition. We, yet again, strongly encourage the GDNs to reduce the risk of market distortions, to fulfil their legal obligation to establish transportation arrangements that secure effective competition between relevant shippers and between relevant suppliers.

There has also been a lack of engagement from the gas distribution network companies on developing a methodology for profiling shrinkage:

We have consistently emphasised the need for the GDNs to engage with their stakeholders that are potentially financially affected by the existence of the ‘flat’ shrinkage profile. We have encouraged the GDNs to engage with their stakeholders to develop the shrinkage profiling methodology. We have offered on several occasions to act as a ‘sounding board’, to help the GDNs to test the methodology and to ensure that it will satisfy stakeholders’ needs. In the March 2023 meeting of the Shrinkage Forum, it was agreed that the GDNs would provide bi-monthly updates to their stakeholders on the development of the profiling methodology.⁶ We have not received any updates. There has been a lack of engagement from the GDNs on this matter.

² “2023 Shrinkage and Leakage Model Review Final Report”; page 7.

³ “2023 Shrinkage and Leakage Model Review Final Report”; page 7.

⁴ “2024 Shrinkage and Leakage Model Review”; page 3.

⁵ “2023 Shrinkage and Leakage Model Review Final Report”; page 7.

⁶ See page 4 of: <https://www.gasgovernance.co.uk/sites/default/files/ggf/2023-03/Minutes%20Shrinkage%20Forum%202022%20March%202023%20v1.0.pdf>. Responsibility was placed on

It is essential that the GDNs engage with their stakeholders, to ensure that the proposed solution is acceptable. We are aware of the stated correlation between estimates of shrinkage volumes and factors such as system pressures, gas consumption, etc. The high-level solution presented in the *2023 Shrinkage and Leakage Model Review Final Report* involves profiling shrinkage based on gas consumption. It has been unclear to us whether profiling shrinkage in this way is the most appropriate approach.

We have not stated a preferred way in which shrinkage should be profiled. We have repeatedly encouraged the GDNs to conduct analysis to identify the variable(s) that estimates of shrinkage volumes are most closely correlated with and to discuss the findings with their stakeholders. We are not aware whether this analysis has been conducted. This demonstrates the importance of the GDNs engaging with their stakeholders on this matter.

The Shrinkage Profiling project needs to be progressed independently of the Digital Platform for Leakage Analytics project.

We are extremely concerned that the GDNs have incorporated the Shrinkage Profiling project into the Digital Platform for Leakage Analytics (DPLA) innovation project. The decision was made without the GDNs first consulting their stakeholders that are potentially financially affected by the existence of the ‘flat’ shrinkage profile and without consulting the stakeholder that first argued for the need for shrinkage to be profiled. We disagree with the proposed approach. We encourage the GDNs to reclassify the Shrinkage Profiling project as a stand-alone project and to prioritise delivery during 2024.

Incorporated the Shrinkage Profiling project into the Digital Platform for Leakage Analytics project will cause further delays that are unnecessary:

Our primary concern about incorporating the Shrinkage Profiling project into the DPLA project is that implementing shrinkage profiling will be even further delayed and thus delaying action to reduce the risk of distortions that may be causing financial detriment. The DPLA project is still being progressed and outcomes are not expected before 2026 at the earliest.⁷ Furthermore, it is unclear whether the DPLA project will produce useful information that can be used to profile shrinkage or when that information could be made available. As noted in the consultation:

Recently, it has been proposed via the Shrinkage Forum that shrinkage gas should be profiled throughout the year as this has an impact on daily unidentified gas (UIG) calculations. The DPLA technology trials could provide outputs that will identify any day-to-day shrinkage fluctuations and associated materiality. The outputs could help to determine whether it would be appropriate to replace the existing procurement process with an approach based on real time leakage data. The DPLA project will capture and review the approach to profiling daily shrinkage as part of the regulatory considerations workstream.⁸

the wrong party, and this was noted and corrected in the minutes of the October 2023 Shrinkage Forum meeting. See page 2 of: <https://www.gasgovernance.co.uk/sites/default/files/ggf/2023-10/Minutes%20Shrinkage%20Forum%2012%20October%2023%20v1.0.pdf>.

⁷ See paragraph 2.12 of: <https://www.ofgem.gov.uk/sites/default/files/2023-12/RIIO-3%20SSMC%20GD%20Annex.pdf>.

⁸ “2024 Shrinkage and Leakage Model Review”; page 6.

It is entirely unnecessary to artificially link progressing the Shrinkage Profiling project to the DPLA project: developing an approach to profile shrinkage does not inherently depend on any output from the DPLA project. The GDNs could develop a methodology for profiling shrinkage even if the DPLA did not exist. The analysis that we have encouraged the GDNs to conduct - to identify the variable(s) that estimates of shrinkage volumes are most closely correlated with – is a stand-alone activity. That analysis can be conducted at any time since the GDNs already collect and store data for potential explanatory variables.

There is nothing to suggest that the DPLA will eventually produce information that is better than that to which the GDNs already can obtain. Additionally, we are unaware whether the project specification has already been updated to consider shrinkage profiling. Choosing to incorporate the Shrinkage Profiling project into the DPLA project creates a material risk of further delays in developing a methodology for profiling shrinkage. This is wholly unnecessary and unjustified.

Profiling should not be conflated with procurement:

We have been explicit that we do not expect that profiling shrinkage will require the GDNs to change their gas procurement strategies. The GDNs have already acknowledged our position and developed their high-level solution to accommodate this. In the *2023 Shrinkage and Leakage Model Review Final Report*, the GDNs state that, in relation to the Shrinkage Profiling project, “...procurement of gas will remain as a flat daily volume, however system profiling of this gas volume would likely follow a typical demand profile taken from historic data trends...”⁹

In the *2024 Shrinkage and Leakage Model Review*, the GDNs state that, in relation to the DPLA project “...the outputs could help to determine whether it would be appropriate to replace the existing procurement process with an approach based on real time leakage data...”¹⁰ We welcome that the GDNs seek to innovate their process. This may need to be investigated as part of the DPLA project. However, it must be recognised that investigating whether procurement process can be based on real time leakage data is beyond the scope of what we have encouraged the GDNs to do since 2018. The GDNs must not delay developing a methodology for simply profiling annual estimates of shrinkage volumes across the year to also investigate procurement.

Other matters:

Shrinkage reductions:

We note that the average difference in shrinkage volumes across NGN’s local distribution zones (LDZs) between 2021-22 and 2022-23 is significantly greater than that for the other GDNs. The average difference across NGN’s LDZs (-9.7%) is about 150% greater than that across Cadent’s LDZs (-3.9%) that exhibit the second-largest differences (See Table 1). The individual LDZ differences vary between -9.0% and -10.4%.

We also note that the average difference in shrinkage volumes across NGN’s LDZs between 2021-22 and 2022-23 is about 500% greater than the differences between 2020-21 and 2021-22. For comparison the individual LDZ differences varied between -1.3% and -1.9%. It would be helpful if these differences between 2021-22 and 2022-23 are confirmed as accurate and are explained in detail.

⁹ “2023 Shrinkage and Leakage Model Review Final Report”; page 7.

¹⁰ “2024 Shrinkage and Leakage Model Review”; page 6.

Table 1: average differences in shrinkage across GDNs' local distribution zones

Company	Differences in the 2023 review (%)	Differences in the 2024 review (%)
Cadent	-2.9	-3.9
NGN	-1.6	-9.7
SGN	-2.8	-3.4
WWU	-3.1	-3.6

Additional information:

In our submission to the 2023 review, we asked that the following information for each project be included in the final report:

- an explanation of how the projects that the GDNs propose to progress were selected from the list of candidate projects and why those projects were prioritised;
- the potential materiality of the impact of the outcome of each project on shrinkage volumes;
- an estimate cost of delivering each project;
- a timeline showing the expected milestones for each project; and
- a summary of the risks that might each project being successfully completed.

This information was helpfully included in the 2023 final report. However, the information has been excluded from the consultation document. We, again, ask that the information is included in the final 2024 report and in future reports.

We hope you find these comments helpful. Please contact me if you have any questions. We confirm that we will also share this submission with Ofgem.

Yours sincerely,

Gregory Edwards
Network Regulation Manager
Centrica Regulatory Affairs & Policy