

**UNC Shrinkage Forum Minutes**  
**Wednesday 17 September 2014**  
**31 Homer Road, Solihull B91 3LT**

**Attendees**

Helen Cuin (Chair)	(HC)	Joint Office
Lorna Dupont (Secretary)	(LD)	Joint Office
Colette Baldwin	(CB)	E.ON UK
Dave Chalmers	(DC)	National Grid Distribution
David Simpson	(DS)	Scotia Gas Networks
Geoff Goldie	(GG)	Northern Gas Networks
Ian Dunstan	(ID)	Wales & West Utilities
Ian Marshall	(IM)	Wales & West Utilities
John Morrison	(JM)	Northern Gas Networks
Joanne Parker	(JP)	Scotia Gas Networks
Mark Jones	(MJ)	SSE
Mark Askew*	(MA)	Ofgem
Matt Marshall	(MM)	National Grid Distribution
Neil Copeland*	(NC)	Ofgem
Roy Malin	(RM)	National Grid Distribution

\* via teleconference

Copies of all papers are available at: [www.gasgovernance.co.uk/sf/170914](http://www.gasgovernance.co.uk/sf/170914)

**1. Introduction and Status Review****1.1. Review of Minutes**

The minutes of the previous meeting were accepted.

**1.2. Review of Actions**

**SF0801: Best Practice/Licence Obligations: CV Measurements** - National Grid Distribution (RM) to look to provide a presentation that seeks to identify the different approaches the DNs adopt for provision of CV measurements and try to highlight a preferred (best practice) option.

**Update:** RM provided a [presentation on the Calorific Values – Shrinkage and Leakage Model](#). RM explained that the leakage calculation estimates an annual volume of emissions that needs to be converted to an energy value, using appropriate calorific values, for both UNC Shrinkage and Licence allowance/incentive purposes. National Grid Distribution is considering the different approaches used by the GDNs and is undertaking further analysis on the impacts. More work is required to quantify the difference(s) between the two approaches (time-weighted vs flow-weighted and capped vs uncapped), to identify if any these might be of significance, and to assess which might most appropriately inform best practice. Shippers thought it strange that there was divergence between the GDNs. CB enquired how was Xoserve managing the differences in the approach, in respect of invoicing. RM explained that the CV issue only had an impact on the post year shrinkage adjustment and as such was reflected in the neutrality invoice adjustment to RbD, i.e. it is a purely financial consideration rather than energy balancing. MJ explained how Shippers used a standard approach for billing using truncation and not rounding (CV based on LDZ, truncated to one decimal place, and then do the average, and then

truncated again). Differences between truncating and rounding were discussed. Treatment of CV is an issue across the board. RM explained capping of flow-weighted CVs. It was noted that differences in practices in using rounding or truncation may produce significant differences and degrees of error. Truncating and capping will reduce the calculated Shrinkage energy and will flow through to the customers (lower Transportation Charges but higher RbD apportionment). CB recommended some source documents that the GDNs might consult and consider when looking at this area.

CB suggested GDNs should consider adopting what is used for billing purposes. There was a consensus for GDNs to operate consistently. **Complete**

**New Action SF0901: GDNs to analyse and quantify the time-weighted and flow-weighted CV measurement approaches and identify and assess the impacts of using different methods/models, for further consideration and agreement on the preferred option to be adopted. Report to the January meeting.**

**SF0101: 2012/13 Shrinkage Assessment and Adjustment** - DNs to consider what supporting information/explanations can be included/provided, and provide a draft for discussion at the meeting on 16 April 2014.

**Update:** See item 4, below. DS provided a summary of the factors taken into account for the shrinkage proposals and the assessment of variations for the adjustment report. DS believed it would be difficult to quantify the specific impact and financial values associated with changes to these in the year-end assessment, as there is interaction between the different model inputs. Shippers wished to consider the information provided and agreed to communicate any remaining concerns. **Complete.**

**SF0103: IFI Project Information/Report** - DNs to consider what information might be released.

**Update:** See Item 3. National Grid provided a view on what information might be released. **Carried forward.**

**SF0401: Annual Shrinkage and Leakage Model Review** - All parties to submit elements they would like included in the Model Review to: [david.simpson@sgn.co.uk](mailto:david.simpson@sgn.co.uk)

**Update:** DS confirmed no responses had been received. **Closed.**

**SF0402:** SGN (DS) to summarise responses to Action SF0401 for consideration/review at the July meeting.

**Update:** See Action SF0401, above. **Closed**

**SF0701: Shrinkage and Leakage** - Provide details of the equivalent statistics for Ireland.

**Update:** MJ requested this item be carried forward. **Carried forward**

## 2. Shrinkage and Leakage Smart Metering Report

NC had provided a copy of the [GDN Shrinkage and Leakage Smart Metering Report](#), and explained Ofgem's concerns.

NC asked the GDNs to provide clarity on their strategies to effect the move towards measuring levels of shrinkage (rather than modelling) with the increased availability of data, i.e. how GDNs are expecting to use smart meter data, how the model will be tested and developed, and how GDNs will meet the requirements set out in the licence.

RM explained that until there is an extensive roll out of smart meters there would be a concern about the actual availability of any data.

NC recognised that there was a current insufficiency of data, but had expected the report to contain more detailed information on what data would be used, when the DNs became parties to the DCC and what would motivate them to become parties. MA added that DECC had already set the policy and it is necessary to ensure that is established what smart data is required and how it will be used, to test the assumptions and validity of the Leakage Model. Ofgem would have expected to see an appropriate Table included in the Report. NC confirmed there are a number of concerns about GDNs potentially not having access to the appropriate data that would be required. NC asked GDNs to review smart metering data and assess what data could be used. RM indicated this would have to be reviewed and confirmed, and expressed concerns whether or not the data could be used for Shrinkage and Leakage because of issues with units and conversions; volumetric meter readings would be required. He was not sure what exactly was available, or 'cleared' to be available to certain parties. MA indicated that clarification/assurance was required in the Report.

RM observed that in terms of shrinkage, leakage, theft and own use gas there was a concern about the inability to accurately identify the level of theft. He explained the difficulties of trying to estimate something deemed as shrinkage when some of it is attributed to theft, and theft by its nature is an unknown quantity. If smart metering results in reduced instances of theft it may assist in reaching a more accurate assessment. A comparison was made with the electricity industry losses calculation; however, it was recognised it was harder for the gas industry to estimate the outputs due to pressure & temperature correction and unit conversion (volume to energy via calorific values); until there was a large pool of smart meters volatility was likely to be quite significant. It was believed that the level of theft will be impacted once a large population of smart meters was in place and the industry will then have a better measure of outputs.

MA reiterated it was important to have key questions and assumptions to test over the next 8 years, and to have an idea of the strategy and what can be achieved.

RM reiterated that accuracy of meter readings and the level of theft was a big issue; theft was a huge 'unknown'. Having a larger population of smart meters will give a better estimate of actual outputs. RM explained that leakage is fairly flat throughout the year and if some regular within-year calculations were made assumptions about how leakage varies may facilitate estimation – e.g. looking at in the summer when leakage would be a bigger proportion of the overall losses could give a better idea of the level of leakage.

RM was unsure if GDNs would be best placed to undertake the analysis, explaining that GDNs may not have the statistical ability to undertake the calculations. IM explained that GDNs do not necessarily employ statisticians. He suggested an impartial view would add benefit the industry as there are so many unknowns and this would require experienced statistical analysis to separate out individual elements. RM indicated that a robust estimate of emissions, rather than just overall losses, is critical for corporate emissions reporting. RM suggested it would be more appropriate and credible for an independent analysis to be performed, if a calculation and financial adjustment is required.

MA suggested that the GDNs set out the steps they will take to look at addressing these concerns over the next couple of years.

**Action SF0902: GDNs to liaise with Ofgem and provide a response/view on the exact requirements for Shrinkage/Leakage Smart Metering Reporting.**

Theft was discussed. It was not easy to predict or identify. CB reported that it was being looked at from a consumption based approach and on a national basis across the industry (TRAS), but was not sure at what stage it was in terms of reporting an outcome.

MA recognised that theft was one aspect, but there were other aspects that could be tested - to be identified, when and by what means. Ofgem offered to remain engaged with the Shrinkage Forum and requested GDNs consider producing a proposal to start this off.

ID suggested that the model could be deconstructed to assess on what elements smart metering may have an influence. Wales & West Utilities offered to review this on behalf of the GDNs and provide a collective GDN view on any requirements. Shipper engagement would also be welcomed to provide a different perspective into the levels of theft. CB and MJ agreed to this. MA confirmed Ofgem would like sight of a strategy by January 2015. It was suggested interim meetings of a 'sub-group' might be arranged to facilitate this.

Summarising, ID committed to producing a GDN collective view regarding smart metering data, its use, risks and limitations, for issue alongside the Shrinkage and Leakage Model Report, i.e. by end of October, for discussion/comment.

**Action SF0903: WWU to produce a GDN collective view regarding smart metering data, its use, risks and limitations, for issue alongside the Shrinkage and Leakage Model Report, i.e. by end of October, for discussion/comment.**

### 3. AGI Venting and IFI Project Update

Noting that the report had been marked 'confidential' RM was establishing whether or not it could be made publicly available.

RM provided an [AGI Venting presentation](#). He gave a brief overview of the systems in use, and the source of the current estimate. The Watt Committee Report (1994) estimate was believed to be no longer appropriate (a copy of the report and any supporting data for its figures no longer seemed to be in existence) and National Grid Distribution was looking at moving to a new approach to facilitate a non-gas venting system.

He confirmed that DNVGL (formerly GL Noble Denton) was completing National Grid's 'multi purpose' surveys. GG asked National Grid Distribution to confirm to other GDNs what data is being collected by DNVGL as part of their AGI Venting Survey, to ensure consistent data is collected by all GDNs when undertaking similar surveys.

Further work needs to be undertaken to assess what data needs to be collected to ensure that National Grid Distribution can complete the surveys by September 2015. National Grid Distribution aims to provide an initial estimate from the first two LDZs by February 2015.

**Action SF0904: National Grid Distribution to confirm what data is being collected by GL Noble Denton for the IFI Project and advise other GDNs by end of September 2014.**

### 4. Shrinkage Leakage Model Review

DS provided a [Shrinkage Forecast Factors Presentation](#) and an [Annual Review of Shrinkage Model Presentation](#).

#### *Forecast Factors*

DS provided an explanation of the process and timetable for shrinkage forecasts and the factors and variations that are taken into account when evaluating the shrinkage forecasts and an assessment of actuals for the adjustment report.

#### *Annual Review of Shrinkage and Leakage Model*

The Licence drivers were outlined, and the timetable/process followed for 2013. A similar timetable was proposed for publishing the Shrinkage Leakage Model Report by 31 December 2014.

DS highlighted the influencing factors on shrinkage and leakage that would be included in the report, and asked Shippers to consider any additional elements they would like to see added. The draft report was due at the end of October 2014.

JP referred to Ofgem’s objective of measuring the effects of smart metering rather than modelling; did that focus need to be captured in this report?

It was commented that emissions would always need to be estimated and reductions achieved and robust methods would be required to do this. Smart metering may provide more transparency and accuracy for any residue, but how to separate out and apportion that still remains a question.

**5. LP Service Modification Update**

RM confirmed that Ofgem approval is awaited.

It was anticipated that once the LP Service modification was approved the Interference Damage modification would be considered.

**6. 2013/14 Assessment and Adjustment**

RM confirmed that documents have been provided and encouraged participants to review them. The adjustment values (Neutrality invoice information) were sent to Xoserve at the end of August.

**7. Any Other Business**

**7.1. Change of National Grid Distribution Representative**

RM advised that he was moving to a new role and his replacement was Matt Marshall (introduced at the beginning of the meeting).

**8. Diary Planning**

Further details of planned meetings are available at: [www.gasgovernance.co.uk/Diary](http://www.gasgovernance.co.uk/Diary)

Time/Date	Venue	Programme
11:00 Wednesday 17 December 2014	Teleconference	<ul style="list-style-type: none"> <li>Smart Metering</li> <li>SLM Review</li> </ul>
10:30 Wednesday 28 January 2015	31 Homer Road, Solihull B91 3LT	<i>To be confirmed</i>
March 2015	Teleconference	<i>To be confirmed</i>
June 2015	Teleconference	<i>To be confirmed</i>
September 2015	31 Homer Road, Solihull B91 3LT	<i>To be confirmed</i>

Action Table					
Action Ref	Meeting Date	Minute Ref	Action	Owner	Status Update

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<b>Action Ref</b>	<b>Meeting Date</b>	<b>Minute Ref</b>	<b>Action</b>	<b>Owner</b>	<b>Status Update</b>
<b>SF0801</b>	19/08/13	2.0	<i>CV measurement</i> - to look to provide a presentation that seeks to identify the different approaches the DNs adopt for provision of CV measurements and try to highlight a preferred (best practice) option.	National Grid (RM)	<b>Complete</b>
<b>SF0101</b>	22/01/14	1.0	<i>2012/13 Shrinkage Assessment and Adjustment</i> - DNs to consider what supporting information/explanations can be included/provided, and provide a draft for discussion at the meeting on <del>16 April</del> 15 July 2014.	All DNs	<b>Complete</b>
<b>SF0103</b>	22/01/14	4.0	<i>IFI Project Information/Report</i> - DNs to consider what information might be released.	All DNs	<i>Due 17/09/14</i> <b>Carried forward</b>
<b>SF0401</b>	16/04/14	1.2	<i>Annual Shrinkage and Leakage Model Review</i> - All parties to submit elements they would like included in the Model Review to: <a href="mailto:david.simpson@sgn.co.uk">david.simpson@sgn.co.uk</a>	ALL Parties	<b>Complete</b>
<b>SF0402</b>	16/04/14	1.2	SGN (DS) to summarise responses to Action SF0401 for consideration/review at the July meeting.	SGN (DS)	<b>Complete</b>
<b>SF0701</b>	15/07/14	3.	<i>Shrinkage and Leakage</i> - Provide details of the equivalent statistics for Ireland.	SSE (MJ)	<b>Carried forward</b>
<b>SF0901</b>	17/09/14	1.2	GDNs to analyse and quantify the time-weighted and flow-weighted CV measurement approaches and identify and assess the impacts of using different methods/models, for further consideration and agreement on the preferred option to be adopted. Report to the January meeting.	All GDNs	<i>Due January</i> <b>Pending</b>

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<b>SF0902</b>	17/09/14	2.	GDNs to liaise with Ofgem and provide a response/view on the exact requirements for Shrinkage/Leakage Smart Metering Reporting.	All GDNs	<b>Pending</b>
<b>SF0903</b>	17/09/14	2.	WWU to produce a GDN collective view regarding smart metering data, its use, risks and limitations, for issue alongside the Shrinkage and Leakage Model Report, i.e. by end of October, for discussion/comment	Wales & West Utilities (ID/IM)	<b>Due October and January Pending</b>
<b>SF0904</b>	17/09/14	3.	National Grid Distribution to confirm what data is being collected by GL Noble Denton for the IFI Project and advise other GDNs by end of September 2014.	National Grid Distribution (DC/MM)	<b>Due September Pending</b>