

**UNC Workgroup 0719R Minutes
Calculation of Energy Value of Gas
Monday 06 July 2020
via Microsoft Teams**

Attendees

Alan Raper (Chair)	(AR)	Joint Office
Kully Jones (Secretary)	(KJ)	Joint Office
Ben Hanley	(BH)	Northern Gas Networks
Bethan Winter	(BW)	Wales & West Utilities
Catherine Lister	(CL)	Wales & West Utilities
Hilary Chapman	(HC)	SGN
Jeanette Gregory	(JG)	Cadent
Joel Martin	(JM)	SGN
Luke Warner	(LW)	Northern Gas Networks
Phil Lucas	(PL)	National Grid
Shiv Singh	(SS)	Cadent
Steven Fowler	(SF)	SGN
Steve Pownall	(SP)	Xoserve

**via teleconference*

Copies of all papers are available at: <https://www.gasgovernance.co.uk/0719/060720>

The Workgroup Report is due to be presented at the UNC Modification Panel by 17 September 2020.

1.0 Introduction and Status Review

Alan Raper (AR) welcomed everyone to the meeting.

1.1. Approval of Minutes (01 June 2020)

The minutes from the previous meeting were approved subject to the changes provided by Phil Lucas.

1.2. Approval of Late Papers

Workgroup agreed to accept the two late papers provided by Xoserve and SGN in respect of agenda item 2.0.

Steve Pownall (SP) offered apologies for the late Xoserve paper explaining that the presentation was delayed due to internal sign-off.

Steven Fowler (SF) also offered apologies for the late presentation provided on the day on the potential GDN options.

1.3. Review of Outstanding Actions

0601: National Grid (PL) to confirm if NTS connected bio-methane points are included within the 243 bio-methane offtake count.

Update: Phil Lucas (PL) confirmed that there are no Bio-Methane points currently connected directly to the NTS. Although the first is due to connect to the NTS later this year it will not be used in the derivation of CVs applicable in a DN Charging Area and it is not expected to be used in the Attribution Mapping process. Of the 243 measurements that National Grid processes, 35

are NTS measurements from multi-junctions/terminals that have directed measurements and therefore can be used in the FWACV calculation.

Closed.

0602: National Grid (PL) to provide the number of instances CV capping is applied/triggered.

Update: PL confirmed that the levels of CV capping varies per Charging Area. Certain Charging Areas experience quite a lot of capping due to for example predominant supplies from one or more entry terminals. Other regions have a much more stable average CV and therefore capping tends to only occur if there are issues with a connected Bio-methane site. The level of capping recently observed are as follows:

- In the calendar year 2019 there was capping for circa 3.7% of Charging Area CV determinations (175 capping events out of 4,745 [365 * 13] determinations = 3.688%); and
- Up to 05 June 2020 there was capping for circa 2.7% of Charging Area CV determinations (55 capping events out of 2,041 [157 * 13] determinations = 2.695%).

Closed.

0603: National Grid (PL) to confirm if the “Loss of Record” occurs after D+5 and if so, what consequence does this have on the CV that has been determined.

Update: PL confirmed that a ‘Loss of Record’ should be reported to National Grid within one hour of the fault being identified, as outlined in OAD Section D4.2.1(b). Therefore, if the fault is detected and declared within Exit Close Out (D+5) the attribution process is followed. If LOR is declared outside of D+5, an offline calculation is performed with what should have taken place in terms of attribution mappings for the given site. If this has an impact on the Billing CV then both the DN and Ofgem are notified and MIPI is updated, however no amendment is made to Gemini data (i.e. transportation charges are not revised).

Closed

Workgroup sought clarification in respect of how a CV value which is updated post close out is flagged as such in MIPI (i.e. it is not used for invoicing). PL also agreed to clarify whether the CV Shrinkage volume changes in line with a CV value which is updated post close out and whether all the data necessary for National Grid to calculate CV Shrinkage is present in Gemini and provide an update at the next meeting.

Workgroup agreed to close action 0603 and ask National Grid to provide more clarification as part of a new action set out below:

New Action 0701: National Grid (PL) to clarify:

1. How a CV value is updated post close out flagged as such in MIPI.
2. Whether the CV Shrinkage volume changes in line with a CV value which is updated post close out and whether all the data necessary for National Grid to calculate CV Shrinkage is present in Gemini.

0604: National Grid (PL) to confirm if a copy of the monthly Ofgem report can be made available to DNs and if there is any narrative/analysis added to the report over and above simple provision of the CVs and all the data used to calculate the CVs.

Update: PL provide a post-meeting update in the form of a document detailing the information issued to Ofgem on a monthly basis. The document titled “*Interface Specification – Components of Flow-Weighted Average CV Interface File*” which has been published on the Joint Office website alongside these minutes.

Carried Forward.

0605: National Grid (PL) to confirm in terms of the DN data provision levels at D+1 08:30, does the data 'missing' at this point contain a high proportion of bio-methane sites and if there are any discernible drivers for late data that National Grid observes.

Update: PL confirmed that of the 'missing data' at D+1, the vast majority are Bio-methane sites (at DN level, between 75% and 100% of the missing data).

Closed.

0606: National Grid (PL) to confirm how the CV and volume data is communicated between DNs and National Grid.

Update: PL confirmed that the Initial data provided at D+1 is communicated in the form of a data file transferred by a SFTP (Secure File Transfer Protocol) which received by a server in National Grid's system architecture. Where missing data is subsequently requested by National Grid, this is typically issued by email and added to the dataset for the relevant Gas Day.

Closed.

0607: National Grid (PL) to consider the option of providing a Flow Weighted Average CV calculation service as a chargeable service.

Update: PL confirmed that an update will be provided at the August meeting.

Carried Forward

2.0 Discuss / analysis of alternate options (GDNs / Xoserve / NTS)

Phil Lucas (PL) reported that National Grid had updated the process overview diagram presented at the June meeting to address an inaccuracy. This concerned the SC9 file, (used to communicate Charging Area CVs to Shippers), which the diagram showed as being issued via Gemini. This is not correct, this file is generated by an internal National Grid system and issued to Xoserve who then forward onto shippers via its Electronic File Transfer mechanism i.e. the IX.

AR confirmed the revised presentation had been published on the meeting page for June and July and the previous presentation would be removed to avoid any confusion.

Joel Martin (JM) stated that this change may impact the GDN options to be shared later in the meeting.

AR invited SF to provide an update from GDNs. SF provided a walkthrough of the presentation titled *FWACV – Briefing Pack*. He described the current systems view process and definitions. It was noted that the SC9 file was being shown as being provided by National Grid to Gemini and this would need to be updated to reflect the changes made by National Grid to the process overview diagram where the SC9 file goes to Xoserve via an electronic file transfer (IX) before it is sent to Shippers. It does not go to Gemini.

Options 1a, 1b and 1c

SF provided a detailed overview of the options being considered and the high-level capital and operational costs associated with each option, together with approximate development timeframes. He described the key differences between Options 1a, 1b and 1c:

Option 1a – Replace National Grid (NG) system with a modified Xoserve hosted "Gemini" system. This system would accept data from all DN's, process and then pass on to Shippers

Option 1b – Exactly the same as Option 1a but includes an additional step between DN's and Xoserve. This would be passing collated files into NG (who could extract what was needed for their activities) before passing on the full set of data onto the Gemini system

Option 1c – This is seen as being the same as options 1a or 1b but would be a third party hosted service. This is likely to be Wipro /DNVGL / Enzen or other established Gas Sector supplier.

Workgroup asked why there were no Opex costs for Option 1c. SF stated that where possible the costs had been provided by Cadent and Xoserve.

In discussion of the options the following comments/observations were made:

- a. PL questioned the role of Gemini in option 1a noting that Gemini is a National Grid owned system.
- b. PL clarified that the National Grid would still need access to the data information for CV Shrinkage and emissions.
- c. SF clarified that Option 1c is a cross-GDN solution.
- d. Joel Martin (JM) asked if the 21 weeks indicative timeframe was an initial indication and realistic. SF confirmed that it was indicative and DSC Change Management governance needs to be factored in.
- e. GDNs agreed that in principle it would be beneficial if all the DNs adopt the same solution as this would be easier to implement and be more efficient particularly if there was a single vendor undertaking all the work on behalf of the DNs. However, there was acknowledgement that each GDN would have to make their own decision and there is the potential for variations. Bethan Winter (BW) agreed that simplicity is important and a cross-GDN approach was sensible.

SF reported that whilst there was general consensus between GDNs for one of the variants of Option 1 there were likely to be significant overheads for each of the DNs in terms of the need for significant technical IT support, the need for an IT project manager. He added that given all the DNs would need to work together with a vendor on a proposed solution, it was thought that the DNs would approach the vendor to supply an overarching PM resource to help with co-ordination between the DNs and the Vendor technical team(s).

In relation to option 1c that the on-going Opex costs are unknown at this stage.

SF provided cost information based on a proposal sent to Cadent from Wipro (slide 6). He outlined a high-level estimate and rough order of magnitude development costs for the various solution options. He stated that these costs had been used to develop the costs shared in earlier slides.

Option 2

SF described to Workgroup that in this option each GDN would replace the NG system with a modified system to handle the calculations and followed on by highlighting the pros and cons for this option.

SP suggested that there is a potential impact on Shippers as they currently receive one SC9 file but under this option they would receive multiple SC9 files rather than a consolidated SC9 file.

SF explained the costs, (slide 8), clarifying that the costs shown are costs per DN excluding overheads.

SP reiterated the need for an aggregator for the SC9 and PRCMS files.

A brief discussion was held on the reporting of information and the obligations set out in the UNC. BW highlighted that the obligation is for DNs to publish data and questioned if whether the DN obligation would be fulfilled if DNs were to simply publish the information on their individual websites. She did not suggest that this was done but highlighted it could be an interpretation that meets the requirements of the UNC. She added that the key principle should be to maintain the current reporting arrangements where there is open data and clear data transparency.

Currently the SC9 file is informing Shippers of charging area CVs.

Option 3

Option 3 involves each GDN processing Bio-gas Energy calculations (only) with a modified system to handle the calculations, enabling each DN's modified system to exchange information.

SF highlighted that Option 3 is similar to Option 2 but involves greater cost and complexity as there are more flows. In this option there are multiple data exchanges which could result in a lack of traceability and ownership.

It was agreed that this option is more complex with the costs difficult to determine and view was that it was important to have consistency of the outputs using simple interfaces and data flows.

PL noted that the diagram in the presentation for Option 3 showed National Grid continuing to process the non Bio gas CV measurements which would mean National Grid continuing to undertake a material proportion of its *current* role which is potentially not the desired nor appropriate outcome from its perspective. SF considered that this was not a favoured option amongst DNs.

JM highlighted that the costs provided in the presentation are high-level and would change as more detail is added to the options.

It was noted that at this stage DNs initial preference is to adopt one of the Option 1 alternatives, however there was no firm view as yet as to which of these three (1a, 1b or 1c) is preferred.

Xoserve Initial Cost Assessment

AR invited SP to present Xoserve's initial cost estimates.

SP stated two assumptions regarding calculation of the charging area CVs:

- any Xoserve solution would not be built in Gemini
- any Xoserve solution would not necessarily be built in 'new' UK Link (SAP ISU)

SP reiterated his apology for the late paper before highlighting that Xoserve's cost assessments are based on 2 options:

- Option 1 – Xoserve calculate the FWACV
- Option 2 – DNs calculate the FWACV with Xoserve providing an aggregator service.

In terms of Option 1 he indicated that this is broadly similar to DN Options 1a and 1b whereby DNs will send the existing data flows to Xoserve rather than to National Grid. Xoserve would calculate the DNs' daily LDZ FWACV and support the associated processes.

In terms of Option 2, DNs would calculate their own daily LDZ(s) FWACV then send a FWACV file to Gemini and a SC9 data file to Xoserve. In this option Xoserve would amalgamate the SC9 files and issue one file to Shippers.

SP provided a walkthrough of the initial cost and timescale estimates of these two options. He added that the costs are high-level and subject to change.

In terms of the on-going support costs, he acknowledged that NG currently provide support 7 days per week and the annual charge included replicates this level of support.

In terms of implementation, that would need to be aligned to DSC Change Governance and planned delivery release dates.

SP then highlighted that there were a number of gaps and highlighted areas where more information is needed to help develop the costs:

- a. Service levels to be provided by Xoserve – there was agreement that this should be the same level of service as currently provided by NG.
- b. The extent of Xoserve's operational role with respect to missing/inaccurate data e.g. Loss of Record or 'Not Attributable' data – agreement to replicate current NG arrangements

- c. Attribution Mapping is a key element of the FWACV process currently managed and maintained by NG. SP questioned where the responsibility for this would rest in future. JM indicated the current attribution map is old and is a DN document provided to NG. He suggested that this may need to change in future and could be provided to Xoserve by GDNs.

BW agreed that currently the obligation is with the GDNs. She suggested that these need to be reviewed along with what support DNs might need from NG as information regarding network flows on the NTS may be needed.

A brief discussion took place on the attribution mapping document and how often it is likely to change. A Workgroup participant indicated that the document doesn't change very often and is not influenced by bio-gas inputs.

PL added that he recognised that the 'best' alternative measurement used for a point (i.e. the optimal attributed value) may change according to the direction of flow.

Ben Hanley (BH) suggested that there can be seasonal or even daily changes. SP suggested that if it was to become a daily process, this would impact Xoserve options and would need to be factored into the solution.

AR agreed that this issue should be discussed further at the next meeting so that the Workgroup could discuss how attribution mapping would work under the different options.

New Action 0702: Joint Office (AR) to include an agenda item on the August agenda to discuss attribution mapping and how it would work under the different options.

- d. Is there the potential for DNs to develop different options - DNs suggested that they are working to the principle to develop a single option as far as possible recognising the efficiencies of a common approach.
- e. Would a service be provided under DSC as an Agency Service (Code Service)? – SP clarified that this question was raised by DSC Contract colleagues.
- f. Gemini Screen – To deliver this DN-based option a Gemini change window would be required. BW agreed that visibility of data is needed. SP clarified that the interface would switch from NG to Xoserve and under option 1 or 2 a technical change would be needed to implement it.

SP concluded his presentation by seeking endorsement of the key assumptions that Xoserve have used:

A brief discussion was held on the assumption that NG do not require any data other than in Gemini. PL clarified that calorific values are needed to determine NG liability under the emissions scheme (currently EU ETS, changing to the equivalent domestic GB Scheme post-Brexit). BH asked what information is needed from Gemini to determine CV Shrinkage and, in addition, is CV Shrinkage revised following receipt of any revised data post D+5? AR advised that NG would respond to this as part of the new action 0701.

In terms of the FWACV Audit Report to Ofgem for options 1 and 2, the assumption is that this would be issued monthly by Xoserve. Currently, NG issue a single report to Ofgem. Consideration is needed as to whether DNs would provide individual reports or a combined report.

JM asked about Xoserve workload and implications for implementation timescales.

SP indicated that it is likely that Xoserve would require additional resources because of current workload pressures and that this could impact on timings, so timely clarification of the final requirements and preferred solution option is important. He reiterated that development timescales, depending on which option is taken forward, could be between 7 and 14 months.

New Action 0703: Xoserve (SP) to provide information on future DSC Change planned release dates.

3.0 Next Steps

AR drew the discussion to a conclusion and asked Workgroup to consider the next steps.

PL asked, in relation to DNs' Option 1c, if Xoserve have considered the implications of the need to interact with a third party. SP suggested whether the interaction is with DNs or a third party it would still be external so similar issues. PL pointed out that one difference is that a contractual arrangement would be needed with a third party.

It was acknowledged that the DNs need to provide more information on the direction they are likely to take and therefore JM suggested that it would be beneficial for DNs to have further discussions. He added that it would also be helpful to understand if NG are likely to continue with the current arrangements.

New Action 0704: DNs to provide an update at the next meeting on their preferred options subject to NG's response on how the service is likely to continue/or not.

It was suggested that DNs and NG provide updates next month on the likely direction of the future service and an understanding from GDNs on their preferred option.

The Workgroup considered and agreed, following today's discussions, that the next meeting should continue to review the options from a system and process perspective.

See diary planning table.

4.0 Any Other Business

None.

5.0 Diary Planning

Further details of planned meetings are available at: www.gasgovernance.co.uk/events-calendar/month

Workgroup meetings will take place as follows:

Time / Date	Paper Publication Deadline	Venue	Programme
10:00 Monday 03 August 2020	5pm Friday 24 July	Teleconference	Develop selected options / project plan for solutions / UNC Modification requirement if applicable. Attribution Mapping Issue Develop Request Workgroup Report
10:00 Monday 07 September 2020	5pm Friday 28 August	TBC	Finalise Request Workgroup Report

Action Table (as at 06 July 2020)

Action Ref	Meeting Date	Minute Ref	Action	Owner	Status Update
0601	01/06/20	2.0	National Grid (PL) to confirm if NTS connected bio-methane points are included within the 243 bio-methane offtake count.	National Grid (PL)	Closed
0602	01/06/20	2.0	National Grid (PL) to provide the number of instances CV capping is applied/triggered.	National Grid (PL)	Closed
0603	01/06/20	2.0	National Grid (PL) to confirm if the "Loss of Record" occurs after D+5 and if so, what consequence does this have on the CV that has been determined.	National Grid (PL)	Closed
0604	01/06/20	2.0	National Grid (PL) to confirm if a copy of the monthly Ofgem report can be made available to DNs and if there is any narrative/analysis added to the report over and above simple provision of the CVs and all the data used to calculate the CVs.	National Grid (PL)	Closed
0605	01/06/20	2.0	National Grid (PL) Phil to confirm in terms of the DN data provision levels at D+1 08:30, does the data 'missing' at this point contain a high proportion of bio-methane sites and if there are any discernible drivers for late data that National Grid observes.	National Grid (PL)	Closed
0606	01/06/20	2.0	National Grid (PL) Phil to confirm how the CV and volume data is communicated between DNs and National Grid.	National Grid (PL)	Closed
0607	01/06/20	4.0	National Grid (PL) to consider the option of providing a Flow Weighted Average CV calculation service as a chargeable service.	National Grid (PL)	Pending
0701	06/07/20	1.3	National Grid (PL) to clarify: 1. How a CV value is updated post close out flagged as such in MIPI. 2. Whether the CV Shrinkage volume changes in line with a CV value which is updated post close out and whether all the data necessary for National Grid to calculate CV Shrinkage is present in Gemini.	National Grid (PL)	Pending
0702	06/07/20	2.0	Joint Office (AR) to include an agenda item on the August agenda to discuss attribution mapping and how it would work under the different options.	Joint Office (AR)	Pending

Action Table (as at 06 July 2020)

Action Ref	Meeting Date	Minute Ref	Action	Owner	Status Update
0703	06/07/20	2.0	Xoserve (SP) to provide information on future DSC Change planned release dates.	Xoserve (SP)	Pending
0704	06/07/20	3.0	DNs to provide an update at the next meeting on their preferred options subject to NG's response on how the service is likely to continue/or not.	DNs	Pending