

UNC Workgroup 0644 Minutes
Improvements to nomination and reconciliation through the
introduction of new EUC bands and improvements in the CWV

Tuesday 01 May 2018

at St Johns Hotel, 651 Warwick Road, Solihull, B91 1AT

Attendees

Bob Fletcher (Chair)	(BF)	Joint Office
Karen Visgarda (Secretary)	(KV)	Joint Office
Carl Whitehouse	(CW)	First Utility
Fiona Cottam	(FC)	Xoserve
Gareth Evans*	(GE)	Waters Wye
Louise Hellyer	(LH)	Total
Mark Bellman	(MB)	ScottishPower Energy Retail
Mark Palmer*	(MPa)	Orsted
Mark Perry	(MPe)	Xoserve
Mark Rixon*	(MR)	ENGIE
Martin Attwood	(MA)	Xoserve
Rebecca Knight	(RK)	E.ON
Sallyann Blackett	(SBI)	E.ON
Steven Britton*	(SB)	Cornwall Insight

* via teleconference

Copies of all papers are available at: <http://www.gasgovernance.co.uk/0644/010518>

The Workgroup / Final Modification Report is due to be presented at the UNC Modification Panel by 19 July 2018.

1.0 Introduction and Status Review

1.1 Approval of Minutes (20 March 2018)

The minutes were approved.

2.0 Review of the ROM for the EUC band changes

Mark Perry (MPe) provided an overview of the Rough Order of Magnitude (ROM) for EUC Band Changes presentation and explained that Modification 0644 proposed the introduction of three End User Categories in each of Band 01 (01B) and Band 3 (02B) as detailed below:

EUC01P / EUC02P – For prepayment heating load
 EUC01I / EUC02I – For I&C heating load
 EUC01B / EUC02B – All remaining MPRs”

He said the ROM had been produced which considered this possibility. Analysis from this had recommended an approach which set up 4 EUCs in each band as shown below:

Domestic Non-Prepayment
 Domestic Prepayment
 Non-Domestic Non-Prepayment
 Non-Domestic Prepayment

He added that this approach allowed for simpler logic, reducing impact to performance and also set up improved flexibility for the future.

Sallyann Blackett (SBI) said she did not feel there was requirement for this aspect to be included within the modification and that she felt there should be some 'built in' flexibility for the EUC's without needing a system change as this should have been built into Nexus, and this proposed process was not helping with this. She added that there should be the option to flex the EUC's without it being included in the modification and that she had concerns for the 'future proofing' of flexing without a modification.

SBI was concerned at the proposed impact on implementation, as the ROM seemed to imply this would be post November 2018. This was unacceptable when considering UIG was such a significant issue in the industry.

Bob Fletcher (BF) enquired if this was an area that could be progressed through the DSC Change Management Committee to understand the prioritisation aspects of Modifications and Release Management. Fiona Cottam (FC) said that unfortunately Xoserve had no vision of how complicated this process might be to change and a comparison could not be undertaken between the old process and the potential new process.

MPE then overviewed the schematic which showed the EUC definitions in a table format, and he explained the coding key. He also said that DESC could control the underlying profiles used by the EUC definitions and so could revert to three EUC models for Bands 1 and 2 if necessary, e.g. xxEyy01PD and xxEyy01PI using the same profiles. FC added that the mechanical codes that were listed within the table, were the best and most appropriate ones and she requested feedback from the Workgroup regarding if the codes were logical and appropriate. MPE also stated that the file formats would not need to be changed.

New Action 0501: All to provide feedback to Xoserve (FC) regarding if the EUC Definition Codes are logical and appropriate.

A lengthy and protracted discussion then ensued regarding the fact that these changes would not be encompassed within the November Release 3, that SBI and Louise Hellyer (LH) found extremely disappointing. SBI said that Kirsty Dudley (KD) was originally going to raise a Change Proposal in reference to this matter regarding Release 2 and (FC) said that Xoserve had been under the impression this was going to be actioned previously. SBI said this new Change Proposal would be submitted on 02 May 2018 to ensure it was then on the radar of the Change Management Committee for discussion on 09 May 2018 Meeting. Mark Bellman (MB) also added, that everyone had also expected Ofgem to present their 'mind to position' on the cause of Unidentified Gas (UIG) and the UIG Modifications and that also had to date, not been forthcoming.

FC said that Xoserve were confident that these changes would improve UIG and MB also agreed that it would also help to address the volatility issue. FC said there were still concerns regarding the 2.7million Pre Payment meters as 10% of the overall population had Pre Payment Meters, which would give a flatter profile than Credit Meters, which in turn, would have an impact on the UIG. SBI added that DESC had undertaken the necessary analysis last November, which showed the profiles were different and that she felt this whole matter now needed to be escalated to the DSC Change Management Committee on 09 May 2018 to get some leverage and a resolution in an expedient manner.

BF suggested that once the Change Proposal had been raised, this would then help with the overall prioritisation and also would be beneficial if Ofgem were considering further analysis of the Urgent Modifications. He added that the context and content of the Modification did not propose a change in Code and that if the consultation responses were not forthcoming, then the matter would have to be dealt with by the DSC Change Management Committee and

managed through the DSC Service lines. SBI felt for this reasoning, the Modification is the more sensible approach in terms of gauging industry opinion on the proposals rather than managing the process via a DESC consultation.

BF said that Ofgem should hopefully make a decision on this Modification and this modification should target being presented to the June Panel. He further proposed that the process for fixes and system changes inbetween Releases should be identified to understand the options for implementation. that clearly was not ideal, but that if it could be done be an Industry need, and perhaps an interim process could be identified. FC agreed to speak with Emma Smith to ensure the Change Proposal item was added to the DSC Change Management Committee agenda for 09 May 2018 meeting.

FC said that as the modification presently focused on 3 implementation areas in, that perhaps it would be a good idea to strip out the non urgent elements, and SBI said that it would need to include the EUC's and the DAF's, but that the CWV could be addressed a later date and a new modification raised to address this. BF said that Legal Text would not be required as there were no changes to Code itself. SBI said that the charging formula for the DAF's would change, but that this could be submitted to the UNCC for approval and that the new EUC's would change the load factors too.

A general discussion took place regarding the time constraints of ensuring Modification 0644 could be implemented ideally by October 2018 and the ability of Xoserve to action this. BF said the materiality and impact to the Industry was driving this, and not doing this, also needed to be addressed. SBI said that the impact was that the UIG issue would stay the same if it was not actioned prior to October and then this would continue to be an issue for the Industry as whole until potentially October 2019 which was not acceptable.

Mark Rixon (MR) said that there were other modifications in process regarding UIG and SBI said that Modifications 0652 and 0654 were in progress and would have different approaches to reducing UIG impacts. BF said that he knew Ofgem wanted the Performance Assurance Committee (PAC) and DESC to work together to address this area. SBI said that this whole topic had continued to be discussed within DESC since last year and still no resolution had been forthcoming. BF said that both the PAC and DESC committees had no authority to make the final decision to change or alter the present processes and that perhaps a new modification should be raised in order to grant authority powers to the committees.

MR said that within the specific UIG Workgroups last year and earlier this year, these were well attended and seemed to have some traction on this issue, but latterly this was not the case, and he wondered if the Industry as a whole needed to be reminded of the importance of UIG and its detrimental impact it continued to have on the Industry. MB said perhaps there were other routes in which to raise the UIG profile from both a system and commercial aspect and FC said that the Xoserve Customer Training Team could help with this.

MPE then continued to overview the rest of the presentation and presented the Assumptions as listed below:

ROM costs assume...

(1) A start of the Gas Year implementation

Code logic could at least be included as part of a release which goes live mid-year

(2) Domestic and Non-Domestic identification is via 'Market Sector Code'

Although there may be concerns over the accuracy of this field, it is now a mandatory data item and all Supply Meter Points have a value of either 'D' or 'I'

(3) Prepayment identification is via 'Meter Mechanism Code'

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- Use of this data item may not satisfy all industry participants, for example SMART meters (Meter Mechanism is 'S1' or 'S2') operating in prepayment mode will not be allocated to a Prepayment profile. As SMART meter rollout continues this will become more of an issue ?
 - Possible solution is to use 'Payment Method' which is currently held in SAP-ISU, further work required to clarify whether this is a "variable maintained in the Supply Point Register" (UNC Section H 1.2.2 a)
 - Work required to develop business rules which work for all Industry participants?

MPe then moved on to overview the Costs and Timescales as detailed below:

ROM estimates costs of change as at least 125K but probably not more than 210K

- CDSP has had a clear steer from customers that they ordinarily require at least 6 months notice for externally visible system changes
- These costs, the likely external impacts on Shippers and the required testing of SAP-ISU, Gemini and SAP BW platforms mean an implementation within a major release delivery model is recommended
- The scope of changes in Release 3 due in November 2018 have now been finalised which means the 'additional EUCs element' of Modification 0644 would need to be considered in Release 4 which is targeted for June 2019 (so effective for Gas Year 2019/20)
- The process for approving changes is managed by the DSC Change Committee. DSC would need clear requirements and change proposal for consideration in Release 4

Following a further general discussion, it was agreed the Workgroup Report for Modification 0644 would be completed in readiness to be considered at the 21 June Panel, with a consultation report for the July Panel.

Modification 0644 UIG Analysis

SBI provided an overview of the Modification 0644 UIG Analysis and gave a short introduction to the history as detailed below:

Modification 0644: Improvements to nomination and reconciliation through the introduction of new EUC bands and improvements in the CWV

Purpose of Modification:

SBI explained the Modification sought to split the End User Categories (EUC) EUC01B and EUC02B into three and grouping by prepayment, market sector code of industrial and commercial and finally all remaining meter point reference numbers. It also sought to amend the Composite Weather Variable (CWV) to include more than just wind speeds and temperature plus the creation of parameters to flex the Weather Correction Factor (WCF) and/or Daily Adjustment Factors (DAF) where they reach defined tolerances. These amendments would provide a more accurate profile to that which is in place today and would work towards improved nominations which in turn, would reduce reconciliation and UIG.

SBI then introduced Rebecca Knight (RK) who had undertaken the overall UIG analysis. RK provided an overview of the presentation content and explained a little of the history of UIG, and said at a national level, UIG could be generated back to October 2015 using industry

agreed data (because Nexus-ready DAFs were produced for this month onwards). Over this period, the volatility of UIG volume was very high, especially during the winter months, and UIG had also had a strong positive bias. Looking at the same range of data as a % of total national demand showed the volatility remained, and was similar across each year.

The presentation and associated analytical schematics can be found at:

<https://www.gasgovernance.co.uk/0644/010518>

RK then proceeded to move through the various analytical schematics which encompassed the following areas as listed below, highlighting specific areas of interest and providing an explanation to each diagram/graph and the data results:

Methodology; DAF Adjustment, data used, results of the DAF Adjustments, Methodology; including ALP Adjustment, Adjustments both ALP's and DAF's, sample data, and limitations and recommendations.

A general discussion took place regarding whether if more sample data was used in the DAF adjustments, if that would make a difference in the sample and an improvement to the EA. Also the weather sensitivity issue was discussed regarding the sample from a colder or warmer perspective, and how the UIG was calculated at the LDZ level together with the volatility of the DAF's. MR asked if RK could check the extra validation and investigate the sample data and RK agreed to sense check this again. A further general discussion took place regarding the bias of the UIG and the allocation and reconciliation at a single supply point level and the impact of the reconciliation volume.

A general discussion then took place regarding the reconciliation volume and if this was prior to the Nexus period and SBI said it was post Nexus and FC confirmed all the energy was post Nexus from a reconciliation and consumption profiles perspective.

RK then continued to overview the results on each slide and in closing, provided a summary of the limitations and recommendations as detailed below:

Limitations of the final analysis:

Performed at LDZ level only (not EUC)

Multiplier applied flat to all ALPs/DAFs

Sample Data Analysis only covers one year and EUCs 1 to 4

No investigation into the impact of changing the ALPs without changing the total sum of ALPs

No assessment of system impact of ALPs not adding to 365 on Shippers, GTs or IGTs

No assessment of impact on LFs

Recommendation for next steps:

Xoserve to work with E.ON to define a new set of ALPs and DAFs. This should include:

Analysis at EUC level

Validation using the latest sample data

This work should be incorporated into the spring analysis

The new ALPs and DAFs should be loaded and applied as soon as possible

A general discussion took place regarding the limitations and the recommendations and SBI said that DESC still had time to look at the data and re-model it, and she appreciated that there were only 4 weeks until DESC had to present the modelling, however she felt this was something that should be carried out, as this issue needed to be addressed and not left until next year. MPE said the ALPs and DAFs would have to be published on 01 June 2018, and SBI said that E.ON would help with the analysis, despite not having any extra resource for this additional work, but that she was prepared to work with Xoserve on this data analysis.

MR asked if the DAF's increased for the AQ adjustments, what difference would it make? FC said that as there were in excess of 7million calculations to create a principal to change the ALP's and the DAF's, and the DAF's were larger in the first place then the ALP's would increase too.

It was subsequently agreed that there would be another Workgroup meeting held on Tuesday 22 May 2018 in Solihull to complete the Workgroup Report.

3.0 Review of the temperature sensitivity of the Algorithm Development of Workgroup Report

MPE provided an overview of the 'Temperature sensitivity of Algorithm' presentation and explained that the Modification 0644 proposed some changes to the weather correction element of the daily NDM algorithm, and detailed the proposal as defined in the modification as below:

Expanding the data items included in the CWV to improve the WCF applied to all EUCs
Create wider parameters for the DAF and/or WCF where the CWV and SNCWV are > [1] % tolerance

- The 'weather correction element' of the current NDM Algorithm is highlighted below:
- Supply Meter Point Demand = $(AQ/365) * ALPt * (1 + [DAFt * WCFt])$
- The DAF is an EUC model parameter, derived by the EUC modelling system ahead of the gas year. The formula is $WSENSt / SNDt$
- The WCF is an LDZ parameter, calculated daily in Gemini and SAP-ISU. The formula is $CWVt - SNCWVt$

MPE then provided an explanation of the Governance and Systems considerations that were itemised in a table and he said it showed where there were references in industry documents to either the formula definition and/or data items which must be used. Please find the presentation via the link: <https://www.gasgovernance.co.uk/0644/010518>

MPE provided a summary of the Weather Correction Factor (WCF) CWV as detailed below:

- The formula for the CWV is reviewed every 5 years, in addition the parameters which are used within the formula are revised to seek the optimum fit to gas demand

The next review is scheduled to take place in 2019, to take effect in Gas Year 2020

This would need to be informed by any analysis / conclusions which suggested a change to the formula is required (i.e. new weather data items) and not just a revision to the parameters used within existing formula

- The lead time needed to ensure changes are made to SAP-ISU need to be considered plus any amendments to DN's contracts with weather providers
- This assumes that detailed analysis has been carried out to identify the improvement and produced a set of clear conclusions / rules

Short Term Fix: Look at existing parameters within CWV formula and review whether any could be changed to improve allocation?

e.g. Max CWV ?

MPE then provided a summary of the Weather Correction Factor (WCF) SNCWV as below:

The formula for the SNCWV is reviewed every 5 years

The next review is scheduled to take place in 2019, to take effect in Gas Year 2020

It currently relies upon the use of the output from the Weather Station Substitution Methodology (WSSM) and Climate Change Methodology (CCM) (as per Section H UNC)

- DESC have already approved the use of the CCM output procured in 2014, this decision may need to be reviewed if it is felt the CWV should be based on additional data items ?
- The calculation of the SNCWV is all off-line and so no impact to mainframe systems as only the SNCWV 'value' is required

Short Term Fix: No real options

4.0 Review of outstanding actions

Action 0301: Xoserve (FC) to request a ROM figure for the EUC band changes and gain support if required from E.ON in raising any required documentation.

Update: FC said this action could now be closed as the ROM had been supplied as discussed in section 2 above. **Closed**

Action 0302: Xoserve (MPE) and E.ON (SB) to investigate the best option to incorporate further temperature sensitivity into the algorithm (amend WCF or CWV or the DAF's) and evaluate the data available to support any analysis required.

Update: MPE said this action could now be closed as the information had been supplied as detailed in section 3, above. **Closed**

5.0 Next Steps

BF said that his aspirations for the next meeting on 22 May 2018 was to complete the Workgroup Report. He said that he understood that Xoserve and E.ON respectively would be re-evaluating the DAF's and ALP's data in readiness for publication on 01 June 2018.

6.0 Any Other Business

None.

7.0 Diary Planning

Further details of planned meetings are available at: www.gasgovernance.co.uk/Diary

Workgroup meetings will take place as follows:

Time / Date	Venue	Workgroup Programme
10:00 Tuesday 22 May 2018	Radcliffe House, Blenheim Court, Warwick Road, Solihull B91 2AA (http://www.blenheimcourtsolihull.co.uk)	Detail planned agenda items. <ul style="list-style-type: none"> • Review of the temperature sensitivity of the Algorithm • Consideration of Implementation timeline • Confirmation of Legal Text provision

		<ul style="list-style-type: none"> • Completion of Workgroup Report
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Action Table (as at 01 May 2018)

Action Ref	Meeting Date	Minute Ref	Action	Owner	Status Update
0301	20/03/18	2.0	Xoserve (FC) to request a ROM figure for the EUC band changes and gain support if required from E.ON in raising any required documentation.	Xoserve (FC)	Closed
0302	20/03/18	2.0	Xoserve (MPe) and E.ON (SB) to investigate the best option to incorporate further temperature sensitivity into the algorithm (amend WCF or CWV or the DAF's) and evaluate the data available to support any analysis required.	Xoserve (MPe) and E.ON (SB)	Closed
0501	01/05/18	2.0	All to provide feedback to Xoserve (FC) regarding if the EUC Definition Codes are logical and appropriate.	ALL	Pending