

UNC Demand Estimation Sub-Committee Technical Workgroup Minutes

Wednesday 26 April 2017

Teleconference

Attendees

Helen Cuin (Chair)	(HCu)	Joint Office
Karen Visgarda (Secretary)	(KV)	Joint Office
Andy Smith	(AS)	British Gas (Representative)
Anupa Purewal	(AP)	E.ON (Representative)
Daniel Rowley	(DR)	Xoserve
Fiona Cottam	(FC)	Xoserve (Alternate)
Fiona Speak	(FS)	RWE npower (Representative)
Jason Blackmore	(JB)	British Gas
Joseph Lloyd	(JL)	Xoserve
Mandeep Pangli	(MPa)	Xoserve
Mark Perry	(MP)	Xoserve
Martin Attwood	(MA)	Xoserve
Robert Wigginton	(RW)	Wales & West Utilities (Representative)
Shiv Singh	(SS)	National Grid Gas Distribution (Alternate)
Tony Davey	(TD)	SSE (Representative)

Apologies

Chris Warner	(CW)	National Grid Gas Distribution (Representative)
Hilary Chapman	(HCh)	Scotia Gas Networks (Representative)
Joanna Ferguson	(JF)	Northern Gas Networks (Representative)
Phil Clough	(PC)	National Grid NTS (Representative)

Copies of papers are available at: <http://www.gasgovernance.co.uk/DESC/260417>

1. Introduction

1.1. Apologies for absence

See table above.

1.2. Note of Alternates

Fiona Cottam (Xoserve) for Joanna Ferguson Transporter (Northern Gas Networks)
Shiv Singh for Chris Warner (National Grid Gas Distribution) and for Hilary Chapman, (Scotia Gas Networks)

2. Review of Minutes (22 June 2016 TWG and 15 February 2017 DESC)

The minutes of the previous meetings were considered approved.

There were no outstanding actions to review for the DESC Technical Workgroup.

3. Spring Analysis – Phase 1: Data Validation and Aggregations:

3.1. Background and Summary of Validated Sample Data

MP overviewed the *EUC Modelling 2017/18 – Data Validations and Aggregations* presentation that detailed the purpose and background of the Technical Workgroup. He

explained that the main area for discussion was the review and analysis of the Sample Data for the Small and Large NDMs.

He confirmed that the purpose of the modelling was to provide a method to differentiate NDM loads and usage, which are represented by the End User Category (EUC) definitions; and to set up profiles (ALPs and DAFs) for use in the NDM algorithm formula; and provide a means of determining supply point capacity (NDM EUC Load Factors).

MP reminded the committee that DESC had an obligation in Section H to submit proposals to Transporters and Users each year and consult with the wider industry. He explained that the proposals comprised of the End User Category (EUC) Definitions; the NDM Profiling Parameters and the Capacity Estimation Parameters; together with analysis of the accuracy of the allocation process; the derivation of CWV and Seasonal Normal. He noted that as Xoserve was the appointed Central Data Services Provider (CDSP), it was required to perform the analysis to support the DESC UNC requirements.

MP overviewed the agreed work-plan schematic for 2017, noting that the confirmation and agreement for April was to agree the data aggregations and WAR band limits for the Small and Large NDM sample data, which would enable the development of the demand models for the next phase.

MP drew attention to the forthcoming implementation of Modifications 0432 on 01 June 2017 and explained that including the UK Link replacement and the changes to the Gemini system, this would mean a change to the NDM Nominations and Allocation formula as well. He overviewed the main areas of change which were:

- The Weather Correction Factor (WCF) will be based on the differences in weather variables (CWV and SNCWV)
- The Daily Adjustment Factor (DAF) will be calculated using only the EUC model weather sensitivities
- The Scaling Factor (SF) will be removed meaning NDM Allocation will no longer be the balancing figure
- Unidentified Gas (UG) will now become the balancing figure for the Total LDZ demand

DR then introduced the Summary of Validated Sample Data section of the presentation, starting with the Daily Demand Data area and he confirmed that there was a requirement to develop Demand Models and End User Categories (EUCs) and that this relied upon the demand data and weather data as key inputs.

DR referred to the fact that the UNC allowed the use of the Third Party Data, and, following a query from RW, confirmed that this had been provided via email and been sent voluntarily with no charge attached. Referring to results on the accompanying spreadsheet "TW_A_Sample_Val_Summ_260417" DR said that the 2017 Demand Data had been boosted again by this data which was from the same source as last year. RW enquired about using Third Party sample data, and if anything needed to be done for the smaller supply points if samples were insufficient. DR confirmed that if Xoserve were provided with data, this could be incorporated, without any further change to the UNC.

3.2. Small NDM – Proposed Aggregations and WAR Band Limits

DR confirmed there were no proposed changes to the Small NDM EUC definitions for the Gas Year 2017/2018.

DR then overviewed the Small NDM results and pointed out that s/sheet “TW_B Sample_Pop_Summ_260417” should be referred to alongside the presentation for this section. DR stated that a number of LDZs for EUC Band 1 fell below the ideal sample size of 200 sites. He further referred to the separate spreadsheets provided. It was considered that the current samples sizes were not critical and he explained that there was a target of 200, but at this point, there were no concerns with the sample sizes.

FC explained that in February an action was taken to try and bolster the small supply point data samples and there were warnings that sample sizes were reducing.

RW questioned if 179 was sufficient (sample size for LDZ ‘NO’). FC believed the sample size was sufficient for this year, saying that there were warning signs that there was a downward trend, and the sample size needed to be boosted for each LDZ by probably around 100 sites per LDZ. It was understood that 200 was the bench mark and that it was not the bottom line critical number.

DR presented the sample numbers for all Small NDM Consumption Bands and confirmed that there were no aggregations necessary for any of the Bands, meaning individual LDZ analysis could be achieved (except for the usual NW/WN combination - necessary because of low population in WN).

MP then introduced the Review of Sample Data for the Small NDM WAR Bands, and explained this would cover the sample numbers, proposed aggregations and WAR band limits for EUC WAR bands 3 to 4, with an AQ range of 293 to 2,196 MWh pa.

MP overviewed the schematic of Winter Annual Ratio (WAR) Bands EUCs and explained that WAR Band 1 had the lowest sensitivity to weather, whereas WAR Band 4 would have the most sensitivity to weather. He explained that the WAR value of a supply point was defined as the actual consumption in the months of December to March and was divided by the new supply point AQ, and that the WAR values changed year to year, as the numerator was the actual demand and the denominator was the weather corrected annual consumption.

MP then referred to TW_B_Sample_Pop_Small_260417 Spreadsheet and Table B.5 to consider the aggregations and WAR Band definitions.

There was a general agreement with the proposals for Bands 3 and 4.

AS believed within the ‘Decision Support Tool’ there was a different percentage split to 4521. The committee tested the support tool simultaneously. British Gas could not operate the support tool provided within the email. It was agreed to review this with British Gas offline to understand what the technical issues were with the emailed support tool.

Post Meeting Note:

AS has since confirmed that he has been able to replicate the results presented by Xoserve and believes this to have been a local issue.

MP confirmed the agreement for modelling Band 3 and 4 was individual LDZ analysis except to combine LDZs NW and WN and LDZs WS and SW, using WAR ratios 0.421; 0.491; and 0.573.

3.3. Large NDM – Proposed Aggregations and WAR Band Limits

MP provided the overview of Current EUC Bands and Consumption Ranges for large NDM and noted there were no proposed changes to EUC definitions for Gas Year 2017/2018. He did however, draw attention to the fact that DESC had agreed in the Spring of 2014, as part of the ad-hoc analysis of the EUC Definitions that the bands 14,650 to 29,300 Band 7 and 29,300 to 58,600 Band 8, could be merged for modelling purposes if required.

MP then moved on to overview the TW_C_Sample_Pop_Large_260417 Spreadsheet. The Committee considered the NDM Consumption Bands and reviewed the proposed aggregations as below:

Band 5

Following general discussion regarding the individual LDZ analysis and the proposal for Band 5, committee members agreed with the provided recommendation of Individual LDZ analysis with NW/WN combined.

Band 6

The committee discussed the low sample size in WS and the proposed aggregations.

MP confirmed the agreed recommendation of i) Individual LDZ analysis with NW/WN combined and ii) Individual LDZ analysis with NW/WN and WS/SW combined

RW asked about the size of the sample and why it differed between LDZs and why there appeared to be a north/south split. FC explained the sample for Bands 3 and upwards was obtained entirely from Transporters (plus Third Parties' data). Most of those sites would have AMR read equipment in place, and that the equipment may not be functioning properly to use within the sample, or the consumption may be too erratic to include, e.g. due to Demand Side Responses. There was some discussion of the fact that although sample sizes may be low they often represent a very large proportion of the available population.

Band 7 and 8 (combined)

The committee discussed the low sample sizes in WS, SE and SO and the proposed aggregations.

MP confirmed the agreed recommendation of i) Individual LDZ analysis with NW/WN combined and ii) Individual LDZ analysis with NW/WN, WS/SW and SE/SO combined

Band 9

The committee discussed the proposed aggregation.

MP confirmed the agreed recommendation of a National aggregation.

This concluded the Large NDM Consumption Band analysis.

The Committee then considered the Large NDM WAR Bands.

MP again referred to the TW_C_Sample_Pop_Large_260417 Spreadsheet.

Band 5

The committee discussed the proposed ratios. E.ON and British Gas suggested 0.373; 0.445; and 0.521. The committee considered the alternative suggestion provided by E.ON and British Gas and it was agreed to use the ratios provided.

MP confirmed the agreement to use the WAR band ratios of 0.373; 0.445; and 0.521.

MP also confirmed the agreed recommendation of i) 5 LDZ Group analysis (SC, NO/NW/WN, NE/EM/WM, EA/NT/SE, WS/SO/SW) and ii) 4 LDZ Group analysis (SC/NO/NW/WN, NE/EM/WM, EA/NT/SE, WS/SO/SW).

Band 6

The committee discussed the proposed ratios and the 3 LDZ Groups. Parties then agreed with the provided recommendation.

MP confirmed the agreement to use the WAR band ratios of 0.346; 0.410; and 0.494.

MP also confirmed the agreed recommendation of 3 LDZ Group analysis (SC/NO/NW/WN, NE/EM/WM, EA/NT/SE/WS/SO/SW).

Band 7 and 8 combined

The committee discussed the proposed ratios and the 3 LDZ Groups. The representatives agreed with what was proposed.

MP confirmed the agreement to use the WAR band ratios of 0.333; 0.366; and 0.434.

MP also confirmed the agreed recommendation of 3 LDZ Group analysis (SC/NO/NW/WN, NE/EM/WM, EA/NT/SE/WS/SO/SW).

Band 9

No WAR bands to consider for this band.

3.4. Summary – Review, Conclusions and Next Steps

JL summarised the main areas of discussion and reconfirmed all the agreements made on modelling runs and WAR band ratios for Small and Large NDM EUCs.

JL also summarised the earlier discussion about lower sample numbers in Band 1 and encouraged Shippers to provide assistance to bolster sample sizes where possible.

JL summarised the next steps in readiness for the meeting on 17 May 2017 and these were:-

- Xoserve to commence the single year modelling, once all the aggregations had been agreed.
- Xoserve might be in contact with the Technical Workgroup for prompt decisions regarding the modelling analysis via email.

4. Any Other Business

None raised.

5. Diary Planning

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

DESC and DESC Technical Workgroup Meetings 2017

Time/Date	Venue	Meeting	Programme
10:00, Wednesday 17 May 2017	Consort House, 6 Homer Road, Solihull B91 3QQ	DESC Technical Workgroup	<ul style="list-style-type: none"> • Review single year modelling results and approve commencement to model smoothing
10:00, Wednesday 12 July 2017	Solihull (<i>venue to be confirmed</i>)	DESC Technical Workgroup, followed by DESC meeting	<ul style="list-style-type: none"> • Review TWG and DESC responses to draft proposals • Communication of Key Messages
10:00, Wednesday 26 July 2017	Solihull (<i>venue to be confirmed</i>)	DESC	<ul style="list-style-type: none"> • Review industry representations • Agree Ad hoc work plan • Current Weather Station review • Seasonal Normal • Communication of Key Messages
10:00, Wednesday	Solihull (<i>venue to be confirmed</i>)	DESC	<ul style="list-style-type: none"> • Ad hoc analysis progress and NDM sample update

15 November 2017			<ul style="list-style-type: none"> • Communication of Key Messages
10:00, Monday 11 December 2017	Solihull (<i>venue to be confirmed</i>)	DESC	<ul style="list-style-type: none"> • Evaluation of Algorithm Performance for GY 16/17 • Communication of Key Messages

Action Table (as at 26 April 2017)

Action Ref	Meeting Date	Minute Ref	Action	Owner	Status Update
			None recorded		