

UNC Demand Estimation Sub-committee Technical Workgroup Minutes

Tuesday 17 May 2016

Consort House, 6 Homer Road, Solihull B91 3QQ

Attendees

Helen Cuin (Chair)	(HC)	Joint Office
Karen Visgarda (Secretary)	(KV)	Joint Office
Anupa Purewal	(AP)	E.ON (Representative)
Colin Thomson*	(CT)	Scotia Gas Networks (Representative)
Fiona Cottam	(FC)	Xoserve
Jason Blackmore	(JB)	British Gas (Alternate)
Joseph Lloyd	(JL)	Xoserve
Mandeep Pangli	(MPa)	Xoserve
Mark Perry	(MP)	Xoserve
Sallyann Blackett	(SB)	E.ON UK
Tony Davey	(TD)	SSE (Representative)

Apologies

Andy Smith	(AS)	British Gas (Representative)
Chris Warner	(CW)	National Grid (Representative)
Fiona Speak	(FS)	RWE npower (Representative)
Richard Pomroy	(RP)	Wales & West Utilities (Representative)

*via teleconference

Copies of papers are available at: <http://www.gasgovernance.co.uk/DESC/170516>

1. Introduction

1.1. Apologies for absence

Andy Smith, Chris Warner, Fiona Speak and Richard Pomroy.

1.2. Note of Alternates

Jason Blackmore (British Gas) for Andy Smith; Fiona Cottam (Xoserve) for Transporters National Grid Distribution and Wales & West Utilities.

2. Review of Minutes (26 April 2016)

The minutes of the previous meeting were approved.

3. Review single year modelling results and provide approval to commence model smoothing stage

3.1. Background and Summary

MP gave an overview of the Demand Estimation and Timetable for this years modelling, the basis of the modelling and explained that the main core of today's meeting will be to review the single modelling results for 2015/2016.

MP summarised the key changes for 2016, as a result of UNC Modification 0432. The main points noted 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
- The Unidentified Gas (UG) will now become the balancing figure for the Total LDZ demand

MP provided the background overview to the modelling.

Small NDM Analysis

MP moved on to provide the modelling results for Small NDMs, in summary:

Band 1: MP noted that the ILFs were generally in line with last year; R^2 on average slightly lower than last year's, but remain good results; he concluded there was no TWG decision required for EUC Band 1 as individual LDZ analysis was possible.

Band 2: MP noted that the ILFs for the majority of LDZs were comparable to last year; R^2 on average was slightly lower than last year but still remain good results; he concluded there was no TWG decision required for this EUC Band 2 as individual LDZ analysis was possible.

Band 3: MP noted the Small NDM Modelling Results Comparison of monthly residuals (all days) for the specified LDZ for the two models tested. The TWG considered the comparison of SW EUC Band 3, running WS as an individual and SW as an individual. The TWG agreed the preferred model would be to run these LDZs as individuals.

Band 4: MP noted that the ILFs for majority of LDZs are comparable to last year; R^2 on average slightly lower than last year but remain good results; he concluded there was no TWG decision required for this EUC Band as individual LDZ analysis was possible.

EUC WAR Bands 3 to 4: MP noted that the higher AQ Bands where meter points are monthly read have a standard EUC plus 4 differential EUCs based on ratio of winter consumption to total annual consumption. Sites with adequate read history are allocated automatically to a WAR Band based on system calculations during the AQ review. He confirmed that the ILFs show a clear distinction across WAR bands for all LDZs and overall the boost to Small NDM sample sizes has meant WAR Band models are well sampled. He concluded there was no TWG decision required for EUC WAR Bands 3 to 4.

MP provided a summary of the Small NDM Analysis, noting the following key points:

- Good R^2 coefficients for majority of Consumption Band and WAR Band models
- Decrease in sample numbers available for modelling for EUC Band 1 however still more than sufficient to produce robust models this year for individual LDZ analysis
- For EUC Bands 2 to 4 there has been a significant increase in sample numbers available, enabling Xoserve to continue mostly with individual LDZ analysis and providing good robust models

TWG confirmed they were happy to approve the Small NDM single year modelling and allow the models to proceed forward into the model smoothing phase.

Large NDM Analysis

JL noted that large NDMs represent approximately 11.4% of total NDM load and 0.03% of supply points. Subsequently, lower sample numbers are available in Large NDM sector so underlying demand modelling can be done on basis of more broadly aggregated bands.

Band 5: The TWG considered the modelling results for the individual LDZs and combined LDZs for the Large NDM Modelling Results for WS and SW and the residuals for the two models tested. JL noted that the comparison of monthly residuals (all days) for the specified LDZ for the two models tested. The TWG considered that the combined model

wasn't superior enough to the individual runs to warrant merging the LDZs. The TWG believed that the individual models were acceptable, as combining them didn't improve the models. The TWG considered the options and agreed to run the LDZs individually.

Band 6: The TWG considered the results. JL noted that the results for both modelling runs including a combined WS/SW; and noted good results overall for individual LDZs. It was considered that the combined model didn't improve the models. The TWG considered the options and agreed to run the WS and SW LDZs individually.

Band 7 and 8: JL highlighted there was couple of quirky points in the original issued results and Xoserve have undertaken some subsequent analysis. JL provided a further presentation and noted that the Monday to Thursday chart for SE revealed some outliers, which have been investigated further since the results were published. Further investigation of the 24 sample points in LDZ SE pointed to a potential error with the consumption data for 1 specific sample point. Models have been re-run with this sample point being removed.

The results for both modelling runs were considered with the 'rogue supply point' removed for the SE LDZ. The Workgroup considered how the site passed the validation process.

The TWG considered and agreed to remove the 'rogue supply point', recognising it had passed the appropriate validation.

The TWG considered the residuals for both modelling runs after the removal of the 'rogue supply point'. The individual models were deemed to be good. The Workgroup also considered the combination of LDZs.

The TWG considered whether to select between Run 1 or Run 2. The Workgroup agreed to disregard the individual runs as the aggregated models appeared to improve the residuals.

Band 9: JL noted as with previous years, this band is a national aggregation model and there were no decisions required.

Large NDM Modelling Results WAR Band Analysis

Large NDM Analysis EUC 5 WAR Bands: JL noted that the highlighted results show the two options of LDZ SC modelled singly or aggregated with NO / NW and WN. The Workgroup considered the WAR Bands and whether to combine the LDZs or not. There was a consensus not to aggregate any further than necessary and stick with 5 grouping rather than 4.

Large NDM Analysis EUC 6 WAR Bands: The Workgroup considered Runs 1 and 2 and the residuals. SB expressed some concern about not reviewing the graphs of any other LDZs for this combination, to consider the changes in weather differentials. The Workgroup considered the different runs and LDZ groupings. The Workgroup believed it would be better to keep the models less aggregated and keep the 3 groupings rather than 2.

Large NDM Analysis EUC 7/8 WAR Bands: JL noted that sample numbers were sufficient for a 3 LDZ group model to be run, that ILFs showed clear distinction across WAR bands for all LDZs. No TWG decision required for this EUC Band

The TWG confirmed they were happy to approve the Large NDM single year modelling and allow the models to proceed forward into the model smoothing phase.

3.2 Conclusion and Next Steps

JL summarised the decisions reached and confirmed the recommendation from the DESC TWG to move onto model smoothing.

JL confirmed the intention would be to publish the draft parameter values week commencing 06 June 2016.

4. Any Other Business

None raised.

4 Diary Planning

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

DESC and DESC Technical Workgroup Meetings 2016

Time/Date	Venue	Meeting	Programme
10:00, Wednesday 22 June 2016	Consort House, 6 Homer Road, Solihull B91 3QQ	DESC TWG	Review Technical Workgroup responses to draft proposals and agree key messages for DESC
10:00, Wednesday 06 July 2016	Consort House, 6 Homer Road, Solihull B91 3QQ	DESC	Review and Approval of 2016/2017 NDM Algorithms as recommended by the Technical Workgroup Modification 0565 - UNC TPD Section H changes Communication of Key Messages
10:00, Tuesday 26 July 2016	Consort House, 6 Homer Road, Solihull B91 3QQ	DESC	Response to industry representations on 2016/2017 NDM Algorithms Review of Autumn/Winter ad hoc Work Plan 2016/2017 Modification 0565 - UNC TPD Section H changes Communication of Key Messages
10:00, Tuesday 15 November 2016	Consort House, 6 Homer Road, Solihull B91 3QQ	DESC	Evaluation of Algorithm Performance NDM Sample Update Communication of Key Messages

DESC TWG Action Table (17 May 2016)

Action Ref	Meeting Date(s)	Minute Ref	Action	Owner	Status Update
			<i>None outstanding</i>		