

UNC Demand Estimation Sub-committee Technical Workgroup Minutes

Monday 18 August 2014

31 Homer Road, Solihull B91 3LT

Attendees

Bob Fletcher (Chair)	(BF)	Joint Office
Lorna Dupont (Secretary)	(LD)	Joint Office
Christian Ivaha	(CI)	British Gas
Fiona Cottam	(FC)	Xoserve
James Hanks	(JH)	EDF Energy
Joseph Lloyd	(JL)	Xoserve
Louise Hellyer	(LH)	Total Gas & Power
Mandeep Pangli	(MPa)	Xoserve
Mark Perry	(MPe)	Xoserve
Rob Nickerson	(RN)	National Grid NTS
Sallyann Blackett	(SB)	E.ON

Copies of papers are available at: <http://www.gasgovernance.co.uk/DESC/180814>

1. Introduction

1.1. Apologies for absence

D Parker (EDF Energy).

2. Status Review

2.1. Minutes

The minutes from the previous Technical Workgroup (30 July 2014) were approved.

2.2. Action

DTW0701: *CWV Optimisation (Rostherne No.2 Weather Station – Data Gap filling)* - SB to consider if the information can be provided and report back.

Update: Information provided. **Closed**

3. CWV Optimisation Update

JL gave a presentation, outlining the background and context and summarised achievements and agreements to date. An explanation of the CWV and its impacts on ALPs, DAFs, LFs and parameters was given. The formula was illustrated and explained, together with a schematic and a table indicating existing parameters.

The approach to CWV optimisation was summarised, and an update on the trial phase was given.

JL highlighted some proposed amendments to the approach and these were considered and discussed in more detail.

Holiday Codes 13 – 16

JL questioned whether certain gas days were being removed unnecessarily. The analysis of the aggregate NDM demand modelling results were reviewed and discussed. SB preferred to leave them in if possible to get a better fit in summer. It was agreed to keep

in the extra data points (days with holiday codes 14 and 16). JL indicated that the document would be updated to take account of this agreement.

Demand Data Series

It was questioned whether Maximum Potential Demand (MPD) should still be used. There have been a number of colder years since the last optimisation and it may be considered that the years to be included in cold weather upturn no longer requires use of the MPD data.

Analysis for effective temperature (ET) for 4 LDZs was presented and reviewed and discussed. TWG agreed in principle to only using the aggregate NDM demand data, however it was suggested that Xoserve repeat the same analysis of cold weather days but only for non-holiday Monday to Thursday days in order to confirm if a sufficient number of days remain.

Action DTW0801: *Effective temperature (ET)* - Xoserve to repeat analysis of cold weather days showing results only for non-holiday Monday to Thursday days for 4 LDZs (NE, SC, SW and WM).

Preliminary Results - Clarification of Provision/Format

Given the potential magnitude of what may be provided for decision-making purposes it was suggested that some agreement be reached on the provision and format of the results.

JL provided some examples of format/content, including a worked example, for review and discussion. It was intended to provide two sheets for each LDZ to assist in decision-making, one sheet for each run. The approach document stated that Xoserve would perform a trial run using 12 years (2001/02 to 2012/13) and 17 years (1996/97 to 2012/13). In the full production phase this would become 13 and 18 years (with the addition of gas year 2013/14). The 'worked example format' would provide the summary.

CI suggested a further run using only more recent years in order to reflect the latest trend/reactions to demand and ensure the older years were not influencing the results in a negative way.

SB noted that 2004 was a pivotal year in the residential sector (growth in demand leading up to 2004, then a steady reduction since).

The number of years to use in an additional run was discussed; it was suggested that 9 years be used for the trial and 10 years for the real version. SB commented that she was aware of the amount of work involved in performing additional runs and so suggested trying it on one LDZ to see if this improves the results.

Action DTW0802: *CWV Optimisation* - Xoserve to incorporate an additional run in the trial phase for at least one LDZ using demand and weather data from 2004/05 onwards (9 year period).

Referring to infilled weather data, JL asked the DESC TWG what it would like to see and check. This was considered briefly, and it was agreed that it should be reviewed and checked.

FC confirmed that the revised weather data with an appropriate code to indicate where infilling had been applied will be published on the UKLink Docs area of the Xoserve website and DESC TWG will be informed of its publication.

It was confirmed that trial results would be published before 22 September 2014 for review.

4. Seasonal Normal Review – Use of CCM increments

Presentation 1- Use of CCM Increments

MPE gave a presentation, replicating that initially made at the previous meeting but with minor revisions (indicated in red type) and additions (new material including additional analysis). Referencing the high level diagram produced by the Stakeholder Group during the CCM discussions, MPE provided a proposed detailed interpretation of how this approach could be implemented.

Step 1 – Identify [X] period and average increment values

Following the last meeting, additional analysis had been carried as discussed and the results for each LDZ (SC, NE, WM and SW) were presented and reviewed. MPE reiterated that the projections are being used to aid the decision on which period to use for averaging the increments and will not be used in the derivation of the SNCWVs. MPE explained how the analysis had been carried out. Looking at the summary of the results, it was noted the differences were very small, whether compared to a 5 year or 11 year average, across the wider context.

TWG were satisfied with the analysis performed and agreed to use the 5 years for the average increment period, namely 2015/16 to 2019/20.

Presentation 2 - Applying CCM Increments and Calculate CWV History

MPE gave a second presentation, addressing the further stages referenced in the high level diagram - 'Use of Project Deliverables - Steps 2 and 3'. MPE offered Xoserve's interpretation of the approach/steps required to calculate a draft SNCWV (produced for NE LDZ which had minimal requirements in respect of data gap filling).

Step 2 – Apply Average Increment Values to Adjusted history (rebasing to [X] period)

The individual actions required to reach the point where Step 2 could be fulfilled were outlined.

Step 3 – Using the further adjusted values from Step 2 to calculate the daily CWVs

The individual actions required to reach the point where Step 3 could be fulfilled were outlined.

The results for the draft SNCWV for NE LDZ (using MEAN and MEDIAN compared to current) were displayed and discussed. It was recognised that the 'noise' would remain as it was there in the history; the history will be forming the basis and this analysis will be used to uplift. Smoothing was considered. It was confirmed that it was not being suggested that the MEAN or MEDIAN be used without smoothing. FC indicated that Xoserve would be aiming to try out degrees of smoothing in the trial period. JH suggested that the Met Office might have something relevant/useful - a statistical form of smoothing – that could be applied to the output delivered by the Met Office. SB indicated a preference for smoothing at this stage, rather than at the start of the process.

The TWG was satisfied with Xoserve's interpretation of the steps required.

Degree Day Analysis

MPE described the application of Degree Day analysis and presented results for NE LDZ. The objective of this analysis was to provide a view of the 'level' of the current Seasonal Normal basis compared with the recent years weather experienced. These results were reviewed.

Next Steps

MPE will produce similar analysis for the other 3 LDZs (SC, SW and WM) – i.e. draft SNCWV profile for the next meeting.

MPE will produce a draft approach document that will describe how the SNCWV will be calculated; this will include a proposal for the smoothing model to be used (5 or 7 days smoothing, or Loess?). He reiterated that increments and weather history are to be used, not the Projections. SB commented that TWG could also consider the approach to smoothing. It was noted that care should be taken not to omit the Buchan Spells. JH suggested that the document should also include information on why Xoserve need to carry out a separate infilling exercise for CCM data and cannot re-use the infilled WSSM data. MPE confirmed that the document would be a more detailed version of the bullet points shared with TWG in the presentation.

5. Any Other Business

None raised.

6. Diary Planning

Meetings will take place as follows:

DESC and DESC Technical Workgroup Meetings 2014

Time / Date	Venue	Meeting	Programme
10:00 Monday 22 September 2014	31 Homer Road, Solihull B91 3LT	DESC followed by DESC TWG	<i>For DESC:</i> - Climate Change Methodology - 0451AV draft PPM Profile - Gas Day Change update <i>For DESC TWG:</i> - CWV Optimisation update - Seasonal Normal Review update
10:30 Wednesday 12 November 2014	Energy Networks Association (ENA), 6 th Floor, Dean Bradley House, 52 Horseferry Road, London SW1P 2AF	DESC	Evaluation of Algorithm Performance: Strand 1 – SF and WCF

Action Table: Demand Estimation Sub-committee – Technical Workgroup

Action Ref	Meeting Date(s)	Minute Ref	Action	Owner	Status Update
DTW0701	30/07/14	3.0	<i>CWV Optimisation (Rostherne No.2 Weather Station – Data Gap filling) - SB to consider if the information can be provided and report back.</i>	E.ON (SB)	Closed
DTW0801	18/08/14	3.0	<i>Effective temperature (ET) - Xoserve to produce additional analysis to show results for Monday-Thursday for 4 LDZs (NE, SC, SW and WM).</i>	Xoserve (JL)	Pending

Action Ref	Meeting Date(s)	Minute Ref	Action	Owner	Status Update
DTW0802	18/08/14	3.0	CWV <i>Optimisation</i> - Xoserve to incorporate an additional run in the trial phase for at least one LDZ using demand and weather data from 2004/05 onwards (9 year period).	Xoserve (JL)	Pending