# UNC Demand Estimation Sub-committee Technical Workgroup Minutes Wednesday 21 May 2014

## 31 Homer Road, Solihull B91 3LT

## Attendees

Helen Cuin (Chair)	(HC)	Joint Office
Mike Berrisford (Secretary)	(MB)	Joint Office
Christian Ivaha	(CI)	British Gas
Colin Thomson*	(CT)	Scotia Gas Networks
Fiona Cottam	(FC)	Xoserve
James Hanks*	(JH)	EDF Energy
Joseph Lloyd	(JL)	Xoserve
Mark Perry	(MP)	Xoserve
Penny Rowland	(PR)	E.ON UK
* via teleconference		

Copies of papers are available at: <u>http://www.gasgovernance.co.uk/DESC/210514</u>

## 1. Introduction

The meeting was declared quorate.

## 1.1. Apologies for absence

None received.

## 1.2. Note of Alternates

FC (Xoserve) for R Malin (National Grid Distribution).

#### 2. Status Review

## 2.1. Minutes

The minutes from the previous Technical Workgroup (28 April 2014) were approved.

## 2.2. Actions

**DTW1102:** b) Xoserve to provide a view on how long it would take to fill the gaps in historical weather data, and by when.

**Update:** MP confirmed Xoserve have made an initial assessment and will initially replicate the formula. One or two points need clarifying offline before building actually starts. The application of the data will need to be agreed nearer the time. MP estimated it would take 20 business days to undertake the piece of work (which included time for DESC to review and sign-off amended datasets) and that it would commence in July, after the Spring Modelling is finished. **Closed** 

**DTW0201:** E.ON (SB) to provide a copy of the E.ON overnight temperature behavioural pattern data to Xoserve for their consideration.

**Update:** PR provided the workgroup some within-day shape analysis in response to the action, to be published alongside the minutes. FC explained Xoserve and TWG would need to take some time to understand the information provided. **Closed** 

New Action DTW0501: TWG representatives to review the E.ON 'Within-day Shape Analysis' paper for further consideration on 25 June 2014.

## 3. Progress in Single Year Modelling results – Small and Large NDM (2013/14 data)

MP provided an overview of the 'EUC Modelling 2014/15 – Single Year Modelling Results' presentation for discussion. He summarised the purpose of today's meeting was to share the results and provide a reminder of the modelling principals, with a final review and conclusion.

MP provided a summary of the role and responsibilities of the Demand Estimation Sub Committee (DESC) and DESC Technical Workgroup and details of the 2014 timetable.

MP confirmed the key aspects of the EUC demand modelling and the purpose of the analysis sharing results so far.

#### Small NDM <2,196 MWh Consumption Band Analysis

MP provided the results and agreed sample data aggregations for Small NDM – Consumption Band Analysis during which CI enquired about the modelling and construction of the ALPs and how any weather extremes are managed. JL explained that Xoserve do consider weather extremes and how this can skew the data; he assured parties that weather sensitivity is considered and Xoserve actively include data for more robust models.

CI offered to provide additional daily consumption data to Xoserve to allow them to undertake a test run in the Autumn, with a view to using that data in future to augment the NDM Sample numbers. MP confirmed he would provide an outline of the data Xoserve would require.

#### Action DTW0502:

- a) TWG representatives and Xoserve to work together to look at ways to enhance the current data sets with a target to have additional data for October.
- b) Xoserve to provide the TWG representatives with a specification by the end June.

Whilst considering the EUC Band 3 Small NDM Modelling Results comparison on page 28 CI wished to understand the residuals in terms of total energy rather than percentages, to be able to assess the impact on gas purchases.

The committee considered the option of keeping SW and WS separate or merging the SW and WS LDZs together. Initially Xoserve was going to suggest keeping the models separate but having weighted the residuals towards the winter months (by eye from the graphs) they suggested consideration was given to merging the SW and WS LDZs. The members present expressed a preference for SW and WS to be combined for EUC Band 3 Small NDM model.

#### Small NDM <2,196 MWh WAR Band Analysis

MP provided the results of the Small NDM WAR Band Analysis during which the members considered the modelling results presented for WAR Band 1 EUC Bands 3 and 4. PR wanted colour coded graphs to be provided to illustrate the seasonal effects. FC agreed where Xoserve believed the seasonal effect was significant a colour code chart would be provided. PR suggested over the next three years that EUC Band 1 Bands 3 and 4 could be monitored to see if the seasonal clusters are repeated. CI asked if after the CWV optimisation a comparison could be made to show sample data before and after CWV optimisation. FC explained there would not be time in the current timetable. JL also clarified it would be difficult to re-run models as a new definition of CWV would exist next year.

MP explained there has been a decrease in sample numbers and welcomed Shipper support to ensure a downward decline in the sample is avoided.

The TWG concluded the review of Small NDMs and agreed to move to model smoothing with the Small NDM results presented.

## Large NDM Analysis >2, 196 MWh pa

JL provided the results for Large NDM analysis, modelling results and WAR Band analysis, with the agreed sample data aggregations for Bands 7 and 8.

The workgroup examined the individual results for Band 5 and 6. Some reductions in the sample size for Band 5 were noted however the sample sizes were still reasonable. JL explained that the trigger for small sample sizes within the modelling system is 50 per sample run; he provided details of the actual reduction in numbers in the sample sizes.

The workgroup looked at the residual patterns. JL explained having NO LDZ on its own provided an  $R^2$  of 90%. If NO LDZ was merged with NW and WN LDZ it improves the residual results. The workgroup also looked at the residual patterns for EA and NT merged, which seemed to conclude that this would not diminish the results. The members present expressed a preference for 8 LDZ groupings as proposed.

The workgroup considered Band 9 for the Large NDM Modelling results noting a reduction in the sample size and in the R<sup>2</sup>. FC explained that Band 9 is a contingency band as these are large sites which are above the DM threshold, that are potentially not affected by weather and more likely affected by other factors such as price volatility. Cl asked the likelihood of using months instead for Band 9. PR questioned if there was a quick solution to improve Band 9. FC suggested that all of these sites in Band 9 should be DM and should only be in NDM Band 9 temporarily.

## Large NDM >2,196 MWh WAR Band Analysis

Whilst reviewing the Large NDM WAR Band Analysis and the size of the samples, CI asked if months opposed to CWV should be used. It was suggested the use of months would provide a seasonal effect and could be a future consideration. FC explained the impacts of Project Nexus on Allocation.

PR wanted a seasonal colour coded chart to be provided for the Large NDM Modelling results SW LDZ EUC Band 6, WAR Band 1.

JL recapped the decision made for Bands 7 and 8 to be merged into a group of 8 LDZs and the Technical Workgroup representatives agreed to move to model smoothing with the results presented.

JL confirmed that Xoserve intend to publish the draft parameter values week commencing 09 June for review at the next TWG meeting on 25 June 2014. The aim of the meeting will be to review the feedback on the figures. JL encouraged parties to provide any comments before the meeting.

## 4. Any Other Business

## 4.1 **Pre-payment Consumption Data**

PR confirmed E.ON continue to work on the validation and cleansing of their data with a view to providing it to Xoserve in due course. PR confirmed that the data would include consumptions.

## 5. Diary Planning

Meetings will take place as follows:

## **DESC and DESC Technical Workgroup Meetings 2014**

Time / Date	Venue	Meeting	Programme
09:30 Wednesday 11 June 2014	Teleconference	DESC	Review Climate Change Data Sets
10:30 Wednesday	31 Homer Road, Solihull B91 3LT /	DESC	Review responses to the E.ON Within-day

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25 June 2014	Teleconference	TWG	shape analysis	
			Review responses to draft NDM proposals and agree key messages for DESC	
		DESC	Approve Climate Change Data Sets	
10:30 Wednesday 09 July 2014	31 Homer Road, Solihull B91 3LT	DESC	Review and approval of 2014/15 NDM Algorithms for publication to the wider industry	
09:30 Wednesday 30 July 2014	Teleconference	DESC	Review representations (if any) from the wider industry and consider response	
10:30 Wednesday 12 November 2014	Energy Networks Association (ENA), 6 <sup>th</sup> 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
DTW1102	27/11/13	3.1	a) Xoserve to provide a workplan with timelines to include an investigation	Xoserve (FC/JL)	Complete
Revised	15/01/14		<ul> <li>b) Xoserve to provide a view on how long it would take to fill the gaps in historical weather data, and by when.</li> </ul>	Xoserve (FC/JL)	Closed
DTW0201	12/02/14	3.2	To provide a copy of the E.ON overnight temperature behavioural pattern data to Xoserve for their consideration.	E.ON UK (SB)	Closed
DTW0501	21/05/14	2.2	To review the E.ON 'Within-day Shape Analysis' paper for further consideration on 25 June 2014.	TWG reps	Pending
DTW0502	21/05/14	3.0	<ul> <li>a) TWG and Xoserve to work together to look at ways to enhance the current data sets with a target to have additional data for October;</li> <li>b) Xoserve to provide the TWG representatives with a specification by the end June.</li> </ul>	TWG reps and Xoserve	Pending