

Demand Estimation Sub-Committee Minutes

Monday 08 October 2018

at Radcliffe House, Blenheim Court, Warwick Road, Solihull B91 2AA

Attendees

Rebecca Hailes (Chair)	(RHa)	Joint Office	
Helen Cuin (Secretary)	(HCu)	Joint Office	
Chris Warner	(CW)	Cadent Gas	Voting Member
Connor Charles	(CC)	Gazprom	Voting Member
Dave Mitchell*	(DM)	SGN	Voting Member
Dean Pearson*	(DP)	NGN	Voting Member Alternate
Edd Fyfe*	(EF)	SGN	
Emma Buxton*	(EB)	NGN	
Fiona Speake	(FS)	N Power	
Jason Blackmore	(JB)	British Gas	Voting Member
John Jones	(JJ)	Scottish Power	
Joshua Mallett	(JM)	N Power	
Lorraine Edgcumbe	(LE)	E.ON	Voting Member
Louise Hellyer	(LH)	Total Gas & Power	Voting Member
Luke Reeves*	(LR)	EDF Energy	
Mandeep Pangli	(MPa)	Xoserve	
Mark Jones	(MJ)	SSE	Voting Member
Mark Perry	(MPe)	Xoserve	
Mark Palmer*	(MPal)	Orsted	
Mark Rixon*	(MR)	ENGIE	
Martin Attwood	(MA)	Xoserve	
Nick Pollard*	(NP)	NGN	
Simon Geddes	(SG)	National Grid	Voting Member

Apologies

(none)

**via teleconference*

Copies of papers are available at: <https://www.gasgovernance.co.uk/DESC/081018>

1. Introduction and Status Review

1.1. Apologies for Absence

None received.

1.2. Note of Alternates

Dean Pearson for Joanna Ferguson.

1.3. Approval of Minutes (09 August and 05 September 2018)

The minutes from the previous meetings were approved.

1.4. DESC related modification/change updates

MPe provided a brief summary on the current DESC related Modifications:

1. Related Changes from Modification 0644 - Improvements to nomination and reconciliation through the introduction of new EUC bands and improvements for the ALP and DAF. MPe confirmed an uplift of the ALPs and DAFs for Gas Year 18/19 had gone live 01 October 2018.
2. Modification 0652 - Introduction of winter read/consumption reports and associated obligations. MPe confirmed that the Winter Consumption Calculation is being discussed at the UIG Workgroups.
3. Modification 0654S - Mandating the provision of NDM sample data. MPe confirmed that the industry are waiting for confirmation of an implementation date in line with the IGT change. This is being discussed at the DSC Change Management Committee.
4. Modification 0659S - Improvements to the Composite Weather Variable. MPe confirmed this is also being discussed at the UIG Workgroups.
5. Change Proposal XRN4665 Creation of New EUCs. MPe confirmed this is related to the system changes for the New EUCs.

5.1. Review of Outstanding Actions

Action DESC1104

0201: Xoserve (MA) to provide reconciliation analysis for the SSPs and LSPs (any additional months) for the next meeting.

Update: Mark Perry (MPe) advised some analysis has been undertaken however due to the volume of data and complexities, an action has been taken by the UIG Taskforce to look into this. The UIG Taskforce are looking at the reconciliation analysis, algorithm performance, and the model's performance and will provide a report back to DESC. It was agreed that Xoserve would provide an indication of when the data will be available. **Carried Forward**

0701: Joint Office to add a new standard agenda item: DESC related modification/change updates (which are currently 0644, 0652, 0654, 0659 and XRN4665 Creation of New End User Categories)

Update: Completed. **Closed.**

0702: Xoserve to a) contact the Met Office to see what their back-up Weather Station is with the Filton Weather Station closing and b) if the secondary station to Filton is Almondsbury, check if weather data is available.

Update: See item 2. **Closed.**

0703: All to provide feedback on whether any of the current information is no longer required and what Users would like to see considered in the system going forward. Please send suggestions to the box account: Xoserve.demand.estimate@xoserve.com.

Update: MPe confirmed no feedback had been received so far. He suggested the action should remain open and encouraged interested parties to provide feedback. **Carried Forward**

6. Filton Weather Station Update

MPe referred to publication [Item 2 Filton Weather Station \(28 September 2018\)](https://www.gasgovernance.co.uk/DESC/081018) available at: <https://www.gasgovernance.co.uk/DESC/081018>

MPe provided an overview of Demand Estimation, and the key industry processes, explaining the use of End User Categories (EUCs).

MPE confirmed that for each Gas Year, DESC will develop or revise the definitions of the EUCs for the LDZ and the Demand Models for each EUC. The CDSP will then implement these decisions. The annual process for determining the EUCs and Demand Models for the following gas year begins with the production of a document called the "Spring Approach". The Spring Approach provides an overview of the proposed EUC definitions and how the modelling shall be performed, including a reference to the sample data required in order to produce the relevant demand models.

DESC approved the latest version of the Spring Approach after its meeting in February 2018, which included the possibility of deriving additional EUCs in Bands 1 and 2. Section H of UNC and the NDM Demand Estimation Methodology document provides more detail of the Demand Estimation process.

MPE summarised DESC's obligation (on page 4) to produce a set of EUC and Demand Models for the next Gas Year and provided the key dates associated with this process. MPE also provided a flow diagram to illustrate the EUC and Demand Model Lifecycle, explaining the use of the graph and how the critical item being addressed at each meeting will be shaded in green. He also explained the checkpoints signalled with a yellow symbol and provided the 2018 timetable to summarise the phases completed for 2018, and the past checkpoint meetings.

MPE went on to provide an update of the Filton weather station. He explained that Filton was used for the south west LDZ and was expected to close due to a housing development in the area. MPE referred to the Weather Station Substitution Methodology (WSSM) which covers this eventuality. He confirmed at present the Filton weather station remains open, however the Met Office have advised that closure is imminent and is likely to happen without warning.

MPE referred to a communication confirming that the switch to Yeovilton with bias adjustments was made from 01 October 2018. MPE confirmed at the previous DESC meeting DESC Committee Members agreed to use Yeovilton weather station as a substitute for Filton weather station.

LE enquired about the bias adjustment and staggering the changes. MPE confirmed the plan will be for DSEC to look at the CWV formula, the demand and optimisation work. He was anticipating a stepped change, and that all LDZs may have parameter changes, he clarified that the Yeovilton parameters will be considered as part of the review process, and that there may be a change in formulas.

MPE provided the conclusions (on page 10). He concluded that the Weather Station Substitution Methodology (WSSM) has been a very useful in supporting DESC through the management of the Filton weather station closure and that DESC will publish the table of bias adjustments for future reference.

JB enquired about the possibility of advance notification for weather station closures and the provision of actual closure dates to enable the industry to agree specific cut over dates. JB was concerned there was no definitive date of closure provided for Filton and asked if it was possible for a more definitive date going forward. It was recognised that advance warnings are out of Xoserve's control, however JB was keen to keep data from the weather station if it remained open for as long as possible. JB also expressed concern over any misalignment of data used by Shippers. JB suggested more advanced notice should be given of the actual date of the switch to allow the parameters in shipper systems to be replicated. Xoserve noted the concerns expressed by JB.

CC enquired about the wind speeds and bias adjustment. MPE explained that Xoserve will be looking at the adjustments and comparing this to the data still available from Filton, he clarified that the WSSM will provide an average value.

RHa enquired about any other stations that maybe at risk. It was agreed that this will be monitored.

7. Model Smoothing Methodology Review

MPE referred to publication [Item 3 Model Smoothing Evaluation 2018 \(28 September 2018\)](https://www.gasgovernance.co.uk/DESC/081018) available at: <https://www.gasgovernance.co.uk/DESC/081018>.

A further document had also been published to support the model smoothing evaluation presentation: [Item 3 Model Smoothing Investigative Analysis \(05 October 2018\)](https://www.gasgovernance.co.uk/DESC/081018) available at: <https://www.gasgovernance.co.uk/DESC/081018>

MPa provided an overview of Demand Estimation, and the key industry processes, explaining the use of End User Categories (EUCs) as in the previous presentation.

MPa provided a background to Model smoothing which was first undertaken in 1999/2000 and has been applied to all subsequent years, based on the methodology detailed in the Spring Approach document. In January 2006, DESC agreed to move to a biennial assessment of the continued applicability of model smoothing. The analysis presented today was the first full assessment of model smoothing since Autumn 2015 and has been carried out along the same lines.

The presentation summarised the Model Smoothing Principles, an assessment of the volatility along with the results and conclusions.

MPa provided slides on the model, CWV intercepts, and an illustration of how the model smoothing is managed. MPa also explained the steps undertaken to complete the review of model smoothing.

The aim of the analysis is to assess the predictive ability of each model type (smoothed and single year) by comparing the difference of the actual CWV intercept from the most recent data set (i.e. 2017/18) to the single year model and the smoothed model. This is achieved by using variations in the CWV intercepts and calculating the overall Root Mean Square (RMS) values.

The Analysis showed that the smoothed models for Large and Small NDM EUCs are associated with significantly lower year on year volatility as shown by generally narrower distribution of Composite Weather Variable (CWV) intercepts differences and generally notable smaller values in the corresponding RMS Values.

MPa provided slides detailing the analysis. These illustrated the volatility analysis for Small NDMs and Large NDMs by EUC bands, and the volatility analysis for the consumption bands. MPa also provided the volatility assessment model smoothing results and an assessment of the predictability.

MPa provided a summary of the Model smoothing results (on page 25) concluding there is no strong evidence that either smoothed models or single year models are consistently better.

MPa explained the patterns of CWV intercept trends, and provided the results of the analysis (on page 28). The table provided summarised the results for all EUCs for 3 year CWV intercept patterns. She pointed out there had been a rise in instances of an increasing Up-Up pattern and why this had been seen in the latest year's analysis, which Xoserve believed was due to receiving a lot more Shipper data which may have driven the change in weather sensitivity. It was clarified that an Up-Up increase means there is a decrease in weather sensitivity.

MPa went on to provide the load factor trends (on page 31) and a graph of the trends (on page 32).

MPa concluded that the principles of the model smoothing which were to: reduce year on year volatility; not necessarily to improve model prediction; and were necessary to review and assess if emerging trends are being identified.

MPa confirmed that the current analysis was consistent with the results from the previous analysis, and concluded that Model Smoothing does reduce year on year volatility overall and that there is no strong evidence that the predictive ability is consistently better.

MPa clarified that the results indicated that the current methodology of using model smoothing over 3 years is appropriate and fit for purpose. The DESC members were asked based on the information presented if there was an agreement to continue with 3 year model smoothing for the Spring 2019 and Spring 2020 analysis. There was a consensus from all DESC members to continue with the approach.

MPa suggested that the next review will be in Autumn 2021. There was a consensus from all DESC members to undertake the next review Autumn 2021.

8. NDM Sample Update

MA referred to publication [Item 4 NDM Sample Update \(28 September 2018\)](https://www.gasgovernance.co.uk/DESC/081018) available at: <https://www.gasgovernance.co.uk/DESC/081018>

MA provided an overview of the EUC and Demand Model Lifecycle flow diagram and confirmed the need to review the current NDM Sample numbers against the ideal target number for each EUC and LDZ combination. This is necessary to identify what actions may be required to boost the NDM Sample in readiness for the Autumn 2018 Algorithm Performance analysis, due to be presented at the December 2018 DESC meeting.

MA presented the background to the topic which is required in order to develop accurate allocation profiles for NDM supply meter points (Class 3&4). He confirmed that the NDM sample has traditionally been sourced by Xoserve, but as sample numbers have been declining, DESC has previously explored the use of third party data. Following approval, third party data was first utilised during the Spring 2016 modelling. MA also referred to [Modification 0654S – “Mandating the provision of NDM sample data”](#), which when implemented, will obligate shippers with a portfolio greater than 25,000 supply points to actively provide NDM sample data. He highlighted 33 Shippers have a portfolio of greater than 25,000 sites. CW confirmed the implementation date of the modification will be discussed at the DSC Change Management Committee as there were a number of responses suggesting a 3 month lead time would be required (see <https://www.gasgovernance.co.uk/DSC-Change/101018>).

MA provided a number of slides of the samples and concluded that the current sample numbers are below the revised targets in most EUC & LDZ combinations and that additional sample data will be required to improve the analysis of the demand model's performance during Gas Year 2017/18.

MA confirmed that Third Party data boosted the sample by approximately 11,000 sites in Spring 2018 with circa 2,000 Pre-Payment Customers; circa 9,000 I&C Customers.

MA confirmed that the Shippers who provided data in Spring 2018 have been contacted to request either a 'top-up' to the data already provided or additional data, and as a result Xoserve have provided data for around 14,000 extra sites from 4 Shippers.

MA recommended that the provision of Third Party Data should still be actively encouraged by Xoserve. He highlighted that the full requirements are provided in a document available on the Joint Office website at: www.gasgovernance.co.uk/DESC, and any enquires should be directed to: xoserve.demand.estimation@xoserve.com.

It was agreed the request for Third Party data would be communicated via the Key Messages.

MA summarised the next steps (on page 12) for collating and validating NDM sample data for the modelling and algorithm performance analysis and concluded the presentation.

9. Seasonal Normal Review

MPE referred to publication [Item 5 Seasonal Normal Review \(28 September 2018\)](https://www.gasgovernance.co.uk/DESC/081018) available at: <https://www.gasgovernance.co.uk/DESC/081018>

MPE provided a high level view of the work required and reminded DESC of their obligations under TPD Section H, and the work required during 2019. This included a review of the CWV and Seasonal Normal basis of the CWV (SNCWV).

MPE explained that the last review of the CWV formula and SNCWV was completed by DESC in 2014. The revised values took effect from 01 October 2015 and still remain in place.

MPE reported that the CWV and SNCWV are key building blocks in the production of demand models, profiles, peak load factors and the NDM allocation formula. For stability across the many industry processes impacted, DESC review the CWV and SNCWV every 5 years. The current basis 'expires' on 30 September 2020. The review of CWV and SNCWV needs to be completed during 2019 in order that the Spring modelling in 2020 can be performed using the new arrangements, when profiles for Gas Year 2020/21 will be produced.

MPE provided a timeline, the high level activities required, and the considerations required around the timeline and associated release schedules for system changes i.e. SAP (which were believed to be June and November, with a possible release in February).

MPE summarised the high level activities and the approach for CWV and the SNCWV and the need for DESC to agree the approach, before the analysis is undertaken. He confirmed DESC had agreed the Climate Change Methodology (CCM) output remains fit for purpose and can be used in the next Seasonal Normal review.

LH asked about the potential additional meetings and when these will be scheduled.

DESC also considered the development and scope of [Modification 0659S - "Improvements to the Composite Weather Variable"](#), and the additional considerations the Workgroup should include. DESC members were encouraged to become involved in the Workgroup to ensure key considerations are undertaken by the industry.

MPE provided a slide summarises the key points for discussion (on page 8), he asked for member's views on the need for a sub-group of DESC to discuss elements in between DESC meetings. The current set-up of the DESC Technical Workgroup (DESC TWG) was considered and whether the right expertise was available, noting attendees were very similar to DESC. MPE was keen to encourage experts/ analysts to be involved.

It was anticipated that more DESC TWG meetings would be required and in light of this Shippers should review whether the right expertise was available for these additional meetings.

Action 1001: DESC members to review the representatives for the DESC Technical Workgroup with the view of providing alternative representatives with appropriate expertise.

MPE provided a reminder of the work required during 2019 relating to the review of the Composite Weather Variable (CWV) formula and the Seasonal Normal basis of the CWV (SNCWV) and encouraged members to review the approach documents available on the secure website (Folder 18.NDM Profiling and Capacity Estimation Algorithms / 2015_16 Gas Year / 6. SN 2015 Data).

Action 1002: DESC members to review the approach documents: Summary of CWV Review 2015; and Final Approach to Seasonal Normal Basis 2015 via the Xoserve secured website (<https://www.xoserve.com/index.php/our-systems/extranet-secured-sites>). For any enquires contact: xoserve.demand.estimate@xoserve.com.

Xoserve's recommended next steps were:

- Await conclusions from Modification 0659S Workgroup and use of additional weather data items to inform DESC's analysis.
- DESC to produce initial draft approach documents for how the review of CWV Formula and SNCWV values could be carried out.
- Agree more detailed timetable of activities and checkpoints for 2019 at December 2018 DESC meeting.

10. Communication of Key Messages

It was agreed that Xoserve would produce the required Key Messages for circulation to the industry and these would include the following topics:

Third Party Data requirement (including a reminder of the obligations under Modification 0654S).

Seasonal Normal Review to be instigated (including the engagement of industry experts).

11. Any Other Business

11.1. Xoserve Staff changes

MPE confirmed that Fiona Cottam had been moved onto the UIG Taskforce and future DESC meetings will be supported by Mark Perry for the next 6 months.

12. Diary Planning

Further details of planned meetings are available at: <https://www.gasgovernance.co.uk/events-calendar/month>

Workgroup meetings will take place as follows:

Time / Date	Venue	Workgroup Programme
10:00 Monday 10 December 2018	Radcliffe House, Blenheim Court, Warwick Road, Solihull B91 2AA	Evaluation of Algorithm Performance Modelling Approach – Spring 2019 Seasonal Normal Review DESC TWG Representation Communication of Key Messages
10:00 Monday 11 February 2019	Radcliffe House, Blenheim Court, Warwick Road, Solihull B91 2AA	Agenda items TBC
10:00 Tuesday 24 April 2019	Radcliffe House, Blenheim Court, Warwick Road, Solihull B91 2AA	Agenda items TBC
10:00 Wednesday 15 May 2019	Radcliffe House, Blenheim Court, Warwick Road, Solihull B91 2AA	Agenda items TBC
10:00 Monday 08 July 2019	Radcliffe House, Blenheim Court, Warwick Road, Solihull B91 2AA	Agenda items TBC
10:00 Monday 22 July 2019	Radcliffe House, Blenheim Court, Warwick Road, Solihull B91 2AA	Agenda items TBC
10:00 Monday 07 October 2019	Radcliffe House, Blenheim Court, Warwick Road, Solihull B91 2AA	Agenda items TBC
10:00 Monday 09 December 2019	Radcliffe House, Blenheim Court, Warwick Road, Solihull B91 2AA	Agenda items TBC

Action Table (as at 08 October 2018)

Action Ref	Meeting Date	Minute Ref	Action	Owner	Status Update
DESC 0201	13/02/18	2.0	Xoserve (MA) to provide reconciliation analysis for the SSPs and LSP's (any additional months) for the next meeting.	Xoserve (MA)	Carried Forward
DESC 0701	24/07/18	1.4	Joint Office to add a new standard agenda item: DESC related modification/change updates (which are currently 0644, 0652, 0654, 0659 and XRN4665 Creation of New End User Categories)	Joint Office (HB)	Closed
DESC 0702	24/07/18	4.0	Xoserve to a) contact the Met Office to see what their back-up Weather Station is with the Filton Weather Station closing and b) if the secondary station to Filton is Almondsbury, check if weather data is available.	Xoserve (MPe)	Closed
DESC 0703	24/07/18	4.0	All to provide feedback on whether any of the current information is no longer required and what Users would like to see considered in the system going forward. Please send suggestions to the box account: Xoserve.demand.estimate@xoserve.com .	Xoserve (MPe)	Carried Forward
DESC 1001	08/10/18	9.0	DESC members to review the representatives for the DESC Technical Workgroup with the view of providing alternative representatives with appropriate expertise.	DESC Members	Pending
DESC 1002	08/10/18	9.0	DESC members to review the approach documents: Summary of CWV Review 2015; and Final Approach to Seasonal Normal Basis 2015 via the Xoserve secured website (https://www.xoserve.com/index.php/our-systems/extranet-secured-sites). For any enquires contact: xoserve.demand.estimate@xoserve.com .	DESC Members	Pending