XOSETVE

Demand Estimation Sub Committee Ad-hoc Work Plan

Background

- The DESC 'Ad-hoc Work Plan' was established in 2012 to capture any issues and ideas which arise during the year that DESC decide they may like to review at a later stage. The list of items is maintained by Xoserve
- The in depth review of the plan occurs at the end of July once the work to produce the NDM proposals has been completed / approved for the coming gas year
- Those items which are seen as a priority would then be added to the Autumn/Winter work plan schedule, which is traditionally when there is more time available to explore such items
- The Ad-hoc work plan is now a standing DESC agenda item and allows for new items to be added as necessary



Ad-hoc Work Plan Approach

JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	ОСТ	NOV	DEC
DESC / TWG Meetings		V)				

- Review progress on current prioritised work items
 - Add any new items to Adhoc Work Plan

- Review outstanding work items
- Agree priorities for next Autumn / Winter period

Key:

- Annual Demand Modelling
- Production of Derived Factors
- Algorithm Performance
- Standard / Ad-hoc work items



Ad-hoc Work Plan Status

- The following slides present all of the adhoc work plan items which have been generated by DESC or TWG and their current status
- There are 3 status categories:
- "IN PROGRESS": Items which have been assigned and prioritised at the formal review meeting in July
- "OUTSTANDING": Adhoc work plan items which have been raised but yet to be formally assigned for further work
- "COMPLETED": Items which have been investigated and reviewed by DESC / TWG with references to where the analysis can be found



Record of <u>IN PROGRESS</u> Adhoc Work Plan Items



July 2017 Ad-hoc Work Plan Agreement

- A reminder of the agreement from 26th July 2017 meeting, where DESC approved the following for the Autumn / Winter work schedule:
- Standard Work Plan Items
 - Algorithm Performance for Gas Year 2016/17
 - Spring Approach 2018 (preparations for Gas Year 2018/19)
 - Start to work on plans for Seasonal Normal Review 2020
- Ad-hoc Work Plan Items
 - Following UK Link replacement, continue to support industry discussions specifically around the ongoing monitoring / simulation of UiG levels
 - Establish process for Algorithm Performance measures for 'new world' algorithm
 - Work on upgrades to modelling processes / systems which develop Demand Estimation deliverables



Adhoc Work Plan Items – IN PROGRESS: (Prioritised July 2017)

Source	Description	Status
XOS 13/07/16	Support to UK Link replacement, including ongoing simulation of UiG levels	Ongoing
XOS 13/07/16	Establish process for Algorithm Performance measures for 'new world' algorithm	Ongoing (Strands 1 to 3 presented)
XOS 13/07/16	Update to modelling systems to accommodate new UK Link data structure (Spring 2018)	Ongoing
XOS 26/07/17	Continue work on improving current DE processes / systems	Ongoing



Record of <u>OUTSTANDING</u> Adhoc Work Plan Items



Adhoc Work Plan Items: OUTSTANDING

-	Source	Description of Work item	Estimated Effort *	Potential Approach	Next Steps	Ownership	Status
	TWG 20/04/12	Consider the application of weather correction to WAR Bands	High	Analysis to assess impacts of switching approach, and system implications of making changes	To be considered at Adhoc Work Plan review meeting in July 2018	Xoserve	Awaiting Prioritisation
	TWG 25/06/14	Review day of the week demand behaviours, particularly whether the modelling of Monday to Thursday demands together is still valid (Ref: E.Ons 14/15 rep – qry 1)	Medium	Statistical analysis using daily sample demands to establish if 'day of week' behaviours are consistent for Monday to Thursday	To be considered at Adhoc Work Plan review meeting in July 2018	Any TWG party	Awaiting Prioritisation
	TWG 25/06/14	All parties to suggest different ways that the EUC banding might be split, based on consumption levels or customer attributes, this was a post UKL replacement consideration (DE0202)	Low	Partly being addressed by potential introduction of new EUCs in bands 1 and 2 using new attributes	To be considered at Adhoc Work Plan review meeting in July 2018	Any TWG party	Awaiting Prioritisation
	DESC 13/02/18	Review appropriateness of current AQ boundaries for Large NDM EUCs (>2,196 MWh pa), currently requires 21 demand models for population of c.7,000 supply points	High	Detailed statistical analysis required, using daily sample data to try and identify unique end user categories i.e. consumers with specific consumption profiles and weather sensitivities	To be considered at Adhoc Work Plan review meeting in July 2018	Any TWG party	Awaiting Prioritisation

Key *

High: Detailed analysis / consultation required (>10 days effort)

Medium: Moderate amount of analysis required (2 to 10 days effort)

Low: 'Quick wins' e.g. request for data / minor analysis (<2 days effort)



Adhoc Work Plan Items: OUTSTANDING

Source	Description of Work item	Estimated Effort *	Potential Approach	Next Steps	Ownership	Status
DESC 13/02/18 (MOD 0644)	Part 1:Establish whether any additional weather data items (excl. temperature and wind speed) have a consistent relationship to daily gas demand Part 2: In the event that relationships exist, investigate possibilities of how this could be defined and incorporated into the CWV formula	High	Part 1: Detailed statistical analysis required using daily NDM gas demand and [x] weather data items Part 2: Extensive analysis required to define the relationship which can be incorporated with CWV formula	Feb'18: JB from British Gas agreed to start looking into Part 1	Part 1: Any TWG party Part 2: Any TWG party	Awaiting Prioritisation
Post DESC Feb' 18 meeting (MOD 0644)	Investigate if the weather sensitivities expressed by the DAF parameter for each EUC could be enhanced to improve the performance of the demand models when there are [X%] differences observed in the WCF i.e. CWV-SNCWV	High	Using daily sample gas demand review the performance of demand models and levels of daily UiG under certain WCF conditions - e.g. is it worse when WCF differences are larger?	To be considered at Adhoc Work Plan review meeting in July 2018	Any TWG party	Awaiting Prioritisation
Post DESC Feb' 18 meeting	Review whether the treatment of EUC Cut-Offs in the approach to demand modelling is still applicable	High	Using daily sample gas demand investigate EUC models which have exhibited a CWV Cut-Off and review whether their application has improved the performance of the models.	To be considered at Adhoc Work Plan review meeting in July 2018	Any TWG party	Awaiting Prioritisation

Key *

High: Detailed analysis / consultation required (>10 days effort)

Medium: Moderate amount of analysis required (2 to 10 days effort)

Low: 'Quick wins' e.g. request for data / minor analysis (<2 days effort)



Record of <u>COMPLETED</u> Adhoc Work Plan Items



Source	Description	Status
TWG 20/04/12	Review of appropriateness of current EUC definitions for Small and Large NDM	Completed - DESC TWG Meeting 15/01/2014
TWG 20/04/12	Investigate possibility of providing TWG with data during the Spring analysis WAR Band definitions review	Completed - Spring 2013 Analysis
TWG 15/08/12	Complete analysis and investigations into Options A,C and E in order to conclude views on final algorithm to take forward	Completed - DESC TWG Meeting 19/03/2013
TWG 15/08/12	'Maintenance work' on EUC modelling system / processes following first run through of annual cycle – including re-write of systems, updates to existing ones and documentation updates	Completed - Winter 12/13
TWG 15/08/12	Prepare for impacts of weather station change at Hulme Library impacting NW and WN LDZs	Completed - DESC Meeting 08/10/2013



Source	Description	Status
TWG Dec'12	Analysis to understand relationship between Birmingham Edgbaston and Winterbourne following announcement of Edgbaston closure	Completed - DESC TWG Meeting 28/01/2013
TWG 24/04/13	Review current LDZ aggregations used for EUC modelling and agree any potential new groupings. Followed by system updates and testing	Completed - DESC TWG Meeting 27/11/2013
TWG 20/04/12	Review of 'spike' validation rules applied to sample data during Spring (and Autumn) analysis	Completed - DESC TWG Meeting 12/02/2014
XOS 15/05/13	Windows 7 and Microsoft Office 2010 upgrades	Completed - Winter 14/15



Source	Description	Status
DESC 30/07/14	TWG to explore options for measuring Algorithm Performance in the Post UK Link replacement world.	Completed - DESC TWG Meeting 16/09/2015
TWG 27/04/15	TWG proposed that list of data aggregations for modelling should be reviewed in advance of Spring analysis to see what might be preferred/substituted	Completed - DESC TWG Meeting 17/11/2015
DESC 21/05/14	DESC and Xoserve to work together to establish a process of using Shipper consumption data to boost data available to modelling. Target Date October 2014 to assist Algorithm performance	Completed - DESC TWG Meeting 17/11/2015
XOS 06/07/15	Review of contents of NDM Booklet and modelling supporting files	Completed - Summer 2016



Source	Description	Status
DESC 13/11/13	Perform another review of Model Smoothing methodology in Autumn 2014 (following results presented in Autumn 2013)	Superseded. DESC agreed not to do this in 2014
TWG 23/05/12	Further consideration given to parameters / tests used for defining Warm Weather Cut off models	Completed - DESC Meeting 15/02/2017
TWG 26/06/13	Review actual sample consumption versus summer profiles in order to try and improve allocation process during summer months (linked to above)	Completed - DESC Meeting 15/02/2017

