

# xserve



respect > commitment > teamwork

## Technical Work Group

1<sup>st</sup> August 2012

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# Agenda

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- Lessons Learnt – Spring 2012 analysis
- Review and prioritise list of potential work areas for the Technical Work Group

# Objectives of this Meeting

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- Lessons Learnt:
  - Following completion of the modelling process (March to July) today's meeting is an opportunity to review which areas have gone well and where there is room for improvement
  - TWG were invited to send in their feedback to Xoserve in preparation for today's meeting
  - TWG to provide view on any changes required to 2013 process
- Review and prioritise list of potential work areas:
  - During modelling process some work areas have been identified by the TWG
  - Xoserve have added their own areas too
  - TWG need to agree / prioritise programme of work for Autumn / Winter period

# Lessons Learnt Background

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- As a reminder of the process followed during 2012 a high level summary of the various phases has been produced on the following slides
  - In order that workload and resources can be planned it is important any changes TWG propose for 2013 are agreed and implemented in advance of the modelling process
  - It is difficult/undesirable to be making process / system changes during the modelling work itself

# High level view of 2012 cycle (1 of 2)

- Once Spring Approach document reviewed and signed off by TWG, the end to end process is approx 20 weeks:

Weeks	Activity	Performed by
1-3	Data validation, aggregations, WAR band ratios defined	Xo
Milestone	TWG agree aggreg & WAR ratios for single year modelling	Xo / TWG
4-8	Single year modelling and preparation of results for TWG	Xo
Milestone	TWG review single year results and provide views before proceeding to model smoothing phase	Xo / TWG
9-10	Model smoothing and preparation of draft proposals	Xo
11-13	TWG review of proposals and providing feedback	TWG
Milestone	TWG meeting to discuss feedback & agree approach for DESC	Xo / TWG

# High level view of 2012 cycle (2 of 2)

Weeks	Activity	Performed by
14-16	Preparation of DESC material, DESC meeting and post DESC updates	Xo / DESC
Milestone	DESC agree draft proposals and invite representations from wider industry	Xo / DESC
17-19	Industry consultation period	Xo / DESC
Milestone	DESC notify industry of final proposals	Xo / DESC
20	Key systems updated with interface files	Xo

- The 2013 process will again be 20 weeks long framed by the defined start and end dates – i.e:
  - w/c 1<sup>st</sup> April (31<sup>st</sup> March gas day data available, end of Winter period)
  - w/c 12<sup>th</sup> August (system interface files required)

# Xoserve Lessons Learnt

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- (1) To consult with TWG on all data processing decisions outside of agreed Spring approach
  - For example change to spike validation criteria
  - Hopefully TWG agree Xoserve consulted on majority of areas
- (2) To provide more detail to TWG to help with decisions on WAR Band ratios
- (3) More info needed from TWG in advance on the analysis / results they would like to see presented. Where possible Xoserve will provide it
- (4) Consultation process felt more amicable

# Lessons Learnt

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Any Technical Workgroup views ?



# Potential Work Areas Background

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- In addition to the modelling work completed in Spring / Summer there are opportunities to perform adhoc analysis in Autumn / Winter period
- Programme for 2012/13 already includes:
  - NDM Algorithm Performance - Strand 1 WCF & SF analysis (Nov DESC)
  - Strands 2 & 3 RV analysis and NDM sample analysis (Feb DESC)
- Xoserve created a log to record any potential work areas as TWG identified them
- TWG agreement now required on the priority of these activities

# Assessment of Potential Work Areas

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- For each work area need to determine:
  - Scope of work
  - Measures / tests to be applied
  - Format of results
  - What decision could / would be made from the analysis
  - Who will undertake it
  - What is the priority level
  - How long should be assigned
    - Elapsed time / effort
    - Should work be time boxed ?

# Potential TWG work areas (1 of 2)

Ref No.	Source	Description	Status
1	TWG 20/04/12	Review of 'spike' validation rules applied to sample data during Spring (and Autumn) analysis	Raised
2	TWG 20/04/12	Review of appropriateness of current EUC definitions for Small and Large NDM	Raised
3	TWG 20/04/12	Investigate possibility of providing TWG with data during the Spring analysis WAR Band definitions review, and consider the application of weather correction to WAR Bands	Raised
4	TWG 23/05/12	Further consideration given to parameters / tests used for defining Warm Weather Cut off models	Raised
5	Xoserve	Complete analysis and investigations into Options A,C and E in order to conclude views on final algorithm to take forward	Proposed

# Potential TWG work areas (2 of 2)

Ref No.	Source	Description	Status
6	Xoserve	'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	Proposed

# Xoserve Thoughts on Potential Work Areas

## Ref No.1

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13

- “Review of ‘spike’ validation rules applied to sample data during Spring (and Autumn) analysis”
- What form would this take ? Perhaps review those sites that were borderline on the spike criteria and ‘assess’ whether sites were correctly removed from process
- With sample numbers dropping perhaps review should not be just about the spike, but missing reads and consecutive zeros ?
- Priority: Low ?

# Xoserve Thoughts on Potential Work Areas

## Ref No.2

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- “Review of appropriateness of current EUC definitions for Small and Large NDM”
- There are currently 33 EUCs per LDZ
  - 12 relate to Small NDM (approx 87% of load)
  - 21 relate to Large NDM
- Therefore a lot of effort in producing EUC models for a small % of overall NDM load
- Difficult to maintain sample numbers in higher bands
- However changes to EUC definitions likely to cause system impacts to all industry participants – especially any changes to Band 01B
- Analysis could still be performed off-line by TWG in order to find optimum EUC definitions BUT an appreciation by TWG is required on how long this may take to implement
- Priority: High ?

# Xoserve Thoughts on Potential Work Areas

## Ref No.3

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- “Investigate possibility of providing TWG with data during the Spring analysis WAR Band definitions review and consider the application of weather correction to WAR Bands”
- First part requires minor changes for TWG to review WC data at relevant stage of modelling process
- Second part needs greater consideration because of the system implications
  - For sites >293 MWh pa Sites & Meters is currently designed to assign an EUC band based on ratio of ACTUAL consumption for Dec-Mar period versus the SEASONAL NORMAL consumption (i.e. the AQ)
  - Is analysis required here or just a description from TWG on how the WAR band EUCs should be assigned followed by system impact assessment ?
- Priority: Low ?

# Xoserve Thoughts on Potential Work Areas

## Ref No.4

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16

- “Further consideration given to parameters / tests used for defining warm weather cut off models”
- For EUCs above 293 MWh pa current approach includes ‘best-fit’ cut-offs using a criteria of 20% improvement.
- Additional analysis performed during Spring modelling tried 10% and 30% improvement
  - ‘10%’ criteria resulted in 5 additional models with cut-offs
  - ‘30%’ criteria resulted in 1 less model with a cut-off
- Further adhoc analysis could be performed if TWG deem this a priority ? What analysis ?
- Priority: Low ?



# Xoserve Thoughts on Potential Work Areas

## Ref No.5

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17

- “Complete analysis and investigations into Options A, C and E in order to conclude views on final algorithm to take forward”
- Original discussions at DESC suggested settling on a new algorithm by the end of 2012
- To achieve this there is still a lot of work to do in order to ensure the final choice has been selected from consistent analysis
- TWG need to decide on approach required to analysis, who performs it and how results should be presented
- Priority: High ?

# Xoserve Thoughts on Potential Work Areas

## Ref No.6

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- “Maintenance work on EUC modelling system/process following first run through of annual cycle – including re-write of systems, updates to existing ones and documentation updates ”
- This years modelling process was run end to end by Xoserve for the first time
- It has involved a steep learning curve of running new systems and software whilst keeping TWG involved
- Along the way there has been areas identified for improvement which should hopefully help 2013 to run smoother
- Xoserve require some time to take stock, implement enhancements and complete documentation
- Priority: High ?

# Potential Work Areas Conclusions

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- Are there any additional work area items that TWG would like to raise ?
- TWG to agree which areas should be focussed on for this Autumn / Winter