

UNC 0754R:

Investigate Advanced Analytic Options to improve NDM Demand Modelling



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Glossary



- For those not familiar with all the industry abbreviations please find full name of those used in this presentation below:
 - UIG: Unidentified Gas
 - NDM: Non-Daily Metered
 - ALP: Annual Load Profile
 - DAF: Daily Adjustment Factor
 - PLF: Peak Load Factor
 - EUC: End User Category
 - DESC: Demand Estimation Sub Committee

Background?



- The Xoserve UIG Task Force reported that NDM modelling error is a significant factor in UIG volatility and that the use of advanced analytics, such as Machine Learning, can contribute to reducing this error
- The results of the Xoserve led industry consultation on the future of the NDM Algorithm concluded there was strong support for investigating advanced analytic options within certain boundaries (e.g. retain ALPs and DAFs)
- Improved NDM Allocation will result in a reduction in UIG volatility and subsequent Meter Point reconciliation/UIG volumes

Options



- The Xoserve UIG Task Force suggested some options for improving the accuracy of NDM Modelling which utilised Machine Learning
- There may well be other alternative advanced analytical approaches which can be considered

Scope and Objectives



- This Request proposes a UNC Workgroup
- Scope/objectives:
 - Investigate different options of advanced analytic techniques to produce the underlying EUC Demand Models that are required to create the key parameters of ALP, DAF and PLF
 - Simulate NDM Allocation / UIG over recent historic periods in order to prove the benefits of any proposed options when compared to current approach
 - Provide recommendations/results to DESC to consider as part of its obligations to manage the Demand Estimation process
- UNC Workgroup allows work to proceed at a reasonable pace and increases visibility of progress across the industry
- A collaborative industry approach is likely to generate more ideas/options which can benefit everyone

Recommended Steps



- The Proposer recommends that this Request should be:
 - Referred to a Workgroup for assessment