

Demand Estimation Update

September 2024

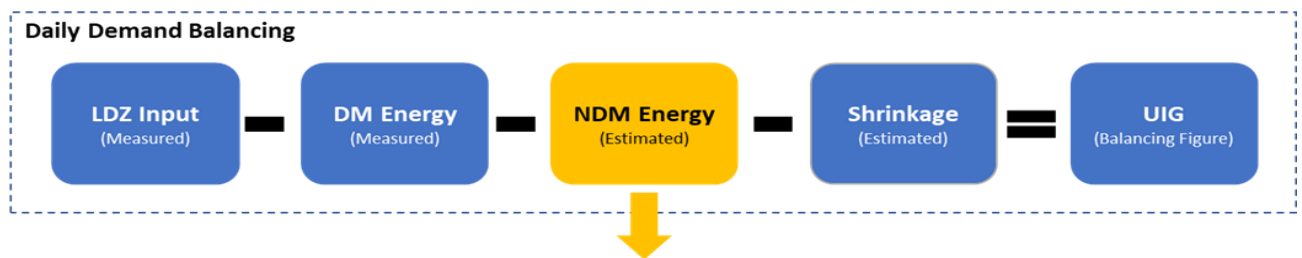
Dear Customers and Industry Colleagues,

Xoserve would like to share an update regarding key Demand Estimation parameters, used in daily demand balancing activities, that are due to be refreshed on the commencement of the new Gas Year on 1st October 2024. These parameters are the **End User Categories (EUCs)** and **Gas Demand Profiles**.

The article reflects on any notable outcomes from this year’s annual demand modelling cycle and where to find the information relating to the new Gas Year 2024/25.

End User Categories (EUCs) and Gas Demand Profiles – Gas Year 2024/25

Ahead of a new Gas Year, [Demand Estimation Sub Committee \(DESC\)](#) are responsible for overseeing the production of EUCs and Gas Demand Profiles which are needed to support the estimation of Non-Daily Metered (NDM) demand (in the context of daily demand balancing calculations – summarised below)



The estimation of Non-Daily Metered (NDM) Energy is calculated using an algorithm requiring:

- End User Categories to represent the multiple types of gas consumer groups in the NDM Sector
- Gas Demand Profiles for each EUC, which, along with NDM Energy estimation, are used in AQ Calculation and Transportation Capacity Invoicing processes. Gas Demand Profiles are represented as:
 - **Annual Load Profile (ALP):** a view of the EUC’s typical gas consumption profile
 - **Daily Adjustment Factor (DAF):** a view of the EUC’s typical weather sensitivity reaction
 - **Peak Load Factor (PLF):** a view of the EUC’s typical reaction to extreme cold weather

Following this year’s Demand Modelling process, DESC have **not changed** the underlying EUC definitions and so the current set of 39 EUCs per Local Distribution Zone (LDZ) will persist for Gas Year 2024/25. The assignment of EUCs to NDM Supply Meter Points will continue to be based on geographical location, Annual Quantity (AQ) kWh boundaries, Winter Consumption, Market Sector Code, Meter Type and Payment Method.

The alphanumeric descriptions associated to the latest EUC definitions, incorporating references to the new Gas Year and latest Winter Annual Ratios (WAR), were shared with Gas Shippers electronically via the .EUC file issued on 23 August 2024. The EUC definitions and Gas Demand Profiles for Gas Year 2024/25 are also available on the secure area on Xoserve.com, explained further on the Demand Estimation webpage [here](#).

Notable items from this year’s Demand Modelling process, which derived the EUCs and Gas Demand Profiles for Gas Year 2024/25, are:

- A robust set of sampling numbers across EUC Bands and Local Distribution Zones (LDZs) were provided, validated and available for the latest 12-month modelling period (April '23 to March '24) – see Fig.1

Fig.1 Latest set of sampling supply points available for Demand Modelling

Consumption Range (MWh pa)	EUC Band	Duration of data set	Size of Data Set	
0 - 73.2	1	12 Months	12,464	supply points
73.2 - 293	2	12 Months	4,716	supply points
293 - 2,196	3 & 4	12 Months	5,519	supply points
2,196 - >58,600	5 to 9	12 Months	1,301	supply points

- As described in the [approach to demand modelling](#), the latest modelling period for each EUC (see Fig.2) was combined with the most recent two years (March '21 to March'22 and April '22 to March '23) to create a three year ‘smoothed’ demand model (see Fig.3). Due to the impacts of recent socio-economic factors (such as the pandemic and energy price crisis) and the absence of reliable prepayment sample data, this year was the first time since 2020 that the same three contributing years were aligned across all EUCs.
- The results for the latest modelling period for the Small NDM sector (0 to 2,196 MWh pa) and subsequent smoothed demand models revealed an increase in weather sensitivity (see example in Fig.4). This change in consumer behaviour driven by price driven conservation is in line with indicators seen across the industry, such as Annual Quantity (AQ) levels and Unidentified Gas (UIG) trends.

Fig.2 Example of model for NO:01BND for latest modelling period (Apr'23 to Mar'24)

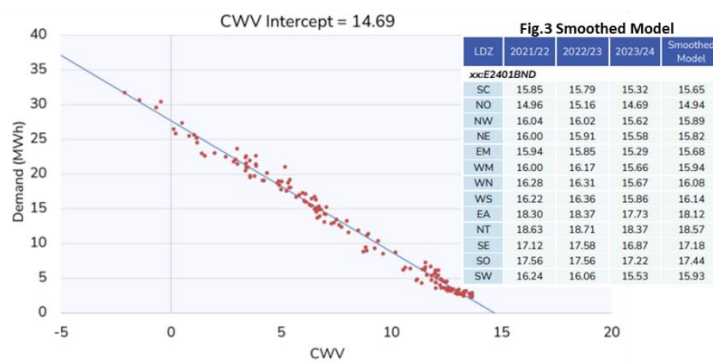
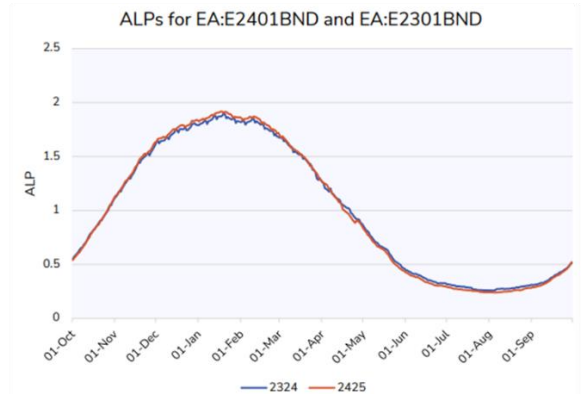


Fig.4 Smoothed Model translated to Annual Load Profile – Gas Year 2024/25 vs 2023/24



DESC has a UNC requirement to provide a summary of the end-to-end process to create the annual Gas Demand Profiles. This is available to customers in the annual **NDM Algorithms Booklet** in Folder 18 of the secure area. Navigate to location: 2024-25 Gas Year / 4 NDM Algorithms Booklet.

Seasonal Normal Review 2025

A reminder that Gas Year 2024/25 will be the final year of the current Seasonal Normal basis which was established and approved by DESC in 2019 and became effective from 01 October 2020.

The latest review of the Composite Weather Variable (CWV) formula and Seasonal Normal value (SNCWV) is currently being discussed by DESC and is due to conclude at the end of this year. Link to 2024 meetings [here](#). The new values will become effective from 01 October 2025. Further news article updates will be provided by the CDSP during 2025.

Further Information

For further information please take a look at Xoserve's dedicated Demand Estimation web page [here](#).

For any follow up queries for the Demand Estimation Team please raise a Help and Support request [here](#).