Demand Estimation Sub Committee

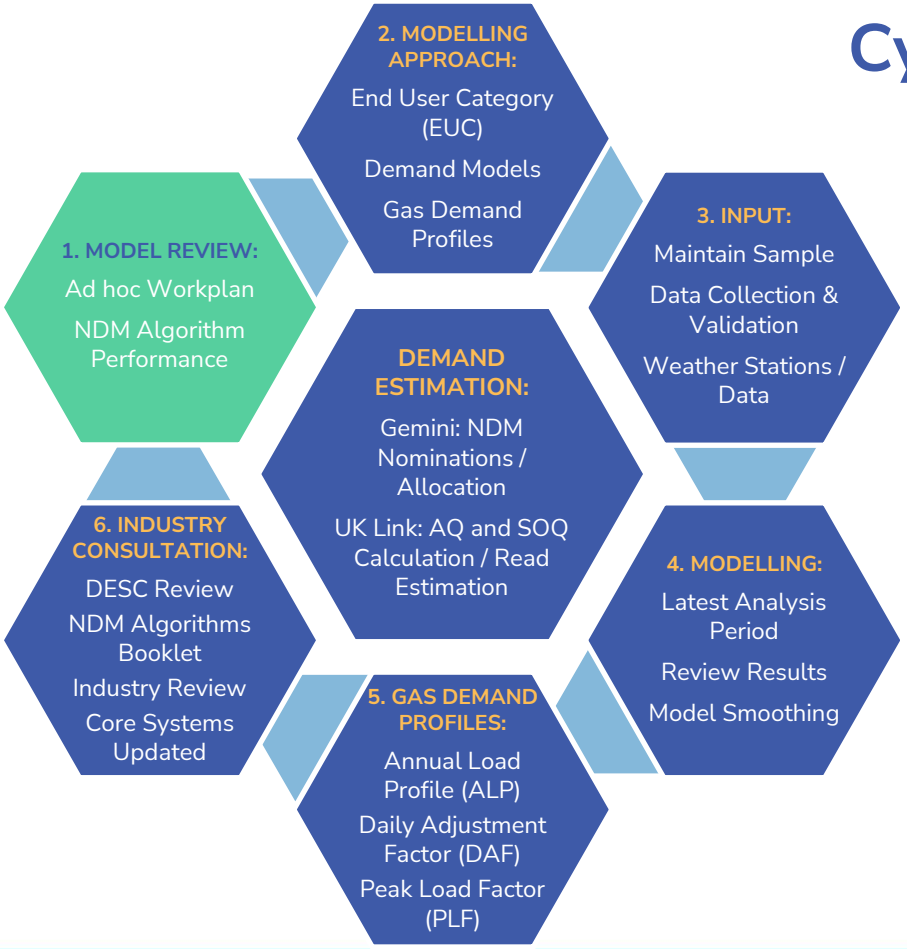
5.0 Ad Hoc Workplan Update

19 December 2023

Contents

- Timetable and Objectives
- Weather API Update
- Flexible Power Generation Sites Update

Demand Estimation Cycle



- An overview of the Demand Estimation process and output can be found here
- Annual modelling cycle of activities are represented in diagram opposite
- This presentation relates to the Model Review phase of the Demand Model cycle

CDSP / DESC Obligations and Timetable: October 2023 to September 2024

Milestone	UNC H Ref	2023			2024								
		Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
DESC Membership confirmed	1.12	✔		✔									
NDM Sampling: Data Collection and Validation	1.6	✔						✔					
NDM Algorithm Performance for Gas Year 2022/23	1.8			✔								✔	
DESC Adhoc Workplan	1.7	✔		✔			✔				✔		
DESC Modelling Approach – EUCs and Demand Models	1.7			✔			✔						
Single Year EUC Demand Modelling	1.7								✔				
Model Smoothing and Draft Gas Demand Profiles	1.7									✔			
Industry Consultation	1.8									✔	✔		
Gas Demand Profiles finalised and Core systems updated	1.9											✔	
Seasonal Normal Review 2025	1.4	✔		✔			✔		✔		✔		

Objective

- To provide an update on the progress of the workplan items agreed with DESC at the July 23 meeting:
- Additional workplan items agreed were:
  - Manage Daily Weather Data Service Provider contract as CDSP transitions from 'file format delivery' to API platform solution
  - Supporting transition to a UK Link API, to poll daily weather data for Demand Estimation processes
- The following ad hoc workplan items were agreed at the meeting:
  - Model Smoothing Review – Covered in agenda item 5.1
  - Review Day of Week Demand Behaviours – To be covered at the March 24 DESC meeting
  - Review the Impact of Flexible Power Generation sites on NDM Modelling Error – Covered later in this pack

Weather API – Progress update

- We are currently running an extended ‘Dual run’ period to understand any differences in the data from the 2 streams and any impacts this may have on downstream calculations. Assuming the testing is successful, implementation is currently planned for mid to late January 2024

- As a result of this implementation, we anticipate some minor differences in the underlying weather data received (i.e. between the legacy data feed and new API platform), examples below:

  - Forecasts – all variables are using DTN’s updated forecasting methodology which is based off gridded co-ordinates as opposed to at weather station level. This should provide a more accurate forecast
  - Actuals – where Actual observations are not available from weather stations, they will be replaced with Forecasts (as they are now) which will be based on the approach referenced above

- Raw data cannot be shared, however we will be happy to support those UNC parties who may replicate CWV calculations and have follow up queries

Flexible Power Generation Sites – Progress update

- We have received a list of Flexible Power Generation Sites from all Distribution Networks, however we are aware that this may not be a complete list.
- In total we received/able to identify 238 sites, we have postcodes for others but we were unable to identify an MPRN
  - 68 of these are in either Class 1 or 2
  - 25 in Class 3
  - 137 in Class 4
  - 8 MPRNs were not live on UK Link
- The table on the right shows the % of Class 3 and 4 MPRNs that are Flexible Power Generation sites in Bands 1-9 (along with % of the EUC AQ)
- **Next Steps:** To investigate impacts to NDM modelling error further for these sites we ideally require daily data.
  Are DESC able to support with this?

National Based on I and C EUCs in each consumption band (Class 3 and 4 MPRs only)		
Consumption Band	**% Based on Count**	**% based on AQ**
1	0.00%	0.00%
2	0.00%	0.00%
3	0.00%	0.00%
4	0.00%	0.00%
5	0.00%	0.00%
6	2.00%	2.40%
7	11.20%	12.20%
8	21.60%	21.00%
9	7.70%	8.60%
Overall Total	**0.00%**	**3.50%**