



## **Demand Estimation Sub Committee**

7.0 Seasonal Normal Review 2025  
Climate Change Methodology (CCM)

13<sup>th</sup> December 2022

# Overview



- Annual modelling cycle of activities are represented in diagram opposite
- This presentation relates to **“Seasonal Normal Review”** which sits outside of the annual cycle of work – reviewed every 5 years

## CDSP / DESC Obligations and Timetable: October 2022 to September 2023

Milestone	UNC H Ref	10/22	11/22	12/22	01/23	02/23	03/23	04/23	05/23	06/23	07/23	08/23	09/23
DESC Membership confirmed	1.12	✓											
NDM Sampling: Data Collection and Validation	1.6	✓						✓					
NDM Algorithm Performance for Gas Year 2021/22	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											✓	
Climate Change Methodology progressed (SN Review 2025)	1.4			✓			✓		✓		✓		

# Background

- DESC are responsible for a number of obligations in Section H of UNC, amongst them are the requirements to:
  - Review the Composite Weather Variable (CWV) (H 1.4.3) and
  - Review the Seasonal Normal equivalent referred to as the SNCWV (H 1.5.3)
- Reviews of the CWV formula and Seasonal Normal basis are normally only carried out by DESC every 5 years due to the time taken to perform the review and the need for stability. This would mean the next Seasonal Normal basis is scheduled to take effect from 1<sup>st</sup> October 2025
- DESC have the option of using a 'Climate Change Methodology' (CCM) to adjust historical weather data when deriving the Seasonal Normal basis – (H 1.4.6)
- In 2012, following a tender process, DESC procured a Climate Change Methodology (CCM) document and associated datasets from the Met Office.
- The latest DESC review derived a new CWV formula and new basis for the Seasonal Normal, which both came into effect from the 1<sup>st</sup> October 2020
- Adjustments were performed on historic Temperature data to remove the effects of climate change, while still preserving year on year variability for the seasonal normal calculation

# High Level Timeline

		2022			2023												2024												2025																					
		Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec										
Seasonal Normal Basis																Complete review of CWV Formula and SN basis Define methodology and calculate values for next period (2025 - 2030)																																		
	Requirements Gathering				Selection of Service provider				Creation of Climate Change Methodology and associated datasets																																									
Demand Estimation Profiles																																																		
								Develop profiles for Gas year 2023/24 using existing CWVs and SNCWVs											Develop profiles for Gas year 2024/25 using existing CWVs and SNCWVs																															
					Profiles in place for Gas year 2022/23 using existing CWVs and SNCWVs						Profiles in place for Gas year 2023/24 using existing CWVs and SNCWVs						Profiles in place for Gas year 2024/25 using existing CWVs and SNCWVs						Profiles go live using New CWVs and SNCWVs																											

# Objectives

- Provide an update on progress since last meeting
- Present an initial high-level view of Technical requirements
- Set out next steps for procurement of a new Climate change Methodology (CCM)

# Actions since last DESC meeting

- Following analysis presented at the July and October meetings, DESC agreed that a revision of the Climate Change Methodology (CCM) would be required to support Seasonal Normal Review 2025 (and beyond)
- A change proposal was presented at Change Management Committee (ChMC) on 9<sup>th</sup> November 2022 which gained approved from all parties
- Change reference number 'XRN5584' was assigned to capture all phases of the procurement and implementation of the new CCM

# Initial high-level view of requirements

- The Service Provider will be required to develop a “Climate Change Methodology” (“the Methodology”) as described in Uniform Network Code (Section H1.4.5)

This Methodology must describe the approach that will be applied to determine the future and historical impacts of climate change trends on GB weather

- The Service Provider will be required to develop a Methodology which will be applied to:
  - History for all data items from 1 January 1960
  - Data up to end of previous complete Gas Year
  - Hourly data forward for a period of [10 or 15 subject to quotation] years starting from 1 October 2025
- List of required data items:
  - Temperature in °C
  - Wind speed in Knots (or other specified measure)
  - Solar radiation in Kilojoules per m<sup>2</sup> (or other specified measure)
  - Precipitation in millimeters
- Previously, many additional Weather stations were chosen. Given the infrequency of closures, is this still necessary?
- What additional data should be considered as part of the ask? e.g.wind direction, relative humidity

# Technical Workgroup

- Would DESC members be interested in establishing a Technical Workgroup panel (no more than 2 or 3 parties) to oversee the procurement of CCM?

Typical panel responsibilities include:

- Scope of request and providing input and insight into requirements from industry perspective
- Review of tender responses against agreed scoring criteria
- Attend and actively participate in meetings with short-listed suppliers
- Final selection of provider
- Panel members likely to need to sign a confidentiality agreement

# Next Steps

- Confirm Technical workgroup panel participants
- CDSP DE Team will prepare a draft CCM Technical Requirements document which will become an important input to the procurement process
- DESC and/or Technical Workgroup will be asked to review and approve this document via correspondence and/or meeting in January
- CDSP to begin procurement activities