



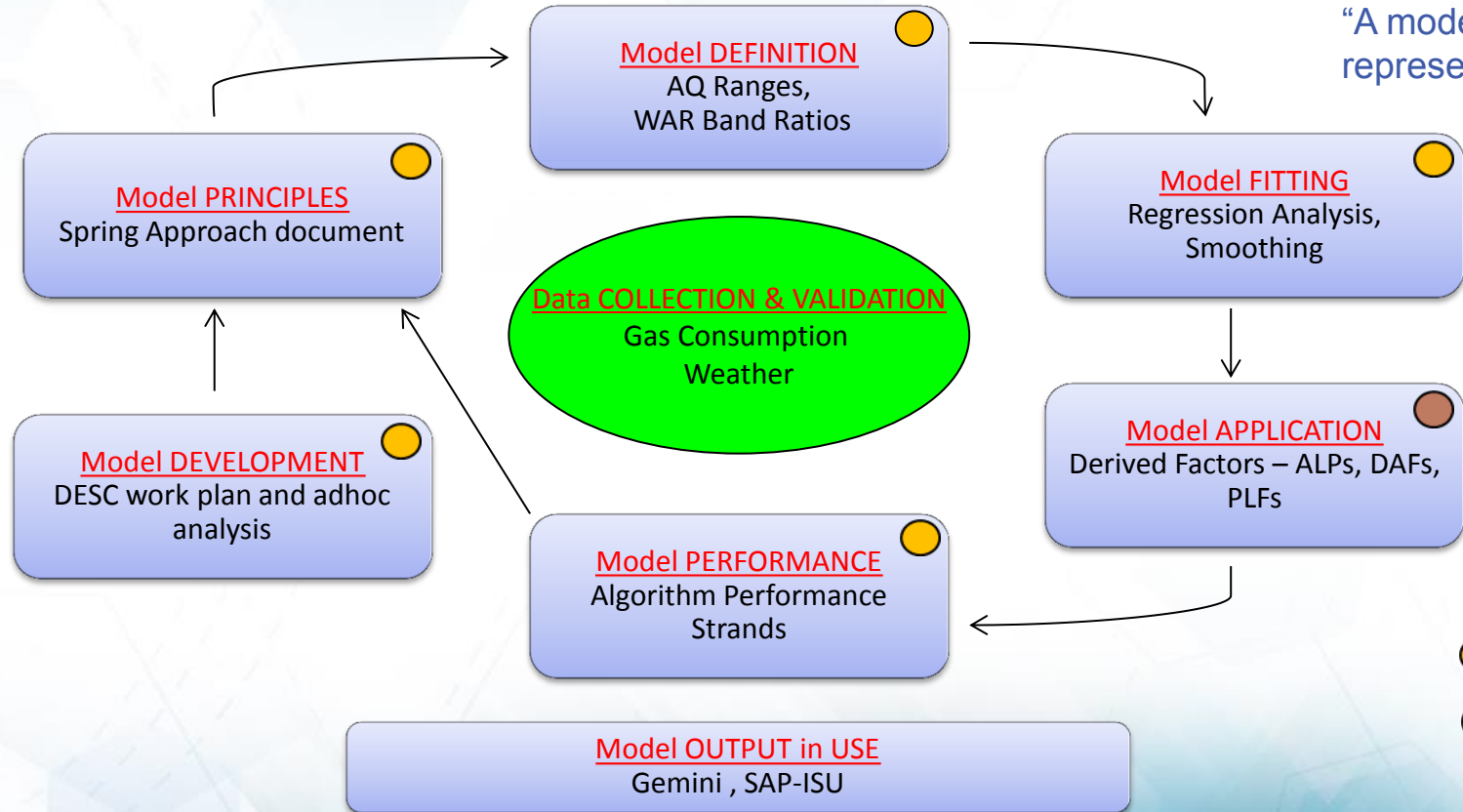
Seasonal Normal Review

DESC: 8th October 2018

Overview: EUC & Demand Model Lifecycle

The purpose of the **EUC Demand Model** is to represent the behaviour and reactions of the **EUC Population**

“A model is a simplified representation of reality”



- DESC / TWG Checkpoint
- Industry Consultation

- To provide DESC with high level view of the work required during 2019 relating to:
 - The review of the Composite Weather Variable (CWV) formula and
 - The Seasonal Normal basis of the CWV (SNCWV)
- Why do DESC need to do this ?
- Reminder of DESC's UNC Section H obligations:
 - *“1.4.3 The Committee will, at appropriate frequencies determined by it, **review** and where appropriate **revise** (with effect from the start of a Gas Year) the **formula** by which the **Composite Weather Variable** for an LDZ will be determined.”*
 - *“1.5.3 The Committee will, at appropriate frequencies determined by it, after consultation with the Uniform Network Code Committee, **review** and where appropriate **revise** (with effect from the start of a Gas Year) the **seasonal normal value** (for each Day in a year) of the **Composite Weather Variable** for an LDZ.”*

- The last review of the CWV formula and Seasonal Normal basis was completed by DESC in 2014. The revised values took effect from 1st October 2015 and remain in place today
- The CWV and SNCWV are key building blocks in the production of demand models, profiles, peak load factors and the NDM allocation formula
- For stability across the many industry processes impacted, DESC review the CWV and SNCWV every 5 years. The current basis 'expires' on 30th September 2020
- The review of CWV and SNCWV needs to be completed during 2019 in order that the Spring modelling in 2020 can be performed using the new arrangements, when profiles for Gas Year 2020/21 will be produced

Background – Timeline

High Level Timeline of CWV / SNCWV Review

2018			2019												2020														
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			
MOD 659 Conclusions - agreement on weather data items for CWV			Complete review of CWV Formula and Seasonal Normal Basis, Define methodology and calculate values for next period (2020-2025)																										
															New CWVs and SNCWVs approved by DESC														
			Develop Profiles for GY 2019/20 using existing CWVs and SNCWVs						Profiles in place for Gas Year 2019/20, using existing CWVs and SNCWVs																				
															Preparation for Modelling for GY 2020/21														
																					Develop Profiles for GY 2020/21 using new CWVs and SNCWVs								
																											Profiles go LIVE using new CWVs and SNCWVs		
			SYSTEM CHANGE - CWV Formula and Receipt of Additional Weather Data Items																										

Current CWVs and SNCWVs

Prep. for New CWVs and SNCWVs

Approach – High Level activities - CWV

- Jan to Oct 2019:

“Complete review of CWV Formula and Seasonal Normal Basis. Define methodology and calculate values for next period (2020-2025)”

- Review of CWV Formula

- DESC agree approach for reviewing the effectiveness/performance of the CWV Formula (*doc.*)
- DESC perform and review analysis of the CWV Formula (*analysis*)
- **KEY MILESTONE:** DESC define a proposed CWV Formula for next period i.e. Gas Year 2020/21

- Optimise parameters within CWV Formula

- DESC agree approach for optimising the parameters/weightings within agreed CWV Formula (*doc.*)
- DESC perform and review CWV optimisation analysis (*extensive analysis*)
- **KEY MILESTONE:** DESC confirm the CWV Formula and parameters for GY 2020/21

- CWV History re-stated using agreed formula

Approach – High Level activities - SNCWV

- Jan to Oct 2019:

“Complete review of CWV Formula and Seasonal Normal Basis. Define methodology and calculate values for next period (2020-2025)”

- DESC have already agreed that Climate Change Methodology (CCM) output remains fit for purpose and can be used in the next Seasonal Normal review (may need to revisit this if additional weather variables are required)
- Review of SNCWV Formula
 - DESC agree approach for reviewing the effectiveness/performance of the SNCWV values (.doc)
 - DESC perform and review analysis of the SNCWV values (analysis)
 - **KEY MILESTONE:** DESC define approach for deriving the SNCWV values for GY 2020/21
- Produce SNCWV values (dependency on CWV Formula)
 - DESC calculate SNCWV values in line with agreed approach
 - **KEY MILESTONE:** DESC and UNCC approve the SNCWV values for GY 2020/21

- Current CWV parameters were optimised using aggregate NDM demand i.e. $LDZ - DM - SHR = NDM$. Post 1st June 2017, aggregate NDM demand in Gemini is a bottom up estimate using DE models
- Assumption: The relationship between CWV and Demand will continue to use aggregate NDM demand. If so, from 1st June 2017 onwards values will need to be 'back-calculated' ?
- Analysis/Performance of existing CWV Formula would produce a 'baseline' which any subsequent CWV Formula can be measured against
- The analysis work required in 2019 is extensive, any thoughts on how it can be shared out ?, do we need a sub-group of DESC who discuss things inbetween DESC meetings to keep momentum up ? (similar to CCM project)

- Reminder of objective:
To provide DESC with high level view of the work required during 2019 relating to:
 - The review of the Composite Weather Variable (CWV) formula and
 - The Seasonal Normal basis of the CWV (SNCWV)
- Hopefully presentation has provided this, however for more insight into the work performed during 2014 please review the approach documents on the secure website:

Folder 18.NDM Profiling and Capacity Estimation Algorithms / 2015_16 Gas Year /
6. SN 2015 Data

- Summary of CWV Review 2015.pdf
- Final Approach to Seasonal Normal Basis 2015.pdf

Next Steps

- Await conclusions from MOD0659S Workgroup and use of additional weather data items to inform DESC's analysis
- DESC to produce initial draft approach documents for how the review of CWV Formula and SNCWV values could be carried out
- Agree more detailed timetable of activities and checkpoints for 2019 at December DESC meeting