



Review Group 280

Action 004:

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- Annual NDM Proposals Output:

Key Outputs	Data Source for DESC	Published	Calculation
Annual Load Profile (ALP)	ALPDAFyy.txt	June	$SNDt / (\sum SNDt / \text{no.of days})$
Daily Adjustment Factor (DAF)	ALPDAFyy.txt	June	$\frac{WSENst}{SNDt} \text{ (for EUC)}$ $WSENst / SNDt \text{ (for agg.NDM in LDZ)}$
Load Factors (LF)	LFyy.txt	June	<p>Small NDM:</p> $\frac{\text{Agg AQ from EUC Model}}{1 \text{ in } 20 \text{ peak demand from EUC model } * 365}$ <p>Large NDM:</p> $\frac{1}{ALPt (1+WCFp * DAFt)}$
EUCs	SSC01.PN000009.EUC	August	

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- Annual Load Profile (ALP):

Key Outputs	Calculation / Detail	Data Source for DESC	Published
Annual Load Profile (ALP)	$SNDt / (\sum SNDt / \text{no.of days})$	ALPDAFyy .txt	June
SNDt for the EUC is derived from smoothed EUC demand model	$SNDt = Pt * (C1 + C2 * SNCWV)$	SNCWV: SNCWVyy.txt C1 & C2 parameters: EUCPARyyL.txt / EUCPARyyS.txt Pt parameters: EUCWKyyS.txt / EUCWKyyL.txt / EUCHOLyyL.TXT / EUCHOLyyS.txt (average of 3 years holiday factors) Holiday Codes: WKHOLDEFyy.txt	June
Appendix 4 - EUC Model Smoothing Methodology	Detailed document explaining process for applying EUC model smoothing	Appndx04.doc	June
Single year EUC model parameters (x3) i.e constants, weekend factors	Results from single year analysis	Example Data for '09/10 NDM Proposals: MDLPAR07.doc MDLPAR08.doc MDLPAR09.doc Note: Holiday Factors for individual years not currently provided	June
Single year EUC models (x3)	Calculate single year model parameters via regression analysis as described in Appendix 3	Data required: CWVs: cwvmmyy n.txt Holiday Codes: WKHOLDEFyy.txt Demand Data: Sample Data	June
Appendix 3 - Demand Modelling Structure	Detailed document explaining process for defining regression analysis	Appndx03.doc	June
Sample Demand Data	Daily demand data either by supply point level or by aggregation depending on sample size	<i>Example Files:</i> SCSM_DL1.TXT SCSM_DR1.TXT LGNDM_OA.TXT	On Request - June

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- Daily Adjustment Factor (DAF):

Key Outputs	Calculation / Detail	Data Source for DESC	Published
Daily Adjustment Factor (DAF)	$\frac{WSENSt}{SNDt}$ (for EUC) WSENSt / SNDt (for agg.NDM in LDZ)	ALPDAFyy .txt	June
WSENSt (for EUC)	$WSENSt = Pt * C2$	C1 & C2 parameters: EUCPARyyL.txt / EUCPARyyS.txt Pt parameters: EUCWKyyS.txt / EUCWKyyL.txt / EUCHOLyyL.TXT / EUCHOLyyS.txt	June
SNDt (for EUC)	$SNDt = Pt * (C1 + C2 * SNCWV)$	SNCWV: SNCWVyy.txt C1 & C2 parameters: EUCPARyyL.txt / EUCPARyyS.txt Pt parameters: EUCWKyyS.txt / EUCWKyyL.txt / EUCHOLyyL.TXT / EUCHOLyyS.txt Holiday Codes: WKHOLDEFyy.txt	June
WSENSt (for agg.NDM)	WSENSt	WSENSt values have been obtained from historical models of aggregate NDM demand derived using a separate but equivalent methodology to EUC demand modelling. Aggregate NDM demand data not currently provided to DESC but available on Gemini and on National Grid data item explorer. WSENSt is provided to DESC for all days of the target gas year. File: SNDWSENSyy.txt	June
SNDt (for agg.NDM)	SNDt	SNDt values have been obtained from historical models of aggregate NDM demand derived using a separate but equivalent methodology to EUC demand modelling. Aggregate NDM demand data not currently provided to DESC but available on Gemini and on National Grid data item explorer. SNDt is provided to DESC for all days of the target gas year. File: SNDWSENSyy.txt	June

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- Load Factor (LF):

Key Outputs	Calculation / Detail	Data Source for DESC	Published
Load Factors (LF)	<p>Small NDM: <u>Agg AQ from EUC Model</u> 1 in 20 peak demand from EUC model *365</p> <p>Large NDM: $\frac{1}{ALPt (1+WCFp * DAft)}$</p>	Lfyy.txt	June
Small PLF	<p><u>Agg. AQ from EUC Model</u> 1 in 20 peak demand from EUC model * 365</p>	<p>Aggregate model derived AQ for each EUC sample is the sum of model derived SND for that EUC sample for all days of a 365 day year. 1 in 20 peak demand for each small NDM EUC sample derived from simulation - not currently provided to DESC. Simulation as per NG Gas Demand Forecasting Methodology</p>	June
Large PLF	$\frac{1}{ALPt (1+WCFp * DAft)}$	<p>ALPt: ALPDAFyy.txt DAft: ALPDAFyy.txt WCFp: Provided in NDM report</p>	June
WCFp	$(PDN / SNDNm) - 1$	<p><u>PDN</u>: Derived from simulation of historical model of aggregate NDM demand - not currently provided to DESC Simulation as per NG Gas Demand Forecasting Methodology <u>SNDNm</u>: Maximum agg.NDM SND value - can be obtained by DESC from set of all SND and WSENS values provided for each LDZ.</p>	June

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- Non Annual process:

Process	Data Required
CWV Review	<p>CWVs: cwvmmyy.txt / SIS</p> <p>Agg. NDM Demand Data (for non-holiday Mondays to Thursdays): Gemini / National Grid data item explorer</p>
Optimisation of CWV Parameters	<p>Daily Temperatures and Windspeeds: Not currently provided - Met Office / Metoegroup (TBC)</p> <p>Agg.NDM Demand Data (for non-holiday Mondays to Thursdays): Gemini / National Grid data item explorer</p> <p>Maximum potential demand data (cold weather upturn): Not currently provided to DESC</p> <p>Erroneous days of DM or other data is required: Provided to DESC via presentation</p> <p>Corrections to aggregate NDM demand data when required/feasible (for example past instances of offtake measurement errors - notified to industry via other means).</p>
SNCWV	<p>Daily Temperatures and Windspeeds: Source depends on final agreed industry solution</p> <p>CWV Parameters: Appndx12.doc / Presentation</p>