

# **Scaling Factors & WCFs in 2009/10 (on new weather basis)**

# Background

- Concern expressed by shippers about the new seasonal normal basis applied from the start of gas year 2010/11.
- Ad-hoc analysis has been carried out to estimate the impact of the new seasonal normal basis on WCFs and SFs over the most recent gas year.
- Demand attribution replicated over gas year 2009/10 using new weather basis.
- Revised SFs and WCFs calculated using new weather basis.

# Methodology used to calculate revised SFs & WCFs

## 1. Obtained / estimated relevant values for calculations:

- Revised daily NDM EUC aggregate AQs (2009/10 actual AQs multiplied by AQ Factors)
- Retro ALPs and DAFs (from 2010/11 smoothed models applied to 2009/10)
- Revised pseudo SNDs calculated from revised AQs on 01/10/09 and retro ALPs ( with pseudo SNDs for WN LDZ from 01/07/10 onwards based on the revised AQs on 01/07/10)
- Actual daily LDZ aggregate NDM demand values
- Revised CWVs, SNCWVs, LDZ SND and WSENS (used to calculate EWCFs)

## 2. WCFs and SFs recalculated by replicating NDM demand attribution on each day in 2009/10 using above values.

## Differences Between Average Values of SF Offsets from 1, Gas Year 2009/10, Actual v Revised

LDZ	Mon-Thur	Friday	Saturday	Sunday	Winter	Summer
SC	0.000	-0.001	-0.001	-0.001	0.000	-0.001
NO	-0.001	-0.001	-0.002	-0.001	-0.001	-0.002
NW	0.009	0.010	0.011	0.010	0.002	0.018
NE	0.006	0.006	0.005	0.005	0.001	0.010
EM	0.007	0.008	0.008	0.008	0.002	0.014
WM	0.008	0.008	0.008	0.009	0.001	0.014
WN	0.001	0.001	0.000	0.001	-0.001	0.002
WS	0.001	0.001	0.001	0.002	0.000	0.001
EA	0.003	0.003	0.002	0.003	0.001	0.004
NT	-0.001	-0.001	-0.001	0.000	0.000	-0.002
SE	0.002	0.003	0.002	0.003	0.001	0.003
SO	0.001	0.000	0.000	0.001	0.000	0.001
SW	0.002	0.001	0.001	0.001	0.001	0.002

# Differences in Average Values of Root Mean Square Deviation of SF from 1, Gas Year 2009/10, Actual v Revised

LDZ	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
SC	-0.0028	-0.0013	-0.0005	-0.0006	0.0006	-0.0004	-0.0026	-0.0039	-0.0131	-0.0067	-0.0031	0.0001
ND	-0.0043	-0.0021	0.0001	0.0009	0.0010	-0.0006	-0.0049	-0.0103	-0.0121	-0.0050	-0.0012	-0.0040
NW	0.0039	0.0031	0.0012	0.0013	0.0012	0.0029	0.0072	0.0160	0.0253	0.0224	0.0039	0.0192
NE	0.0039	0.0015	0.0007	0.0003	0.0001	0.0014	0.0035	0.0078	0.0146	0.0127	0.0042	0.0120
EM	0.0057	0.0021	0.0007	0.0004	-0.0002	0.0019	0.0048	0.0113	0.0186	0.0166	0.0036	0.0154
VM	0.0049	0.0017	0.0001	0.0004	0.0007	0.0003	0.0045	0.0036	0.0182	0.0134	-0.0039	0.0039
VN	-0.0020	-0.0003	-0.0001	0.0007	0.0005	-0.0001	-0.0015	-0.0016	-0.0014	0.0028	0.0005	-0.0007
VS	-0.0017	-0.0007	-0.0001	-0.0003	0.0000	-0.0003	-0.0016	-0.0028	-0.0040	-0.0006	-0.0022	-0.0006
EA	0.0009	-0.0007	-0.0011	-0.0010	-0.0003	-0.0009	-0.0018	-0.0012	0.0027	0.0035	-0.0014	0.0021
NT	-0.0063	-0.0045	-0.0022	-0.0027	-0.0018	-0.0030	-0.0074	-0.0113	-0.0034	-0.0018	-0.0032	-0.0072
SE	0.0007	-0.0013	-0.0007	-0.0003	-0.0004	-0.0001	-0.0020	-0.0015	0.0023	0.0014	-0.0021	0.0035
SO	-0.0042	-0.0032	-0.0019	-0.0024	-0.0011	-0.0012	-0.0057	-0.0061	-0.0033	-0.0026	-0.0043	-0.0009
SW	-0.0010	-0.0006	0.0003	0.0005	0.0001	0.0003	-0.0003	-0.0006	0.0013	0.0020	-0.0013	0.0036
AVG	0.0001	-0.0005	-0.0002	-0.0002	0.0000	0.0001	-0.0003	0.0002	0.0031	0.0045	-0.0001	0.0036

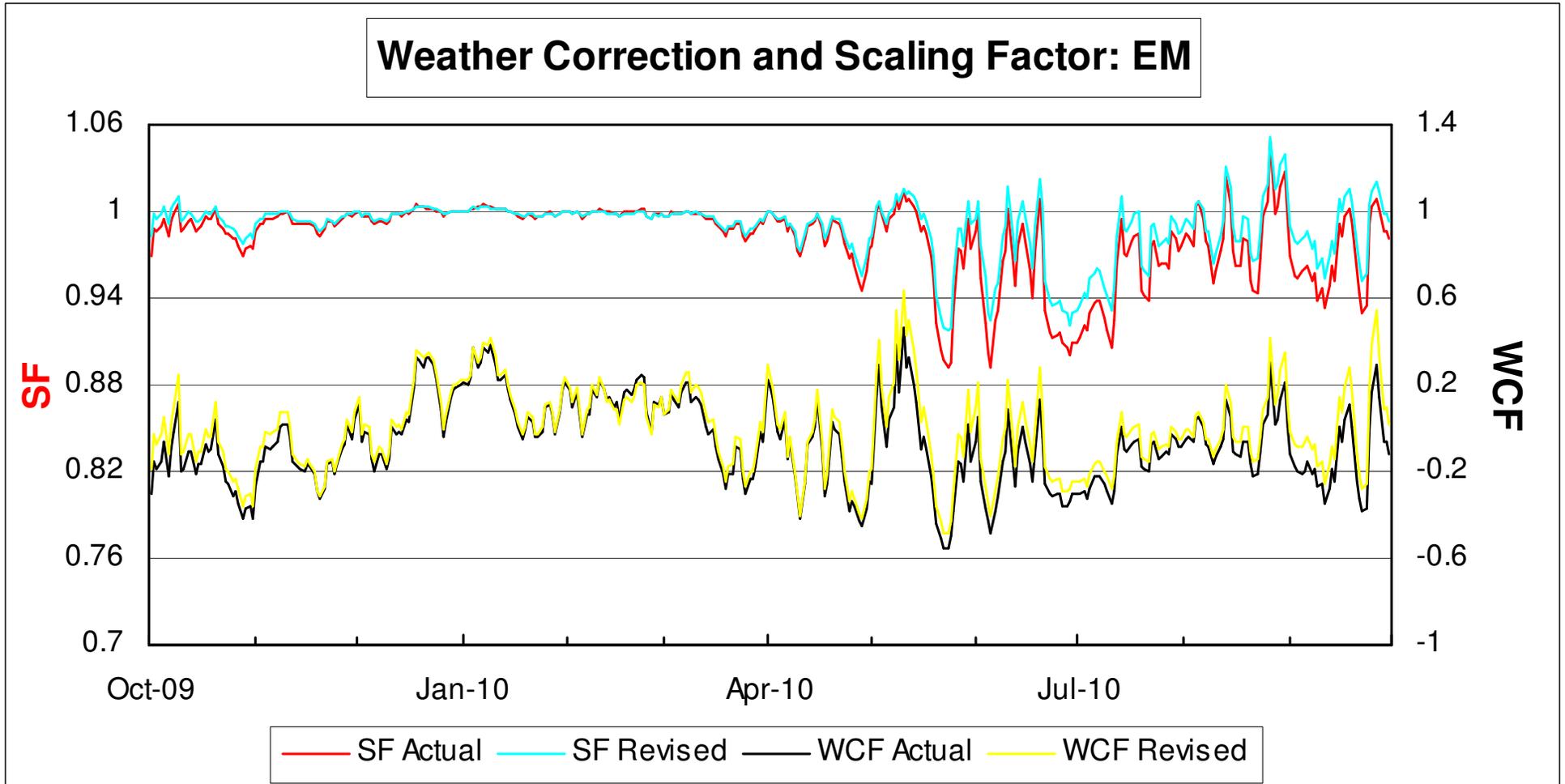
## Differences in Average Values of WCF, Gas Year 2009/10, Actual v Revised

LDZ	Mon-Thur	Friday	Saturday	Sunday	Winter	Summer
SC	0.045	0.043	0.046	0.054	-0.004	0.058
NO	0.054	0.057	0.058	0.070	-0.027	0.079
NW	0.055	0.058	0.064	0.049	-0.033	0.083
NE	0.053	0.053	0.057	0.025	-0.033	0.076
EM	0.049	0.056	0.060	0.068	-0.034	0.083
WM	0.053	0.057	0.057	0.070	-0.004	0.085
WN	0.047	0.048	0.036	0.005	-0.034	0.083
WS	0.047	0.049	0.053	0.061	-0.037	0.062
EA	0.035	0.042	0.038	0.011	-0.028	0.054
NT	0.021	0.024	0.001	-0.033	-0.030	0.043
SE	0.036	0.042	0.021	-0.010	-0.026	0.059
SO	0.044	0.052	0.050	0.056	0.014	0.057
SW	0.046	0.053	0.056	0.025	-0.034	0.077

# Conclusions from analysis

- The revised average SF shows an improvement (i.e. was closer to one) in a majority of LDZs on all days of the week and over the winter and summer periods compared to the actual average SF in 2009/10.
- Results of monthly RMS values of SF deviation from one were mixed with an overall improvement in 6 months over the year, an overall worsening in 5 months and one month overall the same.
- Revised average WCF values were closer to zero in 2009/10 than the actual average WCF values in all LDZs on all days of the week (apart from 2 LDZs on Sundays) and in all LDZs in the summer, but were further away from zero in 12 LDZs in the winter.

# Example WCF / SF graph: EM



# Example WCF / SF graph: SW

