

Supprting Information

Sensitivity Analysis of Coal and Bagasse Co-Firing in an Integrated Gasification Combined Cycle Power Plant

OVERALL FLOWSHEET BALANCE

*** MASS BALANCE ***			
	IN	OUT	RELATIVE DIFF.
CONVENTIONAL COMPONENTS	MOL/SEC	KMOL/SEC	
C	0.00000	0.749495E-02	-1.00000
WATER	0.166525	0.366296E-02	0.978004
CO2	0.00000	0.217594E-02	-1.00000
CO	0.00000	1.53098	-1.00000
H2	0.00000	0.632215	-1.00000
SO2	0.00000	0.165047E-04	-1.00000
NO2	0.00000	0.126401E-17	0.00000
O2	0.656275	0.322232E-13	1.00000
NO	0.00000	0.477772E-09	-1.00000
SO	0.00000	0.00000	0.00000
SO3	0.00000	0.804212E-13	-1.00000
N2	0.00000	0.370479E-01	-1.00000
S	0.00000	0.312322E-01	-1.00000
CL2	0.00000	0.00000	0.00000
SUBTOTAL (KMOL/SEC)	0.822800	2.24482	-0.633468
(KG/SEC)	24.0000	46.4499	-0.483315
NON-CONVENTIONAL COMPONENTS	(KG/SEC)	(KG/SEC)	
COAL	22.5000	0.00000	1.00000
ASH	7.50000	7.55007	-0.663186E-02
BAGASSE	0.00000	0.00000	0.00000
SUBTOTAL (KG/SEC)	30.0000	7.55007	0.748331
TOTAL BALANCE			
MASS (KG/SEC)	54.0000	54.0000	0.210531E-14
ENTHALPY (WATT)	-0.547488E+08	-0.392604E+08	-0.282899

CO2 EQUIVALENT SUMMARY

FEED STREAMS CO2E	0.00000	KG/SEC
PRODUCT STREAMS CO2E	0.957627E-01	KG/SEC
NET STREAMS CO2E PRODUCTION	0.957627E-01	KG/SEC
UTILITIES CO2E PRODUCTION	0.00000	KG/SEC
TOTAL CO2E PRODUCTION	0.957627E-01	KG/SEC