

Cost Comparison of Alternative SO ₂ Compliance Plans All Costs in 2005 PVRR \$ x1000															
Case09- Option 9: DFGD MS BR3															
Case00- Option 0: BASE CASE W/ ENV DISP															
Capital Cost Sensitivity:															
Fuel Forecast: Base															
Load Forecast: Base															
SO ₂ Price Forecast: Base															
NOx Price Forecast: Base															
Other Description: SO ₂ Dispatch, TC2 2010, No B/G SCR															
DFGD MS BR3															
Capital Cost Sensitivity:															
Fuel Forecast: Base															
Load Forecast: Base															
SO ₂ Price Forecast: Base															
NOx Price Forecast: Base															
Other Description: SO ₂ Dispatch, TC2 2010, No B/G SCR															
DFGD MS BR3															
SO ₂ Environmental Controls:															
Unit	SO ₂ Tech	SO ₂ Rem %	Cost (M\$)	In-Service	SO ₂ Rem %	Cost (M\$)	In-Service	SO ₂ Tech	SO ₂ Rem %	Cost (M\$)	In-Service	SO ₂ Tech	SO ₂ Rem %	Cost (M\$)	In-Service
Brown 1	n/a	0%	0	0	n/a	0%	0	n/a	0%	0	0	n/a	0%	0	0
Brown 2	n/a	0%	0	0	n/a	0%	0	n/a	0%	0	0	n/a	0%	0	0
Brown 3	FS MS+Dy/FGD	93%	107M\$ B/G	2009	n/a	0%	0	n/a	0%	0	0	n/a	0%	0	0
Chem 1	n/a	0%	0	0	n/a	0%	0	n/a	0%	0	0	n/a	0%	0	0
Chem 2	n/a	0%	0	0	n/a	0%	0	n/a	0%	0	0	n/a	0%	0	0
Chem 3	n/a	0%	0	0	n/a	0%	0	n/a	0%	0	0	n/a	0%	0	0
Chem 4	n/a	0%	0	0	n/a	0%	0	n/a	0%	0	0	n/a	0%	0	0
SO ₂ Allowances Purchased: 2,113,444															
SO ₂ Tons Emitted: 3,936,834															
Largest Annual SO ₂ Purchase (as a % of EPA Allocation): 289%															
NO _x Allowances Purchased: 152,981															
NO _x Tons Emitted: 605,796															
Year	Allowance Price (\$/Nominal/ton) NOx	SO ₂	Production \$	Combined Company Allow. Purchases NOx \$	SO ₂ \$	Capital \$	NPV Total \$	Allowance Price (\$/Nominal/ton) NOx	SO ₂	Production \$	Combined Company Allow. Purchases NOx \$	SO ₂ \$	Capital \$	NPV Total \$	
2005	3146	392	1,962	-	-	1,962	-	3146	392	1,962	-	-	1,962	-	
2006	3063	405	2,533	-	-	2,533	-	3063	405	2,533	-	-	2,533	-	
2007	2599	412	6,189	-	3,822	9,342	-	2599	412	6,189	-	3,822	9,342	-	
2008	2349	419	9,342	-	22,343	13,709	-	2349	419	9,342	-	22,343	13,709	-	
2009	2309	407	13,267	-	13,267	13,709	-	2309	407	13,267	-	13,267	13,709	-	
2010	1874	538	844	844	36,256	13,591	844	1874	538	844	844	36,256	13,591	844	
2011	1666	547	3,296	3,296	33,000	12,128	3,296	1666	547	3,296	3,296	33,000	12,128	3,296	
2012	1752	558	3,484	3,484	32,860	10,818	3,484	1752	558	3,484	3,484	32,860	10,818	3,484	
2013	1731	569	4,403	4,403	31,795	9,643	4,403	1731	569	4,403	4,403	31,795	9,643	4,403	
2014	2344	580	6,424	6,424	31,598	8,589	6,424	2344	580	6,424	6,424	31,598	8,589	6,424	
2015	2400	592	11,906	11,906	37,269	7,643	11,906	2400	592	11,906	11,906	37,269	7,643	11,906	
2016	2596	604	12,550	12,550	35,561	6,794	12,550	2596	604	12,550	12,550	35,561	6,794	12,550	
2017	2656	616	12,862	12,862	34,418	6,027	12,862	2656	616	12,862	12,862	34,418	6,027	12,862	
2018	2668	628	12,238	12,238	34,044	5,332	12,238	2668	628	12,238	12,238	34,044	5,332	12,238	
2019	2674	641	11,503	11,503	32,923	4,704	11,503	2674	641	11,503	11,503	32,923	4,704	11,503	
2020	2713	653	11,677	11,677	31,577	4,136	11,677	2713	653	11,677	11,677	31,577	4,136	11,677	
2021	2807	666	12,162	12,162	30,732	3,624	12,162	2807	666	12,162	12,162	30,732	3,624	12,162	
2022	2833	680	11,542	11,542	29,437	3,162	11,542	2833	680	11,542	11,542	29,437	3,162	11,542	
2023	2861	693	11,152	11,152	27,715	2,746	11,152	2861	693	11,152	11,152	27,715	2,746	11,152	
2024	2918	707	11,102	11,102	26,891	2,372	11,102	2918	707	11,102	11,102	26,891	2,372	11,102	
2025	2977	721	10,783	10,783	26,131	2,010	10,783	2977	721	10,783	10,783	26,131	2,010	10,783	
2026	-	-	-	-	-	1,567	-	-	-	-	-	-	-	1,567	
2027	-	-	-	-	-	1,330	-	-	-	-	-	-	-	1,330	
2028	-	-	-	-	-	1,117	-	-	-	-	-	-	-	1,117	
2029	-	-	-	-	-	213	-	-	-	-	-	-	-	213	
2030	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Totals			14,067,907	147,929	551,439	141,281	14,908,556	14,027,565	145,818	711,926	25,444	14,910,754	213	(2,198)	

Cost Comparison of Alternative SO ₂ Compliance Plans															
All Costs in 2005 PVRR \$ x1000															
Case 10- Option 10: FS E. COMP BR123															
Capital Cost Sensitivity:															
Fuel Forecast: Base															
Load Forecast: Base															
SO ₂ Price Forecast: Base															
NOx Price Forecast: Base															
Other Description: SO ₂ Dispatch, TC2 2010, No BR3 SCR FS E. COMP BR123															
SO ₂ Environmental Controls:															
Unit SO ₂ Tech SO ₂ Rem % Cost (\$/M\$) In-Service															
Brown 1 FS E Coal 2007 0% 0 0															
Brown 2 FS E Coal 2008 0% 0 0															
Brown 3 FS E Coal 2008 0% 0 0															
Green 1 n/a n/a 0% 0 0															
Green 2 n/a n/a 0% 0 0															
Green 3 n/a n/a 0% 0 0															
Green 4 n/a n/a 0% 0 0															
SO ₂ Allowances Purchased: 2,129,732 SO ₂ Tons Emitted: 3,953,122															
Largest Annual SO ₂ Purchase (as a % of EPA Allocation): 291%															
NO _x Allowances Purchased: 151,385 NO _x Tons Emitted: 604,200															
Year	Allowance Price (\$/Nominal/ton) NOx	Production \$	Combined Company Allow. Purchases NOx \$	Capital \$	NPV Total \$	Allowance Price (\$/Nominal/ton) SO ₂	Production \$	Combined Company Allow. Purchases SO ₂ \$	Capital \$	NPV Total \$	Allowance Price (\$/Nominal/ton) NOx	Production \$	Combined Company Allow. Purchases NOx \$	Capital \$	NPV Total \$
2005	3146	392	-	2,569	-	3146	392	-	2,569	-	3146	392	-	2,569	-
2006	3063	405	-	4,268	-	3063	405	-	4,268	-	3063	405	-	4,268	-
2007	2599	412	-	3,705	-	2599	412	-	3,705	-	2599	412	-	3,705	-
2008	2349	419	-	19,910	-	2349	419	-	19,910	-	2349	419	-	19,910	-
2009	2309	407	-	12,838	-	2309	407	-	12,838	-	2309	407	-	12,838	-
2010	1874	536	544	36,967	8,267	1874	536	544	36,967	8,267	1874	536	544	36,967	8,267
2011	1666	547	3,131	33,799	7,377	1666	547	3,131	33,799	7,377	1666	547	3,131	33,799	7,377
2012	1752	558	3,352	32,936	6,580	1752	558	3,352	32,936	6,580	1752	558	3,352	32,936	6,580
2013	1731	568	4,254	32,616	5,864	1731	568	4,254	32,616	5,864	1731	568	4,254	32,616	5,864
2014	2344	580	6,310	32,193	5,221	2344	580	6,310	32,193	5,221	2344	580	6,310	32,193	5,221
2015	2400	592	11,785	37,945	4,642	2400	592	11,772	47,599	1,010	2400	592	11,772	47,599	1,010
2016	2598	604	12,428	36,040	4,120	2598	604	12,409	45,578	890	2598	604	12,409	45,578	890
2017	2656	616	12,770	34,859	3,647	2656	616	12,742	44,246	783	2656	616	12,742	44,246	783
2018	2668	628	12,139	34,410	3,219	2668	628	12,112	43,338	685	2668	628	12,112	43,338	685
2019	2674	641	11,436	32,630	2,833	2674	641	11,411	41,056	598	2674	641	11,411	41,056	598
2020	2713	653	11,610	32,031	2,484	2713	653	11,583	40,253	519	2713	653	11,583	40,253	519
2021	2807	666	12,118	31,060	2,169	2807	666	12,085	39,240	448	2807	666	12,085	39,240	448
2022	2833	680	11,484	29,914	1,885	2833	680	11,466	37,635	384	2833	680	11,466	37,635	384
2023	2861	693	11,104	27,960	1,630	2861	693	11,077	35,515	327	2861	693	11,077	35,515	327
2024	2918	707	11,033	26,918	1,401	2918	707	10,996	34,106	276	2918	707	10,996	34,106	276
2025	2977	721	10,731	26,375	1,166	2977	721	10,695	33,297	201	2977	721	10,695	33,297	201
2026	-	-	-	-	822	-	-	-	-	-	-	-	-	-	-
2027	-	-	-	-	678	-	-	-	-	-	-	-	-	-	-
2028	-	-	-	-	441	-	-	-	-	-	-	-	-	-	-
2029	-	-	-	-	137	-	-	-	-	-	-	-	-	-	-
2030	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Totals			14,141,223	146,228	555,307	93,310	14,936,068	14,027,565	145,818	711,926	25,444	14,910,754	14,910,754	25,444	25,314

Cost Comparison of Alternative SO ₂ Compliance Plans													
All Costs in 2005 PVRR \$ x1000													
Case11- Option 11: DFGD MS BR23							Case00- Option 0: BASE CASE W/ ENV DISP						
Fuel Forecast: Base Load Forecast: Base SO ₂ Price Forecast: Base NOx Price Forecast: Base Other Description: SO ₂ Dispatch, TC2 2010, No BR3 SCR DFGD MS BR23							Fuel Forecast: Base Load Forecast: Base SO ₂ Price Forecast: Base NOx Price Forecast: Base Other Description: SO ₂ Dispatch, TC2 2010, No BR3 SCR						
SO ₂ Environmental Controls: Unit SO ₂ Tech SO ₂ Rem % Cost (M\$) In-Service Brown 1 na 0% 0 0 Brown 2 FS MS-Dry FGD 93% 143MS BR23 2009 0 Brown 3 FS MS-Dry FGD 93% 143MS BR23 2009 0 Chem 1 na 0% 0 0 Chem 2 na 0% 0 0 Chem 3 na 0% 0 0 Chem 4 na 0% 0 0 SO ₂ Allowances Purchased: 1,905,654 SO ₂ Tons Emitted: 3,729,044 Largest Annual SO ₂ Purchase (as a % of EPA Allocation): 259% NO _x Tons Emitted: 606,598 NO _x Allowances Purchased: 153,772							SO ₂ Environmental Controls: Unit SO ₂ Tech SO ₂ Rem % Cost (M\$) In-Service Brown 1 na 0% 0 0 Brown 2 na 0% 0 0 Brown 3 na 0% 0 0 Chem 1 na 0% 0 0 Chem 2 na 0% 0 0 Chem 3 na 0% 0 0 Chem 4 na 0% 0 0 SO ₂ Allowances Purchased: 2,721,938 SO ₂ Tons Emitted: 4,545,227 Largest Annual SO ₂ Purchase (as a % of EPA Allocation): 369% NO _x Tons Emitted: 603,779 NO _x Allowances Purchased: 150,964						
Year	Allowance Price (\$/Nominal/ton)	SO ₂	Production \$	Combined Company Allow. Purchases NOx \$	Capital \$	NPV Total \$	Allowance Price (\$/Nominal/ton)	SO ₂	Production \$	Combined Company Allow. Purchases NOx \$	Capital \$	NPV Total \$	Difference
2005	3146	392			2,154		3146	392			2,225		(71)
2006	3063	405			7,724		3063	405			2,873		(92)
2007	2599	412		3,822	7,724		2599	412		3,822	2,566		5,158
2008	2349	419		22,343	11,988		2349	419		22,343	2,291		9,697
2009	2309	407		20,042	14,663		2309	407		21,311	2,044		11,852
2010	1874	536		854	30,980		1874	536		49,224	1,823		26,544
2011	1668	547		3,376	28,195		1668	547		44,970	1,625		29,354
2012	1752	558		3,550	26,191		1752	558		43,099	1,448		31,378
2013	1731	569		4,445	27,321		1731	569		42,880	1,287		33,255
2014	2344	580		6,509	27,362		2344	580		42,415	1,141		33,396
2015	2400	592		11,981	33,564		2400	592		47,599	1,010		31,825
2016	2596	604		12,827	31,610		2596	604		45,578	890		29,880
2017	2656	616		12,931	30,577		2656	616		44,246	783		27,280
2018	2668	628		12,292	30,345		2668	628		43,338	685		24,366
2019	2674	641		11,543	29,317		2674	641		41,055	598		21,652
2020	2713	653		11,716	28,162		2713	653		40,253	519		18,066
2021	2807	666		12,207	27,453		2807	666		39,240	448		14,003
2022	2833	680		11,581	26,590		2833	680		37,635	384		9,950
2023	2861	693		11,187	24,690		2861	693		35,515	327		5,534
2024	2916	707		11,133	23,787		2916	707		34,106	276		984
2025	2977	721		10,814	23,361		2977	721		33,297	201		(3,623)
2026													2,171
2027													1,847
2028													1,557
2029													1,133
2030													3,085
Totals	14,083,383		148,748	497,711	183,997	14,913,838	14,027,565		145,818	711,926	25,444	14,910,754	3,085

Cost Comparison of Alternative SO₂ Compliance Plans

All Costs in 2005 PVRR \$ x1000

Case12- Option 12: DFGD MS BR23x		Case00- Option 0: BASE CASE W/ ENV DISP		SO ₂ Price Curve Multiplier 1.00								
Fuel Forecast: Base Load Forecast: Base SO ₂ Price Forecast: Base NOx Price Forecast: Base Other Description: SO ₂ Dispatch, TC2 2010, No Br3 SCR DFGD MS BR23x		Capital Cost Sensitivity:										
SO ₂ Environmental Controls:		SO ₂ Environmental Controls:		DIFFERENCE								
Unit	SO ₂ Tech	SO ₂ Rem %	Cost (M\$)	In-Service								
Brown 1	n/a	0%	0	0								
Brown 2	FS MS-Dry FGD	93%	139M\$ Br23	2006								
Brown 3	FS MS-Dry FGD	93%	139M\$ Br23	2006								
Chem 2	n/a	0%	0	0								
Chem 3	n/a	0%	0	0								
Chem 4	n/a	0%	0	0								
SO ₂ Allowances Purchased: 1,853,233		SO ₂ Tons Emitted: 3,676,623		4,545,227								
Largest Annual SO ₂ Purchase (as a % of EPA Allocation): 153,663		NO _x Tons Emitted: 258%		368%								
NO _x Allowances Purchased: 153,663		NO _x Tons Emitted: 605,678		603,779								
Year	Allowance Price (\$/Nominal/ton) NOx	Production \$	Combined Company Allow. Purchases NOx \$	Capital \$	NPV Total \$	Allowance Price (\$/Nominal/ton) SO ₂	Production \$	Combined Company Allow. Purchases SO ₂ \$	Capital \$	NPV Total \$	Total \$	Cumulative Total \$
2005	3146	392	-	2,154	-	3146	392	-	2,225	-	(71)	(71)
2006	3063	405	-	8,243	-	3063	405	-	2,873	-	5,370	5,299
2007	2599	412	-	12,668	-	2599	412	-	2,566	-	10,102	15,401
2008	2349	419	-	15,438	-	2349	419	-	2,291	-	12,286	27,687
2009	2307	407	-	18,965	-	2309	407	-	2,044	-	6,310	33,976
2010	1874	536	-	30,980	973	1874	536	526	1,823	526	1,797	35,774
2011	1666	547	-	28,195	3,376	1666	547	3,095	1,625	1,625	1,009	36,783
2012	1752	568	-	28,191	3,550	1752	568	3,333	1,448	1,448	966	37,749
2013	1731	569	-	27,321	4,445	1731	569	4,235	1,287	1,287	(677)	37,072
2014	2344	560	-	27,362	6,509	2344	560	6,280	4,245	4,245	(1,357)	35,715
2015	2400	582	-	31,610	11,981	2400	582	11,772	4,599	4,599	(1,613)	34,102
2016	2596	604	-	33,564	12,627	2596	604	12,742	4,578	4,578	(2,539)	31,563
2017	2656	616	-	30,577	12,931	2656	616	12,409	4,246	4,246	(3,164)	28,399
2018	2668	628	-	30,345	12,292	2668	628	12,112	4,338	4,338	(3,422)	24,977
2019	2674	641	-	29,317	11,543	2674	641	11,411	4,055	4,055	(3,177)	21,800
2020	2713	653	-	28,162	11,716	2713	653	11,583	4,025	4,025	(4,011)	17,789
2021	2807	666	-	27,453	12,207	2807	666	12,085	3,924	3,924	(4,452)	13,338
2022	2833	680	-	26,590	11,581	2833	680	11,466	3,735	3,735	(4,407)	8,931
2023	2861	693	-	24,690	11,187	2861	693	11,077	3,515	3,515	(4,739)	4,191
2024	2918	707	-	23,787	11,133	2918	707	10,996	3,406	3,406	(4,846)	(655)
2025	2977	721	-	23,361	10,814	2977	721	10,895	3,297	3,297	(4,878)	(5,532)
2026	-	-	-	1,925	-	-	-	-	-	-	1,925	(3,607)
2027	-	-	-	1,623	-	-	-	-	-	-	1,623	(1,984)
2028	-	-	-	1,181	-	-	-	-	-	-	1,181	(803)
2030	-	-	-	-	-	-	-	-	-	-	-	(803)
Totals			148,867	481,468	190,741	14,027,565	14,027,565	145,818	711,926	25,444	14,910,754	(803)

Cost Comparison of Alternative SO₂ Compliance Plans
All Costs in 2005 PVRR \$ x1000

Year	Case13- Option 0305: WFGD HS GH234, WFGD HS BR123										Case00- Option 0: BASE CASE W/ ENV DISP										
	Allowance Price (\$/Nominalton) NOx	Production \$	Combined Company Allow. Purchases NOx \$	Capital \$	NPV Total \$	Allowance Price (\$/Nominalton) SO2	Production \$	Combined Company Allow. Purchases SO2 \$	Capital \$	NPV Total \$	Allowance Price (\$/Nominalton) NOx	Production \$	Combined Company Allow. Purchases NOx \$	Capital \$	NPV Total \$	Allowance Price (\$/Nominalton) SO2	Production \$	Combined Company Allow. Purchases SO2 \$	Capital \$	NPV Total \$	
2005	3146	392	-	11,233	-	3146	392	-	11,233	2,515,638	152,227	-	11,233	2,225	4,545,227	150,964	-	11,233	2,225	9,008	9,008
2006	3063	405	-	23,749	23,749	3063	405	-	23,749	1,155	605,043	-	23,749	2,873	3,688	150,964	-	2,873	2,873	20,876	29,884
2007	2599	412	-	49,380	49,380	2599	412	-	49,380	-	-	-	49,380	2,566	-	-	-	2,566	32,076	81,960	81,960
2008	2352	419	9,513	66,004	66,004	2349	419	9,513	66,004	-	-	-	66,004	2,291	3,822	-	3,822	2,291	32,722	94,682	94,682
2009	2308	407	-	78,372	78,372	2309	407	-	78,372	-	-	-	78,372	2,044	21,311	-	21,311	2,044	33,002	127,684	127,684
2010	1874	536	406	74,429	74,429	1874	536	406	74,429	-	-	-	74,429	1,825	48,224	-	48,224	1,825	1,016	128,700	128,700
2011	1666	547	3,042	66,404	66,404	1666	547	3,042	66,404	-	-	-	66,404	1,448	44,970	-	44,970	1,448	2,259	130,960	130,960
2012	1752	558	3,196	59,217	59,217	1752	558	3,196	59,217	-	-	-	59,217	1,222	43,099	-	43,099	1,222	1,222	132,181	132,181
2013	1731	569	4,256	52,776	52,776	1731	569	4,256	52,776	-	-	-	52,776	1,287	42,880	-	42,880	1,287	(5,871)	126,310	126,310
2014	2344	580	6,247	47,002	47,002	2344	580	6,247	47,002	-	-	-	47,002	1,141	42,415	-	42,415	1,141	(11,567)	114,744	114,744
2015	2400	592	11,897	41,814	41,814	2400	592	11,897	41,814	-	-	-	41,814	1,010	47,599	-	47,599	1,010	(13,783)	100,860	100,860
2016	2596	604	12,482	37,142	37,142	2596	604	12,482	37,142	-	-	-	37,142	890	45,578	-	45,578	890	(15,384)	85,577	85,577
2017	2656	616	12,838	32,916	32,916	2656	616	12,838	32,916	-	-	-	32,916	783	44,246	-	44,246	783	(17,791)	67,786	67,786
2018	2668	628	12,152	13,023	13,023	2668	628	12,152	13,023	-	-	-	13,023	685	43,338	-	43,338	685	(21,019)	46,766	46,766
2019	2674	641	11,513	25,634	25,634	2674	641	11,513	25,634	-	-	-	25,634	598	41,055	-	41,055	598	26,462	26,462	26,462
2020	2713	653	11,641	12,468	12,468	2713	653	11,641	12,468	-	-	-	12,468	448	39,240	-	39,240	448	3,388	3,388	3,388
2021	2807	666	12,224	12,017	12,017	2807	666	12,224	12,017	-	-	-	12,017	384	37,635	-	37,635	384	(25,596)	(22,209)	(22,209)
2022	2833	660	11,634	11,758	11,758	2833	660	11,634	11,758	-	-	-	11,758	327	35,515	-	35,515	327	(25,941)	(48,149)	(48,149)
2023	2861	663	11,251	10,954	10,954	2861	663	11,251	10,954	-	-	-	10,954	276	34,106	-	34,106	276	(26,233)	(74,382)	(74,382)
2024	2918	707	11,181	12,814	12,814	2918	707	11,181	12,814	-	-	-	12,814	201	33,297	-	33,297	201	(28,291)	(101,617)	(101,617)
2025	2977	721	10,922	10,461	10,461	2977	721	10,922	10,461	-	-	-	10,461	-	-	-	-	-	(28,291)	(129,907)	(129,907)
2026										-	-	-		-	-	-	-	-	9,009	(120,898)	(120,898)
2027										-	-	-		-	-	-	-	-	6,200	(114,698)	(114,698)
2028										-	-	-		-	-	-	-	-	3,981	(110,737)	(110,737)
2029										-	-	-		-	-	-	-	-	706	(110,031)	(110,031)
2030										-	-	-		-	-	-	-	-	-	-	-
Totals			146,853	813,000	813,000			146,853	813,000	14,800,722			146,853	711,926	14,910,754	14,027,565	145,818	25,444	14,910,754	(110,031)	

Cost Comparison of Alternative SO ₂ Compliance Plans												
All Costs in 2005 PVRR \$ x1000												
Case14- Option 0105: WFGD HS GH34, WFGD HS BR123						Case00- Option 0: BASE CASE W/ ENV DISP						
Fuel Forecast: Base Load Forecast: Base SO ₂ Price Forecast: Base NOx Price Forecast: Base Other Description: SO ₂ Dispatch, TC2 2010, No B3 SCR WFGD HS GH34 WFGD HS BR123						Fuel Forecast: Base Load Forecast: Base SO ₂ Price Forecast: Base NOx Price Forecast: Base Other Description: SO ₂ Dispatch, TC2 2010, No B3 SCR						
SO ₂ Environmental Controls:						SO ₂ Environmental Controls:						
Unit	SO ₂ Tech	SO ₂ Rem. %	Cost (\$/M\$)	In-Service	NO _x Allowances Purchased:	Unit	SO ₂ Tech	SO ₂ Rem. %	Cost (\$/M\$)	In-Service	NO _x Allowances Purchased:	
Brown 1	FS HS-Wet FGD	98%	234MS BR123	2009	2,785,920	Brown 1	n/a	0%	0	0	4,545,227	
Brown 2	FS HS-Wet FGD	98%	234MS BR123	2009	151%	Brown 2	n/a	0%	0	0	388%	
Brown 3	FS HS-Wet FGD	98%	234MS BR123	2009		Brown 3	n/a	0%	0	0		
Brown 4	FS HS-Wet FGD	98%	234MS BR123	2009		Chemt 1	n/a	0%	0	0		
Chemt 1	na	0%	0	2007		Chemt 2	n/a	0%	0	0		
Chemt 2	na	0%	0	2008		Chemt 3	n/a	0%	0	0		
Chemt 3	na	0%	0	2008		Chemt 4	n/a	0%	0	0		
Chemt 4	na	0%	0	2008		SO ₂ Tons Emittied:						
SO ₂ Allowances Purchased:	961,930					Largest Annual SO ₂ Purchase (as a % of EPA Allocation):	2,721,836					
NO _x Allowances Purchased:	148,307					Largest Annual SO ₂ Purchase (as a % of EPA Allocation):	388%					
						NO _x Tons Emittied:	150,964					
						NO _x Allowances Purchased:	603,779					
Year	Allowance Price (\$/Normal/ton) NOx	Production \$	Combined Company Allow. Purchases NOx \$	Capital \$	NPV Total \$	Allowance Price (\$/Normal/ton) SO ₂	Production \$	Combined Company Allow. Purchases NOx \$	Capital \$	NPV Total \$	Cumulative Total \$	
2005	3146	392	-	10,899	-	3146	392	-	2,225	8,644	8,644	
2006	3063	405	-	22,804	-	3063	405	-	2,873	19,931	28,575	
2007	2599	412	-	43,373	-	2599	412	-	3,822	26,138	54,713	
2008	2350	419	9,295	55,868	-	2349	419	-	2,291	23,050	77,763	
2009	2309	407	-	63,204	-	2309	407	-	2,131	23,969	101,732	
2010	1874	535	-	8,170	1874	1874	535	526	49,224	827	101,649	
2011	1666	547	2,180	11,051	52,964	1666	547	3,095	44,970	1,625	100,700	
2012	1752	558	2,775	11,480	47,228	1752	558	3,333	43,099	1,448	(1,766)	
2013	1731	569	3,844	11,633	42,086	1731	569	4,235	42,860	1,287	(7,154)	
2014	2344	580	5,965	11,887	37,477	2344	580	6,280	42,415	1,141	(11,299)	
2015	2400	592	11,470	18,549	33,332	2400	592	11,772	47,569	1,010	(13,167)	
2016	2596	604	12,251	17,813	29,597	2596	604	12,409	45,578	890	54,966	
2017	2656	616	12,546	17,338	26,218	2656	616	12,742	44,246	783	38,944	
2018	2668	628	11,966	17,194	23,160	2668	628	12,112	43,338	695	20,357	
2019	2674	641	11,368	16,625	20,397	2674	641	11,411	41,055	598	2,086	
2020	2713	653	11,478	16,296	17,901	2713	653	11,583	40,253	519	(17,794)	
2021	2807	666	12,098	15,784	15,050	2807	666	12,085	39,240	448	(39,583)	
2022	2833	680	11,525	15,430	13,621	2833	680	11,466	37,635	384	(61,528)	
2023	2861	693	11,173	14,483	11,796	2861	693	11,077	35,515	327	(22,009)	
2024	2918	707	11,103	14,021	10,155	2918	707	10,996	34,106	276	(23,060)	
2025	2977	721	10,867	13,671	8,634	2977	721	10,695	33,297	201	(23,889)	
2026	-	-	-	7,056	-	-	-	-	-	-	7,056	
2027	-	-	-	4,612	-	-	-	-	-	-	4,612	
2028	-	-	-	2,693	-	-	-	-	-	-	2,693	
2029	-	-	-	467	-	-	-	-	-	-	467	
2030	-	-	-	-	-	-	-	-	-	-	-	
Totals		13,751,217	142,628	240,719	660,531		14,027,565	145,818	711,926	25,444	14,910,754	
					14,795,095						(115,659)	

Cost Comparison of Alternative SO₂ Compliance Plans
All Costs in 2005 PVRR \$ x1000

Year	Case 07 - Option 0311: WFGD HS GH234,DFGD MS BR23												Case 00 - Option 0: BASE CASE W/ ENV DISP																
	SO ₂ Environmental Controls:						SO ₂ Environmental Controls:						SO ₂ Environmental Controls:						SO ₂ Environmental Controls:										
Year	Allowance Price (\$/Nominal/ton) NOx	SO2	Production \$	Combined Company Allow. Purchases NOx \$	SO2 \$	Capital \$	NPV Total \$	Allowance Price (\$/Nominal/ton) NOx	SO2	Production \$	Combined Company Allow. Purchases NOx \$	SO2 \$	Capital \$	NPV Total \$	Allowance Price (\$/Nominal/ton) NOx	SO2	Production \$	Combined Company Allow. Purchases NOx \$	SO2 \$	Capital \$	NPV Total \$	Allowance Price (\$/Nominal/ton) NOx	SO2	Production \$	Combined Company Allow. Purchases NOx \$	SO2 \$	Capital \$	NPV Total \$	Difference
2005	3146	392				9,795		3146	392						3146	392							3146	392					7,570
2006	3063	405				21,892		3063	405						3063	405							3063	405					19,019
2007	2599	412				44,370		2599	412						2599	412							2599	412					27,066
2008	2352	419				58,273		2349	419						2349	419							2349	419					24,991
2009	2309	407				63,681		2309	407						2309	407							2309	407					19,650
2010	1874	536				63,344		1874	536						1874	536							1874	536					2,195
2011	1666	547				56,519		1666	547						1666	547							1666	547					99,500
2012	1752	558				50,407		1752	558						1752	558							1752	558					(2,846)
2013	1731	569				44,929		1731	569						1731	569							1731	569					89,011
2014	2344	560				40,019		2344	560						2344	560							2344	560					(7,643)
2015	2400	592				35,605		2400	592						2400	592							2400	592					(11,238)
2016	2596	604				31,628		2596	604						2596	604							2596	604					(13,046)
2017	2656	616				28,029		2656	616						2656	616							2656	616					50,916
2018	2668	628				24,773		2668	628						2668	628							2668	628					(15,473)
2019	2574	641				21,829		2574	641						2574	641							2574	641					17,726
2020	2713	653				19,170		2674	641						2674	641							2674	641					(17,433)
2021	2807	666				16,771		2807	666						2807	666							2807	666					293
2022	2833	680				14,448		2833	680						2833	680							2833	680					(19,401)
2023	2861	693				12,963		2861	693						2861	693							2861	693					(20,965)
2024	2916	707				10,913		2916	707						2916	707							2916	707					(21,336)
2025	2977	721				9,314		2977	721						2977	721							2977	721					(20,769)
2026						7,751																							(103,260)
2027						5,136																							(21,837)
2028						3,074																							7,751
2029						1,372																							(117,346)
2030																													(112,208)
Totals			13,736,871	144,055	226,198	695,666	14,802,982			14,027,565	145,918	711,926	25,444	14,910,754															3,074
																													(107,762)

Cost Comparison of Alternative SO ₂ Compliance Plans															
All Costs in 2005 PVRR \$ x1000															
Case 18- Option 0111: WFGD HS GH34,DFGD MS BR23							Case 00- Option 0: BASE CASE W/ ENV DISP								
Fuel Forecast: Base Load Forecast: Base SO ₂ Price Forecast: Base NO _x Price Forecast: Base Other Description: SO ₂ Dispatch, TC2 2010, No B13 SCR WFGD HS GH34 DFGD MS BR23							Capital Cost Sensitivity: Fuel Forecast: Base Load Forecast: Base SO ₂ Price Forecast: Base NO _x Price Forecast: Base Other Description: SO ₂ Dispatch, TC2 2010, No B13 SCR								
SO ₂ Environmental Controls:							SO ₂ Environmental Controls:								
Unit	SO ₂ Tech	SO ₂ Rem.%	Cost.(M\$)	In-Service	Unit	SO ₂ Tech	SO ₂ Rem.%	Cost.(M\$)	In-Service	Unit	SO ₂ Tech	SO ₂ Rem.%	Cost.(M\$)	In-Service	
Brown 1	FS MS-Dry FGD	83%	143MS BR23	0	Brown 1	n/a	0%	0	0	Brown 1	n/a	0%	0	0	
Brown 2	FS MS-Dry FGD	83%	143MS BR23	2009	Brown 2	n/a	0%	0	0	Brown 2	n/a	0%	0	0	
Brown 3	FS MS-Dry FGD	83%	143MS BR23	2009	Brown 3	n/a	0%	0	0	Brown 3	n/a	0%	0	0	
Chemt 1	FS HS-Wet FGD	98%	289MS GH34	0	Chemt 1	n/a	0%	0	0	Chemt 1	n/a	0%	0	0	
Chemt 2	FS HS-Wet FGD	98%	289MS GH34	2007	Chemt 2	n/a	0%	0	0	Chemt 2	n/a	0%	0	0	
Chemt 3	FS HS-Wet FGD	98%	289MS GH34	2008	Chemt 3	n/a	0%	0	0	Chemt 3	n/a	0%	0	0	
Chemt 4	FS HS-Wet FGD	98%	289MS GH34	2008	Chemt 4	n/a	0%	0	0	Chemt 4	n/a	0%	0	0	
SO ₂ Allowances Purchased: 1,171,988					SO ₂ Allowances Purchased: 2,121,838					SO ₂ Allowances Purchased: 4,545,227					
NO _x Allowances Purchased: 145,546					NO _x Allowances Purchased: 145,994					NO _x Allowances Purchased: 150,994					
Largest Annual SO ₂ Purchase (as a % of EPA Allocation): 174%					Largest Annual SO ₂ Purchase (as a % of EPA Allocation): 174%					Largest Annual SO ₂ Purchase (as a % of EPA Allocation): 388%					
NO _x Tons Emitted: 598,361					NO _x Tons Emitted: 598,361					NO _x Tons Emitted: 603,779					
Year	Allowance Price (\$/Nominal ton)	Production \$	Combined Company Allow. Purchases NOx \$	Capital \$	NPV Total \$	Allowance Price (\$/Nominal ton)	Production \$	Combined Company Allow. Purchases NOx \$	Capital \$	NPV Total \$	Allowance Price (\$/Nominal ton)	Production \$	Combined Company Allow. Purchases NOx \$	Capital \$	NPV Total \$
2005	3146	392	-	9,431	9,431	3146	392	-	2,225	2,225	3146	392	-	2,225	2,225
2006	3063	405	-	20,948	20,948	3063	405	-	2,873	2,873	3063	405	-	2,873	2,873
2007	2599	412	-	36,363	36,363	2599	412	-	3,822	3,822	2599	412	-	3,822	3,822
2008	2350	419	-	48,137	48,137	2349	419	-	22,343	22,343	2349	419	-	22,343	22,343
2009	2308	407	-	48,514	48,514	2309	407	-	21,311	21,311	2309	407	-	21,311	21,311
2010	1874	536	-	16,844	16,844	1874	536	-	48,224	48,224	1874	536	-	48,224	48,224
2011	1666	547	1,727	14,432	14,432	1666	547	3,095	44,970	44,970	1666	547	3,095	44,970	44,970
2012	1752	558	2,595	14,784	14,784	1752	558	3,333	43,099	43,099	1752	558	3,333	43,099	43,099
2013	1731	569	3,610	14,613	14,613	1731	569	4,235	42,860	42,860	1731	569	4,235	42,860	42,860
2014	2344	580	5,713	15,055	15,055	2344	580	6,280	42,415	42,415	2344	580	6,280	42,415	42,415
2015	2400	592	11,328	21,708	21,723	2400	592	11,772	47,599	47,599	2400	592	11,772	47,599	47,599
2016	2596	604	12,050	20,857	20,883	2596	604	12,409	45,578	45,578	2596	604	12,409	45,578	45,578
2017	2656	616	12,405	20,275	21,331	2656	616	12,742	44,246	44,246	2656	616	12,742	44,246	44,246
2018	2668	628	11,834	19,947	18,842	2668	628	12,112	43,338	43,338	2668	628	12,112	43,338	43,338
2019	2674	641	11,204	19,302	16,592	2674	641	11,411	41,055	41,055	2674	641	11,411	41,055	41,055
2020	2713	653	11,354	18,674	14,560	2713	653	11,563	39,240	39,240	2713	653	11,563	39,240	39,240
2021	2807	666	11,955	18,276	12,727	2807	666	12,085	37,635	37,635	2807	666	12,085	37,635	37,635
2022	2833	680	11,399	17,791	11,076	2833	680	11,466	35,515	35,515	2833	680	11,466	35,515	35,515
2023	2861	693	11,030	16,751	9,590	2861	693	11,077	34,106	34,106	2861	693	11,077	34,106	34,106
2024	2918	707	10,969	16,218	8,254	2918	707	10,996	33,297	33,297	2918	707	10,996	33,297	33,297
2025	2977	721	10,690	15,748	7,027	2977	721	10,695	-	-	2977	721	10,695	-	-
2026	-	-	-	-	5,798	-	-	-	-	-	-	-	-	-	-
2027	-	-	-	-	3,550	-	-	-	-	-	-	-	-	-	-
2028	-	-	-	-	1,806	-	-	-	-	-	-	-	-	-	-
2029	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2030	-	-	-	-	1,133	-	-	-	-	-	-	-	-	-	-
Totals			13,822,713	298,395	543,399			138,862	711,926	25,444			145,818	14,027,565	14,910,754
					14,804,370										(106,384)

Cost Comparison of Alternative SO ₂ Compliance Plans All Costs in 2005 PVRR \$ x1000															
Case00 - Option 0: BASE CASE W/ ENV DISP															
Fuel Forecast: Base Load Forecast: Base SO ₂ Price Forecast: Base NOx Price Forecast: Base Other Description: SO ₂ Dispatch, TC2 2010, No B3 SCR Capital Cost Sensitivity:															
SO ₂ Environmental Controls: Unit SO ₂ Tech SO ₂ Rem. % Cost (\$/M\$) In-Service Brown 1 n/a 0% 0 0 Brown 2 n/a 0% 0 0 Brown 3 n/a 0% 0 0 Chemt 1 401MS GH234 2008 0 Chemt 2 FS PRB 0% 0 0 Chemt 3 FS PRB 401MS GH234 2007 0 Chemt 4 FS PRB 401MS GH234 2007 0 SO ₂ Allowances Purchased: 2,453,369 SO ₂ Tons Emitted: 4,276,759 Largest Annual SO ₂ Purchase (as a % of EPA Allocation): 337% NO _x Allowances Purchased: 123,638 NO _x Tons Emitted: 576,453															
SO ₂ Environmental Controls: Unit SO ₂ Tech SO ₂ Rem. % Cost (\$/M\$) In-Service Brown 1 n/a 0% 0 0 Brown 2 n/a 0% 0 0 Brown 3 n/a 0% 0 0 Chemt 1 401MS GH234 2008 0 Chemt 2 FS PRB 0% 0 0 Chemt 3 FS PRB 401MS GH234 2007 0 Chemt 4 FS PRB 401MS GH234 2007 0 SO ₂ Allowances Purchased: 2,721,838 SO ₂ Tons Emitted: 4,545,227 Largest Annual SO ₂ Purchase (as a % of EPA Allocation): 365% NO _x Allowances Purchased: 150,964 NO _x Tons Emitted: 603,779															
Year	Allowance Price (\$/Nominal/ton) NOx	SO ₂	Production \$	Combined Company Allow. Purchases NOx \$	SO ₂ \$	Capital \$	NPV Total \$	Allowance Price (\$/Nominal/ton) NOx	SO ₂	Production \$	Combined Company Allow. Purchases NOx \$	SO ₂ \$	Capital \$	NPV Total \$	DIFFERENCE CALCULATIONS
2005	3146	392	5,444	-	-	5,444	14,787,523	3146	392	5,444	-	-	5,444	14,787,523	0
2006	3063	405	15,922	-	2,327	15,922	14,787,523	3063	405	15,922	-	3,822	2,873	16,168	1,446
2007	2600	412	41,145	-	17,747	52,733	14,787,523	2599	412	41,145	-	22,343	2,866	37,827	16,094
2008	2350	419	48,572	-	16,658	48,572	14,787,523	2349	419	48,572	-	21,311	2,291	44,475	21,904
2009	2309	407	43,349	-	44,278	43,349	14,787,523	2309	407	43,349	-	49,224	2,044	55,808	12,469
2010	1874	536	38,669	-	40,085	38,669	14,787,523	1874	536	38,669	526	44,970	1,625	70,999	32,330
2011	1666	547	34,476	-	38,366	34,476	14,787,523	1666	547	34,476	3,095	43,099	1,448	71,828	37,352
2012	1731	569	30,717	2,556	38,394	30,717	14,787,523	1731	569	30,717	3,333	42,860	1,287	71,828	40,111
2013	2344	580	27,345	4,207	37,933	27,345	14,787,523	2344	580	27,345	6,280	42,415	1,141	71,828	44,683
2014	2400	592	24,301	9,891	43,243	24,301	14,787,523	2400	592	24,301	11,772	47,599	1,010	71,828	47,527
2015	2596	604	21,546	10,560	41,770	21,546	14,787,523	2596	604	21,546	12,409	45,578	890	71,828	49,282
2016	2656	616	19,052	10,771	40,205	19,052	14,787,523	2656	616	19,052	12,742	44,246	783	71,828	51,086
2017	2668	628	16,797	10,388	39,596	16,797	14,787,523	2668	628	16,797	12,112	43,338	695	71,828	52,933
2018	2674	641	14,790	9,890	37,496	14,790	14,787,523	2674	641	14,790	11,411	41,055	598	71,828	54,830
2019	2713	653	12,922	10,075	36,860	12,922	14,787,523	2713	653	12,922	11,563	40,253	519	71,828	56,777
2020	2807	666	11,265	10,518	35,679	11,265	14,787,523	2807	666	11,265	12,085	39,240	448	71,828	58,724
2021	2833	680	9,773	10,175	34,498	9,773	14,787,523	2833	680	9,773	11,466	37,635	384	71,828	60,671
2022	2861	693	8,432	9,751	32,460	8,432	14,787,523	2861	693	8,432	11,077	35,515	327	71,828	62,618
2023	2916	707	7,227	9,773	31,185	7,227	14,787,523	2916	707	7,227	10,996	34,106	276	71,828	64,565
2024	2977	721	6,117	9,504	30,500	6,117	14,787,523	2977	721	6,117	10,695	33,297	201	71,828	66,512
2025			4,990	-	-	4,990	14,787,523				-	-	-	71,828	68,459
2026			2,590	-	-	2,590	14,787,523				-	-	-	71,828	70,406
2027			275	-	-	275	14,787,523				-	-	-	71,828	72,353
2028			-	-	-	-	14,787,523				-	-	-	71,828	74,300
2029			-	-	-	-	14,787,523				-	-	-	71,828	76,247
2030			-	-	-	-	14,787,523				-	-	-	71,828	78,194
Totals			13,531,875	118,048	639,280	488,319	14,787,523			14,027,565	145,818	711,926	25,444	14,910,754	123,231

Cost Comparison of Alternative SO ₂ Compliance Plans															
All Costs in 2005 PVRR \$ x1000															
Case20- Option 14: FS PRB BR123					Case00- Option 0: BASE CASE W/ ENV DISP					SO ₂ Price Curve Multiplier 1.00					
Capital Cost Sensitivity:					Capital Cost Sensitivity:										
Fuel Forecast: Base					Fuel Forecast: Base										
Load Forecast: Base					Load Forecast: Base										
SO ₂ Price Forecast: Base					SO ₂ Price Forecast: Base										
NOx Price Forecast: Base					NOx Price Forecast: Base										
Other Description: SO ₂ Dispatch, TC2 2010, No Br3 SCR					Other Description: SO ₂ Dispatch, TC2 2010, No Br3 SCR										
FS PRB BR123x															
SO ₂ Environmental Controls:					SO ₂ Environmental Controls:					DIFFERENCE					
Unit	SO ₂ Tech	SO ₂ Rem %	Cost (\$/M\$)	In-Service	Unit	SO ₂ Tech	SO ₂ Rem %	Cost (\$/M\$)	In-Service	Unit	SO ₂ Tech	SO ₂ Rem %	Cost (\$/M\$)	In-Service	
Brown 1	FS PRB	0%	200M\$ Br123	2006	Brown 1	n/a	0%	0	0	Brown 1	n/a	0%	0	0	
Brown 2	FS PRB	0%	200M\$ Br123	2006	Brown 2	n/a	0%	0	0	Brown 2	n/a	0%	0	0	
Brown 3	FS PRB	0%	200M\$ Br123	2006	Brown 3	n/a	0%	0	0	Brown 3	n/a	0%	0	0	
Chem 1	n/a	0%	0	0	Chem 1	n/a	0%	0	0	Chem 1	n/a	0%	0	0	
Chem 2	n/a	0%	0	0	Chem 2	n/a	0%	0	0	Chem 2	n/a	0%	0	0	
Chem 3	n/a	0%	0	0	Chem 3	n/a	0%	0	0	Chem 3	n/a	0%	0	0	
Chem 4	n/a	0%	0	0	Chem 4	n/a	0%	0	0	Chem 4	n/a	0%	0	0	
SO ₂ Allowances Purchased: 2,011,221					SO ₂ Allowances Purchased: 2,721,838					SO ₂ Allowances Purchased: 4,545,227					
Largest Annual SO ₂ Purchase (as a % of EPA Allocation): 277%					Largest Annual SO ₂ Purchase (as a % of EPA Allocation): 277%					Largest Annual SO ₂ Purchase (as a % of EPA Allocation): 368%					
NO _x Allowances Purchased: 125,116					NO _x Allowances Purchased: 125,116					NO _x Allowances Purchased: 150,984					
NO _x Tons Emitted: 577,931					NO _x Tons Emitted: 577,931					NO _x Tons Emitted: 603,779					
Year	Allowance Price (\$/Nominalton)	SO ₂	Production \$	Capital \$	NPV Total \$	Allowance Price (\$/Nominalton)	SO ₂	Production \$	Capital \$	NPV Total \$	Allowance Price (\$/Nominalton)	SO ₂	Production \$	Capital \$	NPV Total \$
2005	3146	392	3,156	3,156		3146	392	3,156	3,156		3146	392	3,156	3,156	931
2006	3063	405	5,066	5,066		3063	405	5,066	5,066		3063	405	5,066	5,066	2,793
2007	2599	412	9,766	20,674		2599	412	9,766	20,674		2599	412	9,766	20,674	7,200
2008	2349	419	21,280	26,674		2349	419	21,280	26,674		2349	419	21,280	26,674	17,390
2009	2308	407	8,143	26,146		2308	407	8,143	26,146		2308	407	8,143	26,146	28,314
2010	1874	536	34,614	23,473		1874	536	34,614	23,473		1874	536	34,614	23,473	44,246
2011	1666	547	31,647	20,952		1666	547	31,647	20,952		1666	547	31,647	20,952	56,049
2012	1752	558	31,041	18,694		1752	558	31,041	18,694		1752	558	31,041	18,694	61,734
2013	1731	569	30,644	16,668		1731	569	30,644	16,668		1731	569	30,644	16,668	66,251
2014	2344	580	4,448	30,184		2344	580	4,448	30,184		2344	580	4,448	30,184	69,727
2015	2400	592	10,050	36,083		2400	592	10,050	36,083		2400	592	10,050	36,083	70,717
2016	2596	604	10,615	34,184		2596	604	10,615	34,184		2596	604	10,615	34,184	70,788
2017	2656	616	10,438	32,664		2656	616	10,438	32,664		2656	616	10,438	32,664	68,428
2018	2674	641	9,876	31,244		2674	641	9,876	31,244		2674	641	9,876	31,244	68,428
2019	2674	641	10,078	30,427		2674	641	10,078	30,427		2674	641	10,078	30,427	66,580
2020	2713	653	10,554	29,454		2713	653	10,554	29,454		2713	653	10,554	29,454	64,580
2021	2807	666	10,049	28,418		2807	666	10,049	28,418		2807	666	10,049	28,418	60,673
2022	2833	680	9,725	26,510		2833	680	9,725	26,510		2833	680	9,725	26,510	57,223
2023	2961	693	9,724	25,555		2961	693	9,724	25,555		2961	693	9,724	25,555	52,204
2024	2916	707	9,468	25,044		2916	707	9,468	25,044		2916	707	9,468	25,044	44,939
2025	2977	721	2,770	2,770		2977	721	2,770	2,770		2977	721	2,770	2,770	37,487
2026			2,336	2,336				2,336	2,336				2,336	2,336	29,201
2027			1,707	1,707				1,707	1,707				1,707	1,707	19,314
2028			45	45				45	45				45	45	9,079
2029															11,849
2030															14,185
Totals			14,032,395	523,986	250,567			14,027,585	711,926	25,444			14,910,754	15,937	15,937

Cost Comparison of Alternative SO₂ Compliance Plans All Costs in 2005 PVRR \$ x1000

Year	Case00- Option 0: BASE CASE W/ ENV DISP				Case21- Option 1314: FS PRB GH234, FS PRB BR123				Case21- Option 1314: FS PRB GH234, FS PRB BR123				Case21- Option 1314: FS PRB GH234, FS PRB BR123			
	Allowance Price (\$/Nominalton) NOx	Production \$	Capital \$	NPV Total \$	Allowance Price (\$/Nominalton) SO2	Production \$	Capital \$	NPV Total \$	Allowance Price (\$/Nominalton) NOx	Production \$	Capital \$	NPV Total \$	Allowance Price (\$/Nominalton) SO2	Production \$	Capital \$	NPV Total \$
2005	3146	392	6,376	548,556	3146	392	6,376	548,556	3146	392	6,376	548,556	3146	392	6,376	548,556
2006	3063	405	18,615	246%	3063	405	18,615	246%	3063	405	18,615	246%	3063	405	18,615	246%
2007	2600	412	48,345		2599	412	48,345		2599	412	48,345		2599	412	48,345	
2008	2350	419	71,116		2349	419	71,116		2349	419	71,116		2349	419	71,116	
2009	2309	407	72,674		2309	407	72,674		2309	407	72,674		2309	407	72,674	
2010	1874	536	64,998		1874	536	64,998		1874	536	64,998		1874	536	64,998	
2011	1666	547	57,986		1666	547	57,986		1666	547	57,986		1666	547	57,986	
2012	1752	558	51,722		1752	558	51,722		1752	558	51,722		1752	558	51,722	
2013	1731	569	46,098		1731	569	46,098		1731	569	46,098		1731	569	46,098	
2014	2344	580	41,054		2344	580	41,054		2344	580	41,054		2344	580	41,054	
2015	2400	592	36,512		2400	592	36,512		2400	592	36,512		2400	592	36,512	
2016	2596	604	32,401		2596	604	32,401		2596	604	32,401		2596	604	32,401	
2017	2656	616	28,679		2656	616	28,679		2656	616	28,679		2656	616	28,679	
2018	2668	628	25,312		2668	628	25,312		2668	628	25,312		2668	628	25,312	
2019	2674	641	19,524		2674	641	19,524		2674	641	19,524		2674	641	19,524	
2020	2713	653	17,047		2713	653	17,047		2713	653	17,047		2713	653	17,047	
2021	2807	666	14,816		2807	666	14,816		2807	666	14,816		2807	666	14,816	
2022	2833	680	12,809		2833	680	12,809		2833	680	12,809		2833	680	12,809	
2023	2861	693	11,006		2861	693	11,006		2861	693	11,006		2861	693	11,006	
2024	2918	707	9,361		2918	707	9,361		2918	707	9,361		2918	707	9,361	
2025	2976	721	7,760		2977	721	7,760		2977	721	7,760		2977	721	7,760	
2026			4,926				4,926				4,926				4,926	
2027			1,982				1,982				1,982				1,982	
2028			45				45				45				45	
2029																
2030																
Totals			13,552,040	88,523	454,766	723,444	14,819,773	14,027,565	145,618	711,926	25,444	14,910,754	90,981			

Appendix 8

2004 SO₂ Compliance Strategy
Appendix 8- SO₂ Emissions of Various SO₂ Compliance Plans

Case00- Option 0: BASE CASE W/ ENV DISP

		SO2 SUMMARY BY YEAR																							
		2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025				
FUEL SO2 Contact (#MBTU)																									
Brown 1	KU	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7				
Brown 2	KU	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7				
Brown 3	KU	2.8	2.8	2.7	2.7	2.8	2.7	2.8	2.7	2.7	2.7	2.7	2.8	2.7	2.8	2.7	2.8	2.8	2.8	2.8	2.7				
Ghent 1	KU	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1				
Ghent 2	KU	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2				
Ghent 3	KU	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2				
Ghent 4	KU	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2				
Green River 3	KU	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6				
Green River 4	KU	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6				
Tyrone 3	KU	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8				
Cane Run 4	LGE	6.1	6.0	6.1	6.1	6.1	6.0	6.1	6.1	6.1	6.0	6.1	6.1	6.1	6.0	6.1	6.0	6.0	6.0	6.0	6.0				
Cane Run 5	LGE	6.1	6.0	6.1	6.1	6.1	6.0	6.1	6.1	6.1	6.0	6.1	6.1	6.1	6.0	6.1	6.0	6.0	6.0	6.0	6.0				
Cane Run 6	LGE	6.0	6.0	6.1	6.0	6.1	6.1	6.0	6.1	6.1	6.0	6.1	6.1	6.1	6.0	6.1	6.0	6.0	6.0	6.0	6.0				
Mill Creek 1	LGE	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1				
Mill Creek 2	LGE	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1				
Mill Creek 3	LGE	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1				
Mill Creek 4	LGE	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1				
Trimble County 1	LGE	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5				
Trimble County 2	KU	0.0	0.0	0.0	0.0	0.0	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5				
SCRUBBER REMOVAL EFF.																									
Brown 1		0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%				
Brown 2		0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%				
Brown 3		0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%				
Ghent 1		93%	93%	93%	93%	93%	93%	93%	93%	93%	93%	93%	93%	93%	93%	93%	93%	93%	93%	93%	93%				
Ghent 2		0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%				
Ghent 3		0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%				
Ghent 4		0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%				
Green River 3		0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%				
Green River 4		0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%				
Tyrone 3		0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%				
Cane Run 4	LGE	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%				
Cane Run 5	LGE	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%				
Cane Run 6	LGE	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%				
Mill Creek 1	LGE	93%	93%	93%	93%	93%	93%	93%	93%	93%	93%	93%	93%	93%	93%	93%	93%	93%	93%	93%	93%				
Mill Creek 2	LGE	91%	91%	91%	91%	91%	91%	91%	91%	91%	91%	91%	91%	91%	91%	91%	91%	91%	91%	91%	91%				
Mill Creek 3	LGE	89%	89%	89%	89%	89%	89%	89%	89%	89%	89%	89%	89%	89%	89%	89%	89%	89%	89%	89%	89%				
Mill Creek 4	LGE	90%	90%	90%	90%	90%	90%	90%	90%	90%	90%	90%	90%	90%	90%	90%	90%	90%	90%	90%	90%				
Trimble County 1	LGE	94%	94%	94%	94%	94%	94%	94%	94%	94%	94%	94%	94%	94%	94%	94%	94%	94%	94%	94%	94%				
Trimble County 2	LGE	0%	0%	0%	0%	0%	98%	98%	98%	98%	98%	98%	98%	98%	98%	98%	98%	98%	98%	98%	98%				
TONS SO2 EMITTED																									
Brown 1	KU	8,416	7,412	8,869	9,220	9,201	8,522	7,913	8,332	7,268	8,833	9,025	8,963	9,230	9,221	9,648	8,974	9,820	9,981	9,918	10,162				
Brown 2	KU	15,315	15,149	18,288	14,543	15,876	14,954	14,363	14,561	14,577	14,680	13,391	15,054	15,385	15,837	15,973	16,934	16,137	14,755	18,514	18,705				
Brown 3	KU	30,775	34,298	36,803	36,850	38,500	34,027	32,846	29,789	34,159	35,428	35,834	36,553	38,045	37,842	35,102	39,370	40,929	41,580	41,788	42,404				
Ghent 1	KU	7,744	7,759	6,795	7,612	7,728	7,665	7,678	7,657	7,658	8,889	7,897	7,886	7,735	7,738	7,745	7,771	6,967	7,752	7,763	7,771				
Ghent 2	KU	15,841	17,745	19,074	17,866	19,365	17,190	16,488	15,184	17,281	17,848	18,229	18,550	18,943	18,720	17,532	19,605	20,248	20,452	20,891	20,884				
Ghent 3	KU	20,120	20,822	19,289	21,238	22,170	19,687	20,671	21,257	21,299	21,971	22,290	22,584	20,390	22,680	23,156	23,148	23,528	23,729	23,771	24,438				
Ghent 4	KU	20,796	20,871	21,312	21,868	19,490	21,965	21,127	21,548	21,658	22,219	22,558	20,479	22,968	23,029	23,266	23,253	23,588	23,833	21,387	23,896				
Green River 3	KU	8,059	8,010	8,432	8,416	9,101	8,547	7,455	8,043	8,513	8,790	9,318	8,849	10,299	10,276	10,824	10,884	11,418	11,813	12,070	12,215				
Green River 4	KU	12,977	13,709	14,587	14,245	15,311	11,490	11,906	12,724	13,183	13,731	14,211	14,246	13,167	15,268	16,150	15,714	16,412	16,750	16,790	15,225				
Tyrone 3	KU	2,991	3,247	3,866	3,930	4,365	3,085	3,129	3,445	3,565	3,684	3,884	3,994	3,859	4,151	4,574	4,384	4,778	4,782	4,826	4,904				
Cane Run 4	LGE	5,723	5,823	5,909	5,908	5,831	5,556	4,771	5,470	5,511	5,821	5,821	5,707	5,786	5,220	5,931	5,923	5,990	6,018	6,045	6,130				
Cane Run 5	LGE	5,175	5,387	5,476	5,476	5,486	4,897	4,910	4,787	4,864	5,012	4,531	5,154	5,337	5,340	5,396	5,495	5,538	4,980	5,837	5,738				
Cane Run 6	LGE	7,484	7,572	7,723	7,859	6,877	7,308	7,086	7,152	7,258	7,254	7,380	6,747	7,541	7,518	7,591	7,641	7,701	7,747	6,956	7,822				
Mill Creek 1	LGE	4,869	4,521	4,743	4,467	4,755	4,342	4,538	3,974	4,599	4,348	4,859	4,402	4,890	4,425	4,730	4,694	4,764	4,485	4,771	4,515				
Mill Creek 2	LGE	5,434	5,790	5,481	5,822	5,490	5,697	4,817	5,690	5,352	5,719	5,402	5,755	5,457	5,773	5,016	5,638	5,484	5,862	5,507	5,896				
Mill Creek 3	LGE	10,437	10,480	10,086	10,735	10,089	10,548	9,891	10,566	9,127	10,804	10,010	10,656	10,034	10,662	10,059	10,715	9,275	10,700	10,084	10,751				
Mill Creek 4	LGE	10,955	9,459	11,063	10,479	11,100	10,273	10,755	10,215	10,964	8,397	10,991	10,437	11,069	10,390	11,091	10,485	11,103	8,620	11,147	10,572				
Trimble County 1	LGE	5,525	6,053	5,537	6,066	5,093	6,013	5,494	6,019	5,519	6,027	5,527	6,048	5,080	6,050	5,549	6,071	5,551	6,053	5,590	6,067				
Trimble County 2	LGE	0	0	0	0	0	1,998	1,865	1,879	1,872	1,880	1,884	1,880	1,885	1,889	1,892	1,896	1,894	1,895	1,901	1,896				
Total		198,447	203,846	212,390	212,772	216,938	203,777	198,068	199,852	204,920	210,313	213,082	214,169	217,581	222,863	221,890	227,410	231,857	233,220	231,882	233,762				
ALLOWANCES																									
KU EPA Allocated SO2 Allowances		83,343	83,343	83,343	83,343	83,343	61,722	41,672	41,672	41,672	41,672	29,170	29,170	29,170	29,170	29,170	29,170	29,170	29,170	29,170	29,170				
LGE EPA Allocated SO2 Allowances		62,456	62,456	62,456	62,456	62,456	31,228	31,228	31,228	31,228	21,860	21,860	21,860	21,860	21,860	21,860	21,860	21,860	21,860	21,860	21,860				
Total KU/LGE EPA Allocated SO2 Allowances		145,799	145,799	145,799	145,799	145,799	72,900	72,900	72,900	72,900	72,900	51,030	51,030	51,030	51,030	51,030	51,030	51,030	51,030	51,030	51,030				
KU/LGE Extension		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
KU/L Portion of OMI Surplus/Shortfall		830	870																						

2004 SO₂ Compliance Strategy
Appendix 8- SO₂ Emissions of Various SO₂ Compliance Plans

Case01- Option 1: WFGD HS GH34

		SO2 SUMMARY BY YEAR																							
		2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025			
FUEL SO2 Content (#MBTU)	Ownership																								
Brown 1	KU	2.7	2.7	2.8	2.7	2.8	2.8	2.8	2.8	2.8	2.8	2.7	2.7	2.7	2.7	2.7	2.7	2.8	2.8	2.8	2.7	2.7	2.7		
Brown 2	KU	2.7	2.7	2.8	2.7	2.8	2.8	2.8	2.8	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7		
Brown 3	KU	2.8	2.8	2.7	2.7	2.8	2.7	2.8	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.8	2.8	2.8	2.8	2.7	2.7		
Ghent 1	KU	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1		
Ghent 2	KU	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2		
Ghent 3	KU	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2		
Ghent 4	KU	1.2	1.2	1.2	23.9	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1		
Green River 3	KU	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6			
Green River 4	KU	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6		
Tyrone 3	KU	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8		
Cane Run 4	LGE	6.1	6.0	6.0	6.0	6.0	6.1	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0		
Cane Run 5	LGE	6.1	6.0	6.0	6.0	6.0	6.1	6.0	6.1	6.1	6.0	6.1	6.0	6.1	6.0	6.1	6.0	6.1	6.0	6.0	6.0	6.0	6.1		
Cane Run 6	LGE	6.0	6.0	6.1	6.1	6.0	6.1	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0		
Mill Creek 1	LGE	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1		
Mill Creek 2	LGE	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1		
Mill Creek 3	LGE	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1		
Mill Creek 4	LGE	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1		
Trimble County 1	LGE	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5		
Trimble County 2	KU	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
SCRUBBER REMOVAL EFF.																									
Brown 1		0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%		
Brown 2		0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%		
Brown 3		0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%		
Ghent 1		93%	93%	93%	93%	93%	93%	93%	93%	93%	93%	93%	93%	93%	93%	93%	93%	93%	93%	93%	93%	93%	93%		
Ghent 2		0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%		
Ghent 3		0%	0%	98%	98%	98%	98%	98%	98%	98%	98%	98%	98%	98%	98%	98%	98%	98%	98%	98%	98%	98%	98%		
Ghent 4		0%	0%	0%	98%	98%	98%	98%	98%	98%	98%	98%	98%	98%	98%	98%	98%	98%	98%	98%	98%	98%	98%		
Green River 3		0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%		
Green River 4		0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%		
Tyrone 3		0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%		
Cane Run 4		83%	83%	83%	83%	83%	83%	83%	83%	83%	83%	83%	83%	83%	83%	83%	83%	83%	83%	83%	83%	83%	83%		
Cane Run 5		85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%		
Cane Run 6		85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%		
Mill Creek 1		93%	93%	93%	93%	93%	93%	93%	93%	93%	93%	93%	93%	93%	93%	93%	93%	93%	93%	93%	93%	93%	93%		
Mill Creek 2		91%	91%	91%	91%	91%	91%	91%	91%	91%	91%	91%	91%	91%	91%	91%	91%	91%	91%	91%	91%	91%	91%		
Mill Creek 3		89%	89%	89%	89%	89%	89%	89%	89%	89%	89%	89%	89%	89%	89%	89%	89%	89%	89%	89%	89%	89%	89%		
Mill Creek 4		90%	90%	90%	90%	90%	90%	90%	90%	90%	90%	90%	90%	90%	90%	90%	90%	90%	90%	90%	90%	90%	90%		
Trimble County 1		94%	94%	94%	94%	94%	94%	94%	94%	94%	94%	94%	94%	94%	94%	94%	94%	94%	94%	94%	94%	94%	94%		
Trimble County 2		0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%		
TONS SO2 EMITTED																									
Brown 1	KU	8,418	7,412	8,867	9,251	9,245	8,587	7,973	8,415	7,320	8,866	9,073	8,994	9,303	9,275	9,685	8,872	9,865	9,989	9,999	10,117	10,193			
Brown 2	KU	15,315	15,148	15,921	13,965	15,326	14,580	13,880	14,076	14,234	14,487	13,228	14,872	15,250	15,440	15,793	15,745	16,031	14,879	16,421	16,933	16,876			
Brown 3	KU	30,775	34,298	38,656	36,425	38,210	34,217	32,999	29,934	34,381	35,716	36,110	36,805	38,294	38,089	39,297	39,979	41,142	41,791	41,970	41,894	42,861			
Ghent 1	KU	7,744	7,799	8,279	7,545	7,845	7,580	7,516	7,488	7,515	6,747	7,572	7,556	7,641	7,634	7,641	7,868	8,915	7,692	7,712	7,703	7,707			
Ghent 2	KU	15,841	17,745	18,574	16,684	18,272	16,462	15,498	14,279	15,335	17,216	17,614	18,038	18,496	18,281	17,150	19,128	19,892	20,133	20,405	20,377	20,589			
Ghent 3	KU	20,120	20,822	21,121	24,441	24,885	21,995	21,383	24,222	24,417	24,323	24,447	24,661	24,205	24,462	24,467	24,475	24,882	24,489	24,885	24,882	24,944			
Ghent 4	KU	20,796	20,871	20,996	9,195	2,160	2,439	2,412	2,438	2,429	2,442	2,454	2,216	2,454	2,471	2,472	2,477	2,487	2,494	2,239	2,901	2,900			
Green River 3	KU	8,059	8,010	8,431	9,523	9,179	8,606	7,520	8,198	8,532	8,967	9,505	8,766	10,369	10,391	10,908	10,916	11,468	11,468	11,863	12,295	12,255			
Green River 4	KU	12,977	13,708	14,544	14,405	15,390	11,528	12,145	12,924	13,298	13,767	14,341	14,436	13,361	15,357	16,238	15,846	16,488	16,861	16,868	15,304	17,234			
Tyrone 3	KU	2,991	3,247	3,874	3,950	4,382	3,128	3,188	3,521	3,646	3,761	3,936	4,025	3,901	4,187	4,615	4,427	4,810	4,814	4,975	4,968	4,932			
Cane Run 4	LGE	5,723	5,823	5,813	5,988	5,825	5,311	4,303	5,065	5,157	5,369	5,403	5,521	5,586	5,003	5,788	5,770	5,877	5,233	5,962	6,037	5,429			
Cane Run 5	LGE	5,175	5,367	5,343	4,749	5,283	4,751	4,360	4,517	4,739	4,790	4,420	5,053	5,221	5,231	5,309	5,400	5,473	4,885	5,581	5,665	5,892			
Cane Run 6	LGE	7,464	7,572	7,636	7,499	8,708	7,025	6,657	6,782	6,902	6,963	7,087	6,560	7,334	7,298	7,409	7,442	7,563	7,498	6,853	7,739	7,748			
Mill Creek 1	LGE	4,699	4,521	4,720	4,418	4,712	4,224	4,394	3,860	4,490	4,221	4,563	4,324	4,603	4,361	4,679	4,043	4,729	4,453	4,745	4,900	4,788			
Mill Creek 2	LGE	5,434	5,790	5,483	5,753	5,429	5,583	4,860	5,535	5,233	5,805	5,299	5,682	5,385	5,897	4,964	5,779	5,436	5,878	5,478	5,870	5,532			
Mill Creek 3	LGE	10,437	10,480	10,063	10,670	10,024	10,467	9,776	10,465	9,942	10,515	9,941	10,598	10,000	10,633	10,031	10,696	9,257	10,687	10,078	10,744	10,901			
Mill Creek 4	LGE	10,955	9,499	10,985	10,313	10,936	10,128	10,512	10,022	10,944	9,265	10,877	10,342	10,995	10,311	11,040	10,402	11,367	9,865	11,125	10,562	11,204			
Trimble County 1	LGE	5,525	6,053	5,537	6,067	5,982	6,011	5,002	5,518	6,024	5,522	6,043	5,081	5,585	6,045	5,546	6,070	5,551	6,075	5,551	6,065	5,500			
Trimble County 2	KU	0	0	0	0	0	1,098	1,867	1,861	1,872	1,881	1,884	1,890	1,886	1,888	1,892	1,897	1,894	1,895	1,895	1,901	1,896			
Trimble County 2	LGE	0	0	0	0	0	366	666	661	678	661	662	664	663	663	665	667	666	666	666	666	666			
SO2 EMISSIONS# (TONS)																									
Total		198,447	203,886	197,412</																					

2004 SO₂ Compliance Strategy
Appendix 8- SO₂ Emissions of Various SO₂ Compliance Plans

Case03- Option 3: WFGD HS GH234

SO₂ SUMMARY BY YEAR

FUEL SO ₂ Content (#MMBTU)	Ownership	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025		
Brown 1	KU	2.7	2.7	2.8	2.7	2.7	2.7	2.7	2.8	2.7	2.8	2.7	2.8	2.7	2.8	2.7	2.7	2.8	2.7	2.8	2.7	2.8	2.7	
Brown 2	KU	2.7	2.7	2.8	2.7	2.8	2.7	2.7	2.7	2.8	2.7	2.8	2.8	2.8	2.7	2.7	2.7	2.8	2.8	2.7	2.8	2.7	2.8	
Brown 3	KU	2.8	2.8	2.7	2.7	2.8	2.7	2.7	2.7	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.7	2.8	2.8	2.8	
Ghent 1	KU	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	
Ghent 2	KU	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	
Ghent 3	KU	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	
Ghent 4	KU	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	
Green River 3	KU	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	
Green River 4	KU	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	
Tyone 3	KU	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	
Cane Run 4	LGE	6.1	6.0	6.0	6.0	6.1	6.0	6.0	6.0	6.0	6.1	6.1	6.0	6.0	6.0	6.0	6.0	6.0	6.1	6.0	6.1	6.0	6.0	
Cane Run 5	LGE	6.1	6.0	6.0	6.1	6.1	6.1	6.0	6.0	6.1	6.0	6.0	6.1	6.0	6.0	6.1	6.0	6.1	6.0	6.1	6.0	6.0	6.1	6.1
Cane Run 6	LGE	6.0	6.0	6.1	6.1	6.0	6.0	6.0	6.1	6.1	6.0	6.0	6.1	6.0	6.0	6.0	6.0	6.0	6.1	6.0	6.0	6.1	6.0	6.1
Mill Creek 1	LGE	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1
Mill Creek 2	LGE	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1
Mill Creek 3	LGE	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1
Mill Creek 4	LGE	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1
Trimble County 1	LGE	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5
Trimble County 2	KU	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
SCRUBBER REMOVAL EFF.																								
Brown 1		0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
Brown 2		0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
Brown 3		0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
Ghent 1		93%	93%	93%	93%	93%	93%	93%	93%	93%	93%	93%	93%	93%	93%	93%	93%	93%	93%	93%	93%	93%	93%	
Ghent 2		0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
Ghent 3		0%	0%	98%	98%	98%	98%	98%	98%	98%	98%	98%	98%	98%	98%	98%	98%	98%	98%	98%	98%	98%	98%	
Ghent 4		0%	0%	0%	0%	98%	98%	98%	98%	98%	98%	98%	98%	98%	98%	98%	98%	98%	98%	98%	98%	98%	98%	
Green River 3		0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
Green River 4		0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
Tyone 3		0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
Cane Run 4		83%	83%	83%	83%	83%	83%	83%	83%	83%	83%	83%	83%	83%	83%	83%	83%	83%	83%	83%	83%	83%	83%	
Cane Run 5		85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	
Cane Run 6		85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	
Mill Creek 1		93%	93%	93%	93%	93%	93%	93%	93%	93%	93%	93%	93%	93%	93%	93%	93%	93%	93%	93%	93%	93%	93%	
Mill Creek 2		91%	91%	91%	91%	91%	91%	91%	91%	91%	91%	91%	91%	91%	91%	91%	91%	91%	91%	91%	91%	91%	91%	
Mill Creek 3		89%	89%	89%	89%	89%	89%	89%	89%	89%	89%	89%	89%	89%	89%	89%	89%	89%	89%	89%	89%	89%	89%	
Mill Creek 4		90%	90%	90%	90%	90%	90%	90%	90%	90%	90%	90%	90%	90%	90%	90%	90%	90%	90%	90%	90%	90%	90%	
Trimble County 1		94%	94%	94%	94%	94%	94%	94%	94%	94%	94%	94%	94%	94%	94%	94%	94%	94%	94%	94%	94%	94%	94%	
Trimble County 2		0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
TONS SO₂ EMITTED																								
Brown 1	KU	8,416	7,412	8,867	8,258	9,274	8,822	8,003	8,441	7,354	8,717	9,100	9,014	9,335	9,303	9,703	8,888	9,882	10,014	10,055	10,139	10,201	10,201	
Brown 2	KU	15,315	15,149	15,921	13,929	15,085	14,096	13,514	13,782	13,921	14,283	13,080	14,633	14,977	15,190	15,642	15,528	15,949	14,548	16,256	16,441	16,525	16,525	
Brown 3	KU	30,775	34,298	36,656	36,947	38,318	34,205	33,057	29,996	34,461	35,831	36,228	36,803	38,387	38,198	35,387	39,862	41,203	41,866	42,037	41,962	42,635	42,635	
Ghent 1	KU	7,744	7,759	6,778	7,529	7,580	7,327	7,348	7,313	8,603	7,425	7,471	7,565	7,545	7,565	7,545	7,565	7,565	7,565	7,565	7,565	7,565	7,565	
Ghent 2	KU	15,841	17,745	18,574	5,845	2,114	1,998	1,875	1,785	2,016	2,008	2,022	2,044	2,064	2,051	1,882	2,106	2,141	2,154	2,167	2,157	2,175	2,175	
Ghent 3	KU	20,120	20,622	6,211	2,440	2,467	2,181	2,368	2,387	2,389	2,426	2,439	2,453	2,200	2,496	2,462	2,468	2,477	2,486	2,481	2,237	2,491	2,491	
Ghent 4	KU	20,796	20,871	20,986	21,151	5,114	2,420	2,383	2,411	2,402	2,432	2,443	2,208	2,454	2,481	2,482	2,468	2,485	2,485	2,485	2,485	2,491	2,491	
Green River 3	KU	8,050	8,010	8,451	8,537	9,226	8,735	7,647	8,262	8,646	8,983	9,599	8,765	10,400	10,486	10,965	10,967	11,521	11,772	10,317	11,881	12,275	12,275	
Green River 4	KU	12,677	13,709	14,544	14,406	15,431	11,740	12,291	12,852	13,357	13,840	14,409	14,612	13,408	15,407	16,253	15,888	16,519	16,907	16,904	15,327	17,275	17,275	
Tyone 3	KU	2,961	3,247	3,874	3,960	4,411	3,155	3,211	3,540	3,862	3,800	3,955	4,094	3,926	4,230	4,628	4,456	4,822	4,824	4,894	4,404	4,941	4,941	
Cane Run 4	LGE	5,723	5,823	5,813	5,845	5,493	5,050	4,201	4,805	4,754	5,098	5,135	5,267	5,395	5,385	4,770	5,565	5,568	5,754	5,802	5,846	5,940	5,331	
Cane Run 5	LGE	5,175	5,387	5,343	4,714	5,189	4,568	4,073	4,316	4,484	4,571	4,282	4,898	5,049	5,070	5,180	5,248	5,394	4,834	5,501	5,552	5,608	5,608	
Cane Run 6	LGE	7,484	7,572	7,636	7,416	8,507	6,700	6,222	6,488	6,532	6,593	6,853	6,319	7,100	6,997	7,257	7,207	7,414	7,521	6,747	7,861	7,861	7,861	
Mill Creek 1	LGE	4,989	4,521	4,720	4,363	4,870	4,102	4,239	3,756	4,388	4,132	4,477	4,248	4,544	4,303	4,640	4,011	4,691	4,426	4,722	4,492	4,783	4,783	
Mill Creek 2	LGE	5,434	5,780	5,463	5,734	5,366	5,430	4,521	5,380	5,089	5,515	5,208	5,568	5,324	5,631	4,923	5,7							

2004 SO₂ Compliance Strategy
Appendix 8- SO₂ Emissions of Various SO₂ Compliance Plans

Case04- Option 4: WFGD HS BR123x

FUEL SO ₂ Content (#MMBTU)	Ownership	SO ₂ SUMMARY BY YEAR																				
		2006	2006	2007	2008	2009	2010	2011	2012	2013	2014	2014	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Brown 1	KU	2.7	2.7	2.7	123.7	6.4	6.4	6.4	6.4	6.4	6.4	6.4	6.4	6.4	6.4	6.4	6.4	6.4	6.4	6.4	6.4	
Brown 2	KU	2.7	2.7	2.7	132.9	6.4	6.4	6.4	6.4	6.4	6.4	6.4	6.4	6.4	6.4	6.4	6.4	6.4	6.4	6.4	6.4	
Brown 3	KU	2.8	2.8	2.7	122.7	6.4	6.4	6.4	6.4	6.4	6.4	6.4	6.4	6.4	6.4	6.4	6.4	6.4	6.4	6.4	6.4	
Ghent 1	KU	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	
Ghent 2	KU	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	
Ghent 3	KU	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	
Ghent 4	KU	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	
Green River 3	KU	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	
Green River 4	KU	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	
Tyrone 3	KU	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	
Cane Run 4	LGE	6.1	6.0	6.1	6.0	6.1	6.0	6.1	6.0	6.1	6.0	6.1	6.0	6.1	6.0	6.1	6.0	6.1	6.0	6.1	6.0	
Cane Run 5	LGE	6.1	6.0	6.1	6.0	6.1	6.0	6.1	6.0	6.1	6.0	6.1	6.0	6.1	6.0	6.1	6.0	6.1	6.0	6.1	6.0	
Cane Run 6	LGE	6.0	6.0	6.1	6.0	6.0	6.0	6.0	6.0	6.1	6.1	6.1	6.0	6.0	6.0	6.0	6.1	6.0	6.1	6.0	6.1	
Mill Creek 1	LGE	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	
Mill Creek 2	LGE	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	
Mill Creek 3	LGE	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	
Mill Creek 4	LGE	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	
Trimble County 1	LGE	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	
Trimble County 2	KU	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
SCRUBBER REMOVAL EFF.																						
Brown 1		0%	0%	0%	98%	98%	98%	98%	98%	98%	98%	98%	98%	98%	98%	98%	98%	98%	98%	98%	98%	
Brown 2		0%	0%	0%	98%	98%	98%	98%	98%	98%	98%	98%	98%	98%	98%	98%	98%	98%	98%	98%	98%	
Brown 3		0%	0%	0%	98%	98%	98%	98%	98%	98%	98%	98%	98%	98%	98%	98%	98%	98%	98%	98%	98%	
Ghent 1		93%	93%	93%	93%	93%	93%	93%	93%	93%	93%	93%	93%	93%	93%	93%	93%	93%	93%	93%	93%	
Ghent 2		0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
Ghent 3		0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
Ghent 4		0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
Green River 3		0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
Green River 4		0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
Tyrone 3		0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
Cane Run 4		83%	83%	83%	83%	83%	83%	83%	83%	83%	83%	83%	83%	83%	83%	83%	83%	83%	83%	83%	83%	
Cane Run 5		85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	
Cane Run 6		85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	
Mill Creek 1		93%	93%	93%	93%	93%	93%	93%	93%	93%	93%	93%	93%	93%	93%	93%	93%	93%	93%	93%	93%	
Mill Creek 2		91%	91%	91%	91%	91%	91%	91%	91%	91%	91%	91%	91%	91%	91%	91%	91%	91%	91%	91%	91%	
Mill Creek 3		89%	89%	89%	89%	89%	89%	89%	89%	89%	89%	89%	89%	89%	89%	89%	89%	89%	89%	89%	89%	
Mill Creek 4		90%	90%	90%	90%	90%	90%	90%	90%	90%	90%	90%	90%	90%	90%	90%	90%	90%	90%	90%	90%	
Trimble County 1		94%	94%	94%	94%	94%	94%	94%	94%	94%	94%	94%	94%	94%	94%	94%	94%	94%	94%	94%	94%	
Trimble County 2		0%	0%	0%	0%	0%	98%	98%	98%	98%	98%	98%	98%	98%	98%	98%	98%	98%	98%	98%	98%	
TONS SO₂ EMITTED																						
Brown 1	KU	8,416	7,412	8,269	6,410	686	418	395	415	361	420	437	436	451	469	419	462	487	493	505	509	
Brown 2	KU	15,315	15,149	16,288	14,149	788	784	770	779	780	786	788	793	796	800	803	807	808	729	813	817	816
Brown 3	KU	30,775	34,298	38,803	33,557	2,101	1,958	1,912	1,728	1,972	1,996	2,007	2,043	2,064	2,063	1,871	2,095	2,135	2,151	2,146	2,162	2,172
Ghent 1	KU	7,744	7,759	6,785	7,611	7,707	7,643	7,839	7,608	7,823	6,844	7,655	7,716	7,724	7,720	7,743	7,825	6,961	7,740	7,752	7,760	7,757
Ghent 2	KU	15,841	17,745	19,074	17,566	18,415	15,892	15,018	13,887	15,840	18,384	18,903	17,100	17,746	17,555	16,857	18,550	19,326	19,815	19,980	19,919	20,164
Ghent 3	KU	20,120	20,822	19,289	21,177	21,328	18,990	18,626	20,571	20,321	21,224	21,551	21,806	19,739	22,167	22,614	22,509	22,964	23,192	23,288	21,027	23,524
Ghent 4	KU	20,796	20,871	21,512	21,861	18,587	20,980	20,322	20,908	20,817	21,519	21,897	19,975	22,199	22,288	22,979	22,615	22,863	23,333	20,918	23,361	23,552
Green River 3	KU	8,059	8,010	8,432	8,418	8,167	8,810	7,489	8,130	8,580	8,859	9,426	8,681	10,343	10,350	10,885	10,885	11,444	11,653	10,278	11,838	12,221
Green River 4	KU	12,977	13,709	14,587	14,246	15,208	11,520	12,023	12,783	13,224	13,866	14,178	14,299	13,148	15,177	16,061	15,710	16,339	16,897	16,579	15,166	17,046
Tyrone 3	KU	2,991	3,247	3,866	3,901	4,373	3,081	3,117	3,453	3,323	3,688	3,889	3,972	3,858	4,149	4,549	4,377	4,717	4,788	4,826	4,358	4,892
Cane Run 4	LGE	5,723	5,823	5,909	5,883	5,700	5,282	4,454	5,145	5,169	5,339	5,388	5,494	5,578	5,041	5,787	5,777	5,856	5,922	5,832	6,031	5,429
Cane Run 5	LGE	5,175	5,267	5,476	4,881	5,319	4,538	4,370	4,496	4,717	4,753	4,310	4,908	5,136	5,143	5,220	5,321	5,388	4,832	5,510	5,905	5,643
Cane Run 6	LGE	7,464	7,572	7,723	7,868	8,821	7,121	6,888	6,978	7,053	7,087	7,203	6,828	7,408	7,364	7,484	7,496	7,825	7,992	6,882	7,799	7,761
Mill Creek 1	LGE	4,899	4,521	4,743	4,466	4,747	4,308	4,485	4,391	4,453	4,309	4,833	4,375	4,652	4,403	4,711	4,785	4,751	4,474	4,763	4,504	4,780
Mill Creek 2	LGE	5,434	5,790	5,481	5,821	5,482	5,860	4,758	5,641	5,313	5,686	5,373	5,720	5,435	5,747	4,989	5,517	5,467	5,854	5,496	5,885	5,540
Mill Creek 3	LGE	10,437	10,480	10,066	10,732	10,067	10,524	9,825	10,532	9,089	10,571	9,987	10,837	10,023	10,852	10,044	10,703	9,266	10,885	10,080	10,745	10,100
Mill Creek 4	LGE	10,855	9,458	11,063	10,462	11,014	10,224	10,864	10,124	10,788	9,371	10,969	10,411	11,056	10,356	11,069	10,447	11,095	9,611	11,141	10,567	11,206
Trimble County 1	LGE	5,825	6,053	5,537	6,069	5,900	6,012	5,487	6,025	5,521	6,025	5,519	6,049	5,078	6,048	5,545	6,068	5,550	6,051	5,549	6,065	5,091
Trimble County 2	LGE	0	0	0	0	0	0	1,097	1,867	1,880	1,870	1,881	1,885	1,891	1,888	1,892	1,897	1,894	1,895	1,895	1,901	1,896
Total		198,447	203,886	212,300	207,909	162,380	146,072	141,985	146,686	148,060	160,908	164,381	163,214	164,970	160,018	161,724	163,977	165,798	168,947	164,985	166,643	170,768
SO₂ EMISSIONS (TONS)																						
Total		198,447	203,886	212,300	207,909	162,380	146,072	141,985	146,686	148,060	160,908	164,381	163,214	164,970	160,018	161,724	163,977	165,798	168,947	164,985	166,643	170,768
ALLOWANCES																						
KU EPA Allocated SO ₂ Allowances		83,343	83,343	83,343	83,343	83,343	41,872	41,872	41,872	41,872	41,872	29,170	29,170	29,170	29,170	29,170	29,170	29,170	29,170	29,170	29,170	29,170
LGE EPA Allocated SO ₂ Allowances		62,456	62,456	62,456	62,456	62,456	31,228	31,228	31,228	31,228	31,228	21,860	21,860	21,860	21,860	21,860	21,860	21,860	21,860	21,860	21,860	21,860
Total KULOE EPA Allocated SO ₂ Allowances		145,799	145,799	145,799	145,799	145,799	73,100															

*2004 SO₂ Compliance Strategy
Appendix 8- SO₂ Emissions of Various SO₂ Compliance Plans*

Case07- Option 7: DFGD MS BR123

SO2 SUMMARY BY YEAR

FUEL SO2 Content (#MMBTU)	Ownership	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Brown 1	KU	2.7	2.7	2.7	2.7	2.7	15.9	2.7	2.8	2.7	2.8	2.7	2.8	2.8	2.8	2.7	2.7	2.8	2.8	2.8	2.7	2.7
Brown 2	KU	2.7	2.7	2.7	2.7	2.8	14.9	2.7	2.7	2.8	2.7	2.7	2.7	2.7	2.8	2.8	2.7	2.8	2.7	2.7	2.8	2.8
Brown 3	KU	2.8	2.8	2.7	2.7	13.1	2.8	2.8	2.7	2.7	2.8	2.7	2.7	2.8	2.8	2.8	2.7	2.8	2.7	2.7	2.7	2.8
Ghent 1	KU	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1
Ghent 2	KU	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2
Ghent 3	KU	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2
Ghent 4	KU	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2
Green River 3	KU	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6
Green River 4	KU	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6
Tyrone 3	KU	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8
Cane Run 4	LGE	6.1	6.0	6.0	6.1	6.1	6.1	6.0	6.0	6.1	6.1	6.1	6.0	6.0	6.1	6.1	6.0	6.0	6.0	6.0	6.0	6.1
Cane Run 5	LGE	6.1	6.0	6.1	6.1	6.0	6.0	6.0	6.0	6.1	6.1	6.0	6.0	6.1	6.1	6.1	6.0	6.0	6.0	6.0	6.0	6.1
Cane Run 6	LGE	6.0	6.0	6.1	6.0	6.0	6.0	6.1	6.1	6.1	6.1	6.0	6.0	6.1	6.0	6.1	6.0	6.1	6.0	6.0	6.0	6.1
Mill Creek 1	LGE	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1
Mill Creek 2	LGE	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1
Mill Creek 3	LGE	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1
Mill Creek 4	LGE	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1
Trimble County 1	LGE	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5
Trimble County 2	KU	0.0	0.0	0.0	0.0	0.0	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5

SCRUBBER REMOVAL EFF.

Brown 1	0%	0%	0%	0%	0%	93%	93%	93%	93%	93%	93%	93%	93%	93%	93%	93%	93%	93%	93%	93%	93%	93%
Brown 2	0%	0%	0%	0%	0%	93%	93%	93%	93%	93%	93%	93%	93%	93%	93%	93%	93%	93%	93%	93%	93%	93%
Brown 3	0%	0%	0%	0%	0%	93%	93%	93%	93%	93%	93%	93%	93%	93%	93%	93%	93%	93%	93%	93%	93%	93%
Ghent 1	93%	93%	93%	93%	93%	93%	93%	93%	93%	93%	93%	93%	93%	93%	93%	93%	93%	93%	93%	93%	93%	93%
Ghent 2	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Ghent 3	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Ghent 4	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Green River 3	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Green River 4	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Tyrone 3	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Cane Run 4	83%	83%	83%	83%	83%	83%	83%	83%	83%	83%	83%	83%	83%	83%	83%	83%	83%	83%	83%	83%	83%	83%
Cane Run 5	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%
Cane Run 6	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%
Mill Creek 1	93%	93%	93%	93%	93%	93%	93%	93%	93%	93%	93%	93%	93%	93%	93%	93%	93%	93%	93%	93%	93%	93%
Mill Creek 2	91%	91%	91%	91%	91%	91%	91%	91%	91%	91%	91%	91%	91%	91%	91%	91%	91%	91%	91%	91%	91%	91%
Mill Creek 3	89%	89%	89%	89%	89%	89%	89%	89%	89%	89%	89%	89%	89%	89%	89%	89%	89%	89%	89%	89%	89%	89%
Mill Creek 4	90%	90%	90%	90%	90%	90%	90%	90%	90%	90%	90%	90%	90%	90%	90%	90%	90%	90%	90%	90%	90%	90%
Trimble County 1	94%	94%	94%	94%	94%	94%	94%	94%	94%	94%	94%	94%	94%	94%	94%	94%	94%	94%	94%	94%	94%	94%
Trimble County 2	0%	0%	0%	0%	0%	98%	98%	98%	98%	98%	98%	98%	98%	98%	98%	98%	98%	98%	98%	98%	98%	98%

TONS SO2 EMITTED

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Brown 1	8,416	7,412	8,859	9,220	9,201	3,720	574	602	519	616	642	639	661	667	664	620	715	724	727	736	743
Brown 2	15,315	15,149	16,288	14,543	15,749	5,966	1,130	1,142	1,136	1,148	1,037	1,160	1,172	1,180	1,189	1,193	1,198	1,086	1,208	1,215	1,218
Brown 3	30,775	34,286	36,803	36,850	14,016	2,851	2,750	2,466	2,781	2,791	2,797	2,853	2,917	2,910	2,657	2,980	3,052	3,091	3,086	3,118	3,146
Ghent 1	7,744	7,759	6,796	7,612	7,728	7,658	7,642	7,647	6,879	7,694	7,686	7,731	7,738	7,743	7,759	6,967	7,750	7,762	7,770	7,766	
Ghent 2	15,841	17,745	19,074	17,666	18,944	16,142	15,200	14,098	16,222	16,814	17,348	17,558	18,179	17,946	16,975	18,922	19,663	19,918	20,279	20,226	20,482
Ghent 3	20,120	20,822	19,269	21,239	21,826	18,059	19,827	20,581	20,843	21,362	21,705	21,974	19,872	22,296	22,740	22,648	23,139	23,389	23,447	21,138	23,661
Ghent 4	20,796	20,871	21,312	21,986	19,005	21,125	20,315	20,913	20,843	21,523	21,947	19,906	22,436	22,545	22,871	22,846	23,317	23,361	21,173	23,580	23,712
Green River 3	8,059	8,010	9,432	9,416	9,107	8,565	7,460	8,089	8,527	8,827	9,323	8,655	10,296	10,312	10,840	10,862	11,420	11,639	10,272	11,811	12,192
Green River 4	12,977	13,709	14,587	14,245	15,252	11,980	11,980	12,737	13,123	13,880	14,132	14,217	13,085	15,140	16,036	15,625	16,316	16,673	16,580	15,142	17,047
Tyrone 3	2,991	3,247	3,066	3,300	4,344	3,031	3,062	3,397	3,587	3,668	3,857	3,947	3,847	4,101	4,509	4,352	4,722	4,766	4,809	4,350	4,885
Cane Run 4	5,723	5,823	5,309	5,308	5,798	5,380	4,535	5,247	5,312	5,946	5,517	5,689	5,693	5,130	5,876	5,966	5,934	5,966	6,004	6,105	5,484
Cane Run 5	5,175	5,367	5,478	4,915	5,408	4,883	4,397	4,579	4,788	4,847	4,381	4,994	5,198	5,214	5,278	5,370	5,449	4,881	5,569	5,671	5,691
Cane Run 6	7,464	7,572	7,723	7,869	6,873	7,220	7,019	7,086	7,182	7,202	7,319	6,719	7,489	7,481	7,568	7,584	7,685	7,737	6,945	7,815	7,805
Mill Creek 1	4,689	4,521	4,743	4,467	4,756	4,326	4,524	3,956	4,589	4,340	4,656	4,399	4,687	4,422	4,728	4,092	4,762	4,484	4,771	4,515	4,797
Mill Creek 2	5,434	5,790	5,481	5,822	5,490	5,682	4,808	5,672	5,347	5,712	5,396	5,748	5,455	5,771	5,013	5,836	5,442	5,862	5,706	5,896	5,549
Mill Creek 3	10,437	10,480	10,086	10,735	10,080	10,541	9,868	10,558	9,115	10,587	10,007	10,650	10,033	10,661	10,055	10,714	9,272	10,888	10,083	10,751	10,101
Mill Creek 4	10,955	9,459	11,063	10,479	11,088	10,253	10,741	10,189	10,858	9,396	10,991	10,636	11,068	10,385	11,088	10,462	11,101	9,619	11,148	10,571	11,209
Trimble County 1	5,525	6,053	5,537	6,069	5,082	6,012	5,497	6,025	5,522	6,026	5,526	6,049	5,079	6,049	5,546	6,069	5,550	6,052	5,549	6,067	5,095
Trimble County 2	0	0	0	0	0	1,098	1,866	1,880	1,872	1,881	1,884	1,891	1,886	1,888	1,892	1,896	1,894	1,895	1,895	1,901	1,896
Trimble County 2	0	0	0	0	0	386	656	661	658	661	662	664	663	664	665	666	666	666	666	668	668

SO2 EMISSIONS (TONS)

Total	196,447	203,886	212,360	212,772	189,778	155,213	143,883	147,520	150,296	153,405	156,820	155,753	157,446	162,497	163,962
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2004 SO₂ Compliance Strategy
Appendix 8- SO₂ Emissions of Various SO₂ Compliance Plans

Case08- Option 8: DFGD MS BR3x

		SO ₂ SUMMARY BY YEAR																				
		2006	2006	2007	2008	2008	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
FUEL BO2 Content (#MBTU)																						
Brown 1	KU	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7
Brown 2	KU	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7
Brown 3	KU	2.8	2.8	2.7	35.3	2.7	2.8	2.8	2.8	2.8	2.8	2.7	2.7	2.8	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.8
Ghent 1	KU	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1
Ghent 2	KU	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2
Ghent 3	KU	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2
Ghent 4	KU	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2
Green River 3	KU	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6
Green River 4	KU	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8
Tyrone 3	KU	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8
Cane Run 4	LGE	6.1	6.0	6.0	6.0	6.1	6.1	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.1
Cane Run 5	LGE	6.1	6.0	6.1	6.0	6.1	6.0	6.1	6.1	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
Cane Run 6	LGE	6.0	6.0	6.1	6.0	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1
Mill Creek 1	LGE	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1
Mill Creek 2	LGE	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1
Mill Creek 3	LGE	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1
Mill Creek 4	LGE	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1
Trimble County 1	LGE	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5
Trimble County 2	LGE	0.0	0.0	0.0	0.0	0.0	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5
SCRUBBER REMOVAL EFF.																						
Brown 1		0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Brown 2		0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Brown 3		0%	0%	0%	93%	93%	93%	93%	93%	93%	93%	93%	93%	93%	93%	93%	93%	93%	93%	93%	93%	93%
Ghent 1		93%	93%	93%	93%	93%	93%	93%	93%	93%	93%	93%	93%	93%	93%	93%	93%	93%	93%	93%	93%	93%
Ghent 2		0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Ghent 3		0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Ghent 4		0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Green River 3		0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Green River 4		0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Tyrone 3		0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Cane Run 4		83%	83%	83%	83%	83%	83%	83%	83%	83%	83%	83%	83%	83%	83%	83%	83%	83%	83%	83%	83%	83%
Cane Run 5		85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%
Cane Run 6		85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%
Mill Creek 1		93%	93%	93%	93%	93%	93%	93%	93%	93%	93%	93%	93%	93%	93%	93%	93%	93%	93%	93%	93%	93%
Mill Creek 2		91%	91%	91%	91%	91%	91%	91%	91%	91%	91%	91%	91%	91%	91%	91%	91%	91%	91%	91%	91%	91%
Mill Creek 3		89%	89%	89%	89%	89%	89%	89%	89%	89%	89%	89%	89%	89%	89%	89%	89%	89%	89%	89%	89%	89%
Mill Creek 4		90%	90%	90%	90%	90%	90%	90%	90%	90%	90%	90%	90%	90%	90%	90%	90%	90%	90%	90%	90%	90%
Trimble County 1		94%	94%	94%	94%	94%	94%	94%	94%	94%	94%	94%	94%	94%	94%	94%	94%	94%	94%	94%	94%	94%
Trimble County 2		0%	0%	0%	0%	0%	98%	98%	98%	98%	98%	98%	98%	98%	98%	98%	98%	98%	98%	98%	98%	98%
TONS BO2 EMITTED																						
Brown 1	KU	8,418	7,412	8,888	9,218	9,181	8,828	7,928	8,268	7,281	8,840	9,028	8,887	9,258	8,224	9,674	8,501	9,825	9,983	9,822	10,081	10,181
Brown 2	KU	15,315	15,149	16,288	14,906	15,668	14,410	13,768	14,013	14,093	14,027	13,000	14,860	14,989	15,269	15,688	15,853	15,827	14,488	16,256	16,457	16,524
Brown 3	KU	30,775	34,298	36,803	33,848	3,054	2,877	2,792	2,501	2,813	2,827	2,883	2,945	2,838	2,935	2,674	3,000	3,071	3,105	3,101	3,132	3,158
Ghent 1	KU	7,744	7,799	6,795	7,812	7,728	7,883	7,876	7,896	7,859	6,872	7,700	7,887	7,735	7,746	7,771	7,771	6,967	7,751	7,763	7,772	7,770
Ghent 2	KU	15,841	17,745	19,074	17,599	18,897	18,244	15,460	14,390	16,423	17,181	17,540	17,850	18,389	18,130	17,121	19,071	19,809	20,039	20,339	20,336	20,588
Ghent 3	KU	20,120	20,822	19,269	21,189	21,585	19,111	19,941	20,763	21,501	21,823	22,083	20,005	22,415	22,439	22,722	23,244	23,441	22,833	21,210	22,737	23,737
Ghent 4	KU	20,786	20,871	21,312	21,883	18,834	21,191	20,458	21,077	20,956	21,718	22,123	20,106	22,815	22,896	22,982	22,884	23,455	23,688	21,273	23,870	23,804
Green River 3	KU	8,099	8,010	9,432	9,417	9,108	9,567	7,453	8,108	8,531	8,819	9,324	8,855	10,299	10,311	10,833	10,862	11,424	11,644	10,276	11,820	12,208
Green River 4	KU	12,977	13,709	14,587	14,246	15,216	11,531	11,971	12,780	13,234	13,740	14,203	14,234	13,132	15,227	16,124	16,894	16,381	18,743	18,718	18,180	17,997
Tyrone 3	KU	2,981	3,247	3,866	3,931	4,340	3,071	3,156	3,438	3,598	3,887	3,871	3,975	3,842	4,134	4,678	4,368	4,786	4,770	4,819	4,380	4,888
Cane Run 4	LGE	5,723	5,823	5,908	5,904	5,784	5,418	4,603	5,316	5,403	5,483	5,558	5,650	5,733	5,184	5,904	5,895	5,870	6,001	6,033	6,121	5,496
Cane Run 5	LGE	5,175	5,367	5,478	4,911	5,391	4,712	4,436	4,828	4,828	4,887	4,416	5,031	5,231	5,240	5,302	5,403	5,471	4,995	5,574	5,886	5,703
Cane Run 6	LGE	7,484	7,572	7,723	7,889	8,873	7,267	7,070	7,129	7,247	7,245	7,381	7,939	7,536	7,812	7,987	7,842	7,888	7,748	6,994	7,822	7,810
Mill Creek 1	LGE	4,899	4,521	4,743	4,467	4,756	4,333	3,870	4,586	4,347	4,680	4,402	4,888	4,426	4,700	4,085	4,763	4,485	4,771	4,515	4,768	4,888
Mill Creek 2	LGE	5,434	5,790	5,481	5,822	5,490	5,895	4,819	5,887	5,563	5,721	5,399	5,756	5,457	5,774	5,015	5,641	5,484	5,883	5,507	5,886	5,550
Mill Creek 3	LGE	10,437	10,480	10,086	10,735	10,089	10,548	8,977	10,565	9,121	10,590	10,011	10,860	10,437	10,661	10,057	10,715	9,273	10,888	10,083	10,751	10,102
Mill Creek 4	LGE	10,955	9,459	11,063	10,478	11,098	10,271	10,765	10,213	10,885	8,401	10,992	10,436	11,087	10,390	11,090	10,487	11,101	9,620	11,148	10,571	11,208
Trimble County 1	LGE	5,526	6,053	6,537	6,069	5,092	6,013	5,496	6,023	5,519	6,029	5,526	6,047	5,079	6,048	5,547	6,070	5,550	6,052	5,550	6,087	5,595
Trimble County 2	KU	0	0	0	0	0	1,098	1,656	1,880	1,872	1,881	1,884	1,891	1,885	1,888	1,892	1,896	1,884	1,895	1,895	1,901	1,896
Trimble County 2	LGE	0	0	0	0	0	385	656	661	658	661	682	664	662	663	685	668	666	668	666	666	666
SO₂ EMISSIONS (TONS)																						
Total		198,447	203,886	212,300	208,297	178,104	168,830	164,766	169,042	170,793	178,268	177,911	178,306	180,888	185,898	188,046	188,396	192,680	193,635	192,237	194,034	198,258
ALLOWANCES																						
KU EPA Allocated SO ₂ Allowances		83,343	83,343	83,343	83,343	83,343	41,872	41,872	41,872	41,872	4											

2004 SO₂ Compliance Strategy
Appendix 8- SO₂ Emissions of Various SO₂ Compliance Plans

Case 10- Option 10: FS E. COMP BR123

SO₂ SUMMARY BY YEAR

FUEL SO ₂ Content (MMDTU)	Ownership	2003	2004	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Brown 1	KU	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7
Brown 2	KU	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7
Brown 3	KU	2.8	2.8	2.7	2.6	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2
Ghent 1	KU	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1
Ghent 2	KU	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2
Ghent 3	KU	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2
Ghent 4	KU	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2
Green River 3	KU	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6
Green River 4	KU	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6
Tyone 3	KU	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8
Cane Run 4	LGE	6.1	6.0	6.0	6.1	6.1	6.0	6.0	6.1	6.1	6.0	6.0	6.1	6.1	6.0	6.0	6.0	6.1	6.1	6.0	6.0	6.1
Cane Run 5	LGE	6.1	6.0	6.1	6.1	6.1	6.1	6.0	6.0	6.1	6.1	6.0	6.1	6.1	6.0	6.0	6.0	6.1	6.0	6.1	6.0	6.1
Cane Run 6	LGE	6.0	6.0	6.1	6.0	6.1	6.0	6.0	6.0	6.1	6.0	6.1	6.1	6.1	6.0	6.1	6.1	6.0	6.1	6.0	6.1	6.1
Mill Creek 1	LGE	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1
Mill Creek 2	LGE	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1
Mill Creek 3	LGE	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1
Mill Creek 4	LGE	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1
Tumble County 1	LGE	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5
Tumble County 2	KU	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SCRUBBER REMOVAL EFF.																						
Brown 1		0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Brown 2		0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Brown 3		0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Ghent 1		93%	93%	93%	93%	93%	93%	93%	93%	93%	93%	93%	93%	93%	93%	93%	93%	93%	93%	93%	93%	93%
Ghent 2		0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Ghent 3		0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Ghent 4		0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Green River 3		0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Green River 4		0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Tyone 3		0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Cane Run 4		83%	83%	83%	83%	83%	83%	83%	83%	83%	83%	83%	83%	83%	83%	83%	83%	83%	83%	83%	83%	83%
Cane Run 5		85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%
Cane Run 6		85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%
Mill Creek 1		93%	93%	93%	93%	93%	93%	93%	93%	93%	93%	93%	93%	93%	93%	93%	93%	93%	93%	93%	93%	93%
Mill Creek 2		91%	91%	91%	91%	91%	91%	91%	91%	91%	91%	91%	91%	91%	91%	91%	91%	91%	91%	91%	91%	91%
Mill Creek 3		89%	89%	89%	89%	89%	89%	89%	89%	89%	89%	89%	89%	89%	89%	89%	89%	89%	89%	89%	89%	89%
Mill Creek 4		90%	90%	90%	90%	90%	90%	90%	90%	90%	90%	90%	90%	90%	90%	90%	90%	90%	90%	90%	90%	90%
Tumble County 1		94%	94%	94%	94%	94%	94%	94%	94%	94%	94%	94%	94%	94%	94%	94%	94%	94%	94%	94%	94%	94%
Tumble County 2		0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
TONS SO₂ EMITTED																						
Brown 1	KU	8,416	7,412	8,330	4,914	4,007	3,732	3,470	3,847	3,119	3,788	3,862	3,814	4,073	4,077	4,280	3,804	4,373	4,375	4,381	4,380	4,484
Brown 2	KU	15,315	15,148	16,288	14,543	15,293	6,887	6,417	6,513	6,495	6,538	5,947	6,886	6,832	6,922	7,072	7,083	7,154	6,503	7,260	7,380	7,401
Brown 3	KU	30,775	34,296	36,803	34,884	16,685	15,078	14,980	13,182	15,027	15,583	15,708	16,039	16,714	16,719	15,386	17,275	18,213	16,322	16,406	16,872	16,872
Ghent 1	KU	7,744	7,759	6,795	7,612	7,728	7,865	7,877	7,657	7,896	6,989	7,898	7,867	7,735	7,739	7,748	7,771	6,987	7,752	7,783	7,771	7,770
Ghent 2	KU	15,841	17,745	18,074	17,868	18,368	17,065	16,357	15,062	17,191	17,747	18,152	18,472	18,858	18,844	17,470	19,518	20,172	20,408	20,864	20,807	20,832
Ghent 3	KU	20,120	20,822	19,271	21,242	22,227	19,555	20,552	21,139	21,238	21,803	22,253	22,544	20,330	22,828	23,120	23,100	23,483	23,989	23,748	21,409	23,843
Ghent 4	KU	20,796	20,871	21,312	21,988	19,526	21,938	21,025	21,575	21,576	22,180	22,505	20,448	22,919	22,896	23,236	23,204	23,821	23,809	21,375	23,871	23,973
Green River 3	KU	8,059	8,010	9,432	8,417	9,102	8,547	7,455	8,040	8,513	8,783	9,320	8,647	10,294	10,272	10,830	10,848	11,415	11,907	10,313	11,807	12,202
Green River 4	KU	12,977	13,709	14,587	14,250	15,333	11,483	11,923	12,715	13,180	13,708	14,174	14,206	13,123	15,206	16,081	15,850	16,382	16,706	16,564	15,172	17,102
Tyone 3	KU	2,981	3,247	3,866	3,931	4,385	3,034	3,102	3,407	3,579	3,679	3,862	3,949	3,848	4,130	4,532	4,383	4,716	4,775	4,821	4,359	4,887
Cane Run 4	LGE	5,723	5,823	5,909	5,908	5,831	5,532	4,750	5,453	5,497	5,571	5,813	5,888	5,780	5,216	5,923	5,915	5,884	6,018	6,044	6,129	5,699
Cane Run 5	LGE	5,175	5,387	5,476	4,915	5,488	4,888	4,583	4,756	4,965	4,992	4,513	6,137	5,318	5,332	5,377	5,472	5,521	4,954	5,830	5,729	5,740
Cane Run 6	LGE	7,484	7,372	7,723	7,889	6,977	7,296	7,082	7,148	7,254	7,248	7,376	6,745	7,358	7,516	7,587	7,537	7,899	7,747	8,954	9,322	7,808
Mill Creek 1	LGE	4,899	4,521	4,743	4,467	4,755	4,342	4,537	3,975	4,588	4,348	4,659	4,402	4,890	4,425	4,730	4,093	4,483	4,485	4,771	4,515	4,787
Mill Creek 2	LGE	5,434	5,190	5,481	5,822	5,480	5,888	4,817	5,887	5,352	5,719	5,402	5,755	5,457	5,773	5,015	5,839	5,484	5,862	5,507	5,896	5,580
Mill Creek 3	LGE	10,437	10,400	10,068	10,735	10,086	10,547	9,889	10,565	9,126	10,589	10,008	10,895	10,034	10,862	10,058	10,714	9,274	10,700	10,084	10,751	10,102
Mill Creek 4	LGE	10,955	9,456	11,083	10,479	11,100	10,273	10,753	10,218	10,884	9,398	10,991	10,437	11,069	10,380							

2004 SO₂ Compliance Strategy
Appendix 8- SO₂ Emissions of Various SO₂ Compliance Plans

Case11-Option 11: DFGD MS BR23

SO2 SUMMARY BY YEAR

FUEL SO2 Content (MMBTU)	Ownership	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Brown 1	KU	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7
Brown 2	KU	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7
Brown 3	KU	2.8	2.8	2.7	2.7	2.7	2.8	2.8	2.8	2.7	2.8	2.8	2.7	2.7	2.8	2.8	2.8	2.8	2.7	2.7	2.7	2.7
Ghent 1	KU	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1
Ghent 2	KU	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2
Ghent 3	KU	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2
Ghent 4	KU	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2
Green River 1	KU	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6
Green River 3	KU	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6
Tyrone 3	KU	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8
Cane Run 4	LGE	6.1	6.0	6.0	6.1	6.1	6.1	6.0	6.0	6.1	6.0	6.1	6.0	6.1	6.0	6.1	6.0	6.1	6.0	6.1	6.0	6.1
Cane Run 5	LGE	6.1	6.0	6.1	6.1	6.1	6.1	6.0	6.0	6.1	6.0	6.1	6.0	6.1	6.0	6.1	6.0	6.1	6.0	6.1	6.0	6.1
Cane Run 6	LGE	6.0	6.0	6.1	6.1	6.1	6.1	6.1	6.1	6.0	6.1	6.0	6.1	6.0	6.1	6.0	6.1	6.0	6.1	6.0	6.1	6.0
Mill Creek 1	LGE	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1
Mill Creek 2	LGE	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1
Mill Creek 3	LGE	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1
Mill Creek 4	LGE	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1
Trimble County 1	LGE	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5
Trimble County 2	KU	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

SCRUBBER REMOVAL EFF.	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Brown 1	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Brown 2	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Brown 3	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Ghent 1	93%	93%	93%	93%	93%	93%	93%	93%	93%	93%	93%	93%	93%	93%	93%	93%	93%	93%	93%	93%	93%
Ghent 2	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Ghent 3	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Ghent 4	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Green River 3	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Green River 4	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Tyrone 3	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Cane Run 4	83%	83%	83%	83%	83%	83%	83%	83%	83%	83%	83%	83%	83%	83%	83%	83%	83%	83%	83%	83%	83%
Cane Run 5	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%
Cane Run 6	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%
Mill Creek 1	93%	93%	93%	93%	93%	93%	93%	93%	93%	93%	93%	93%	93%	93%	93%	93%	93%	93%	93%	93%	93%
Mill Creek 2	91%	91%	91%	91%	91%	91%	91%	91%	91%	91%	91%	91%	91%	91%	91%	91%	91%	91%	91%	91%	91%
Mill Creek 3	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%
Mill Creek 4	90%	90%	90%	90%	90%	90%	90%	90%	90%	90%	90%	90%	90%	90%	90%	90%	90%	90%	90%	90%	90%
Trimble County 1	94%	94%	94%	94%	94%	94%	94%	94%	94%	94%	94%	94%	94%	94%	94%	94%	94%	94%	94%	94%	94%
Trimble County 2	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%

TONS SO2 EMITTED	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Brown 1	8,416	7,412	8,856	9,220	9,197	8,526	7,922	8,347	7,233	8,634	9,031	8,804	9,299	9,246	9,826	8,583	9,827	9,363	9,223	10,063	10,160
Brown 2	15,315	15,149	16,288	14,543	14,838	1,162	1,130	1,142	1,136	1,148	1,037	1,160	1,172	1,180	1,189	1,193	1,197	1,086	1,228	1,215	1,218
Brown 3	30,775	34,288	36,803	36,850	35,824	2,638	2,740	2,466	2,781	2,790	2,853	2,917	2,909	2,857	2,980	3,052	3,081	3,086	3,118	3,145	3,145
Ghent 1	7,744	7,759	8,795	7,612	7,728	7,728	7,856	7,847	7,847	8,879	7,894	7,885	7,731	7,737	7,743	7,789	6,967	7,750	7,782	7,770	7,786
Ghent 2	15,841	17,745	19,074	17,968	19,327	18,065	15,218	14,112	16,230	16,819	17,352	17,358	18,184	17,948	18,973	19,827	19,867	19,920	20,282	20,229	20,484
Ghent 3	20,120	20,822	19,289	21,239	22,168	18,997	18,842	20,588	20,878	21,363	21,705	21,972	19,873	22,296	22,728	22,848	23,196	23,337	23,448	21,130	23,682
Ghent 4	20,796	20,871	21,312	21,986	19,419	21,020	20,331	20,929	20,856	21,518	21,948	19,904	22,435	22,543	22,868	22,844	23,315	23,559	21,172	23,580	23,715
Green River 3	8,059	8,010	9,432	9,416	9,101	8,567	7,460	8,107	8,525	8,870	9,324	8,896	10,302	10,321	10,833	10,885	11,424	11,649	10,278	11,823	12,206
Green River 4	12,977	13,709	14,587	14,245	15,320	11,534	12,017	12,781	13,183	13,736	14,207	14,293	13,151	15,227	16,126	15,893	16,381	16,743	16,720	15,190	17,069
Tyrone 3	2,991	3,247	3,866	3,930	4,368	3,069	3,156	3,434	3,806	3,998	3,870	3,593	3,861	4,137	4,577	4,370	4,767	4,775	4,821	4,362	4,886
Cane Run 4	5,723	5,823	5,909	5,908	5,829	5,352	4,535	5,248	5,312	5,447	5,516	5,610	5,993	5,129	5,876	5,866	5,854	5,865	6,004	6,106	5,485
Cane Run 5	5,175	5,367	5,478	4,915	5,483	4,664	4,396	4,582	4,789	4,844	4,816	4,984	5,199	5,213	5,279	5,371	5,450	4,882	5,599	5,670	5,801
Cane Run 6	7,464	7,572	7,723	7,889	8,877	7,211	7,018	7,188	7,182	7,188	7,319	8,719	7,480	7,480	7,588	7,585	7,866	7,737	6,945	7,815	7,806
Mill Creek 1	4,899	4,921	4,743	4,467	4,756	4,325	3,996	4,589	4,340	4,656	4,399	4,686	4,422	4,728	4,692	4,862	4,484	4,771	4,515	4,798	
Mill Creek 2	5,434	5,790	5,481	5,822	5,490	5,680	4,808	5,672	5,348	5,712	5,395	5,747	5,456	5,771	5,013	5,837	5,482	5,862	5,506	5,586	5,549
Mill Creek 3	10,437	10,480	10,066	10,735	10,098	10,540	9,888	10,568	8,115	10,586	10,007	10,848	10,032	10,660	10,0						

2004 SO₂ Compliance Strategy
Appendix 8- SO₂ Emissions of Various SO₂ Compliance Plans

Case12- Option 12: DFGD MS BR23x

		SO2 SUMMARY BY YEAR																								
		2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025				
FUEL SO2 Content (MMBTU)	Ownership																									
Brown 1	KU	2.7	2.7	2.7	2.8	2.7	2.7	2.8	2.7	2.8	2.7	2.7	2.8	2.7	2.8	2.7	2.8	2.7	2.8	2.7	2.7	2.7				
Brown 2	KU	2.7	2.7	2.7	38.1	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.8	2.8	2.8	2.8	2.8	2.7	2.7	2.7				
Brown 3	KU	2.8	2.8	2.7	35.4	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.7	2.7	2.8	2.8	2.8	2.8	2.8	2.7	2.7	2.8				
Ghent 1	KU	0.4	0.4	0.4	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1				
Ghent 2	KU	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2				
Ghent 3	KU	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2				
Ghent 4	KU	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2				
Green River 3	KU	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8				
Green River 4	KU	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8				
Tytone 3	KU	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8				
Cane Run 4	LGE	6.1	6.0	6.0	6.1	6.1	6.1	6.0	6.0	6.0	6.1	6.1	6.1	6.1	6.0	6.0	6.0	6.1	6.1	6.0	6.1	6.1				
Cane Run 5	LGE	6.1	6.0	6.1	6.1	6.0	6.1	6.0	6.0	6.0	6.1	6.1	6.1	6.1	6.0	6.0	6.0	6.1	6.1	6.0	6.1	6.1				
Cane Run 6	LGE	6.0	6.0	6.1	6.0	6.0	6.1	6.0	6.1	6.0	6.1	6.0	6.1	6.0	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.0				
Mill Creek 1	LGE	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1				
Mill Creek 2	LGE	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1				
Mill Creek 3	LGE	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1				
Mill Creek 4	LGE	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1				
Trimble County 1	LGE	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5				
Trimble County 2	KU	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0				
SCRUBBER REMOVAL EFF.																										
Brown 1		0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%				
Brown 2		0%	0%	0%	93%	93%	93%	93%	93%	93%	93%	93%	93%	93%	93%	93%	93%	93%	93%	93%	93%	93%				
Brown 3		0%	0%	0%	93%	93%	93%	93%	93%	93%	93%	93%	93%	93%	93%	93%	93%	93%	93%	93%	93%	93%				
Ghent 1		0%	0%	0%	93%	93%	93%	93%	93%	93%	93%	93%	93%	93%	93%	93%	93%	93%	93%	93%	93%	93%				
Ghent 2		0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%				
Ghent 3		0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%				
Ghent 4		0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%				
Green River 3		0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%				
Green River 4		0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%				
Tytone 3		0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%				
Cane Run 4		93%	93%	93%	93%	93%	93%	93%	93%	93%	93%	93%	93%	93%	93%	93%	93%	93%	93%	93%	93%	93%				
Cane Run 5		93%	93%	93%	93%	93%	93%	93%	93%	93%	93%	93%	93%	93%	93%	93%	93%	93%	93%	93%	93%	93%				
Cane Run 6		93%	93%	93%	93%	93%	93%	93%	93%	93%	93%	93%	93%	93%	93%	93%	93%	93%	93%	93%	93%	93%				
Mill Creek 1		93%	93%	93%	93%	93%	93%	93%	93%	93%	93%	93%	93%	93%	93%	93%	93%	93%	93%	93%	93%	93%				
Mill Creek 2		91%	91%	91%	91%	91%	91%	91%	91%	91%	91%	91%	91%	91%	91%	91%	91%	91%	91%	91%	91%	91%				
Mill Creek 3		89%	89%	89%	89%	89%	89%	89%	89%	89%	89%	89%	89%	89%	89%	89%	89%	89%	89%	89%	89%	89%				
Mill Creek 4		90%	90%	90%	90%	90%	90%	90%	90%	90%	90%	90%	90%	90%	90%	90%	90%	90%	90%	90%	90%	90%				
Trimble County 1		94%	94%	94%	94%	94%	94%	94%	94%	94%	94%	94%	94%	94%	94%	94%	94%	94%	94%	94%	94%	94%				
Trimble County 2		0%	0%	0%	0%	0%	0%	98%	98%	98%	98%	98%	98%	98%	98%	98%	98%	98%	98%	98%	98%	98%				
TONS SO2 EMITTED																										
Brown 1	KU	8,418	7,412	8,898	9,218	9,208	8,426	7,922	8,347	7,233	8,434	9,031	8,934	9,246	8,828	8,343	9,827	9,883	9,823	10,093	10,160					
Brown 2	KU	15,315	15,149	18,788	14,159	1,179	1,182	1,130	1,142	1,138	1,148	1,031	1,180	1,172	1,180	1,189	1,193	1,197	1,068	1,208	1,215	1,218				
Brown 3	KU	30,775	34,298	38,803	33,643	3,036	2,838	2,748	2,698	2,781	2,790	2,797	2,855	2,917	2,909	2,857	2,980	3,052	3,061	3,086	3,118	3,145				
Ghent 1	KU	7,444	7,750	6,795	7,813	7,723	7,857	7,858	7,842	7,847	6,879	7,894	7,885	7,731	7,737	7,743	7,759	8,987	7,750	7,782	7,770	7,796				
Ghent 2	KU	18,841	17,745	19,074	17,584	18,989	18,085	18,218	14,112	16,230	16,820	17,352	17,559	18,184	17,944	16,973	18,827	19,887	19,820	20,282	20,229	20,483				
Ghent 3	KU	20,120	20,822	19,289	21,185	21,539	18,987	19,842	20,598	20,579	21,383	21,705	21,972	19,873	22,298	22,738	22,848	23,138	23,337	23,448	21,139	23,882				
Ghent 4	KU	20,796	20,871	21,312	21,876	18,751	21,020	20,331	20,929	20,855	21,818	21,846	19,904	22,435	22,543	22,888	22,844	23,315	23,569	21,172	23,580	23,715				
Green River 3	KU	8,058	8,010	9,432	9,417	8,113	8,587	7,460	8,107	8,525	8,970	9,324	8,856	10,302	10,321	10,833	10,885	11,424	11,849	10,278	11,823	12,208				
Green River 4	KU	12,977	13,709	14,587	14,245	15,224	11,534	12,017	12,781	13,183	13,738	14,207	14,293	13,151	15,227	16,128	15,892	16,391	18,743	16,730	15,180	17,098				
Tytone 3	KU	2,881	3,247	3,966	3,031	4,349	3,069	3,156	3,434	3,866	3,898	3,870	3,963	3,881	4,137	4,577	4,370	4,787	4,775	4,821	4,382	4,888				
Cane Run 4	LGE	5,723	5,823	5,909	5,901	5,759	5,352	4,535	5,248	5,312	5,447	5,518	5,810	5,893	5,129	5,876	5,886	5,934	5,985	6,024	6,108	5,485				
Cane Run 5	LGE	5,175	5,367	5,476	4,906	5,372	4,866	4,386	4,582	4,789	4,848	4,382	4,984	5,199	5,213	5,279	5,371	5,490	4,882	5,599	5,870	5,891				
Cane Run 6	LGE	7,464	7,572	7,723	7,889	8,848	7,211	7,018	7,086	7,182	7,198	7,319	8,719	7,489	7,480	7,568	7,585	7,686	7,737	8,945	7,815	7,808				
Mill Creek 1	LGE	4,869	4,521	4,743	4,467	4,747	4,322	4,525	3,986	4,589	4,486	4,896	4,868	4,422	4,728	4,692	4,782	4,484	4,771	4,515	4,788	4,788				
Mill Creek 2	LGE	5,434	5,790	5,481	5,822	5,483	5,660	4,808	5,872	5,346	5,712	5,395	5,747	5,455	5,771	5,013	5,837	5,482	5,882	5,508	5,888	5,498				
Mill Creek 3	LGE	10,837	10,460	10,068	10,735	10,081	10,340	9,888	10,958	9,115	10,586	10,007	10,849	10,032	10,880	10,056	10,714	9,272	10,888	10,083	10,751	10,101				
Mill Creek 4	LGE	10,855	8,456	11,063	10,477	11,075	10,250	10,741	10,389	10,888	9,305	10,980	10,435	11,067	10,384	11,088	10,483	11,101	9,819	11,147	10,371	11,210				
Trimble County 1	LGE	5,525	6,053	5,537	6,089	5,090	6,012	5,498	6,025	5,523	6,024	5,526	6,049	5,079	6,049	5,547	6,089	5,550	6,052	5,550	6,087	5,096				
Trimble County 2	KU	0	0	0	0	0	1,088	1,068	1,880	1,873	1,881	1,884	1,881	1,888	1,888	1,888	1,888	1,884	1,886	1,885	1,891	1,886				
Trimble County 2	LGE	0	0	0	0	0	386	656	661	658	661	662	664	663	664	665	666	666	666	666	668	668				
SO2 EMISSIONS (TONS)																										
Total		198,447																								

2004 SO₂ Compliance Strategy
Appendix 8- SO₂ Emissions of Various SO₂ Compliance Plans

Case 13- Option 0305: WFGD HS GH234, WFGD HS BR123

SO₂ SUMMARY BY YEAR

FUEL SO ₂ Content (M/BTU)	Ownership	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	
Brown 1	KU	7.7	7.7	7.7	7.7	7.7	7.7	7.7	7.7	7.7	7.7	7.7	7.7	7.7	7.7	7.7	7.7	7.7	7.7	7.7	7.7	7.7
Brown 2	KU	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7
Brown 3	KU	2.8	2.8	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7
GHent 1	KU	8.1	8.1	8.1	8.1	8.1	8.1	8.1	8.1	8.1	8.1	8.1	8.1	8.1	8.1	8.1	8.1	8.1	8.1	8.1	8.1	8.1
GHent 2	KU	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2
GHent 3	KU	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2
GHent 4	KU	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2
Green River 3	KU	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8
Green River 4	KU	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8
Tyrone 3	KU	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8
Cane Run 4	LGE	6.1	6.0	6.0	6.0	6.1	6.1	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
Cane Run 5	LGE	6.1	6.0	6.0	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1
Cane Run 6	LGE	6.0	6.0	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1
Mill Creek 1	LGE	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1
Mill Creek 2	LGE	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1
Mill Creek 3	LGE	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1
Mill Creek 4	LGE	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1
Timble County 1	LGE	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5
Timble County 2	KU	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SCRUBBER REMOVAL EFF.																						
Brown 1		0%	0%	0%	0%	98%	98%	98%	98%	98%	98%	98%	98%	98%	98%	98%	98%	98%	98%	98%	98%	98%
Brown 2		0%	0%	0%	0%	98%	98%	98%	98%	98%	98%	98%	98%	98%	98%	98%	98%	98%	98%	98%	98%	98%
Brown 3		0%	0%	0%	0%	98%	98%	98%	98%	98%	98%	98%	98%	98%	98%	98%	98%	98%	98%	98%	98%	98%
GHent 1		93%	93%	93%	93%	93%	93%	93%	93%	93%	93%	93%	93%	93%	93%	93%	93%	93%	93%	93%	93%	93%
GHent 2		0%	0%	0%	0%	98%	98%	98%	98%	98%	98%	98%	98%	98%	98%	98%	98%	98%	98%	98%	98%	98%
GHent 3		0%	0%	0%	0%	98%	98%	98%	98%	98%	98%	98%	98%	98%	98%	98%	98%	98%	98%	98%	98%	98%
GHent 4		0%	0%	0%	0%	98%	98%	98%	98%	98%	98%	98%	98%	98%	98%	98%	98%	98%	98%	98%	98%	98%
Green River 3		0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Green River 4		0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Tyrone 3		0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Cane Run 4		83%	83%	83%	83%	83%	83%	83%	83%	83%	83%	83%	83%	83%	83%	83%	83%	83%	83%	83%	83%	83%
Cane Run 5		85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%
Cane Run 6		85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%
Mill Creek 1		93%	93%	93%	93%	93%	93%	93%	93%	93%	93%	93%	93%	93%	93%	93%	93%	93%	93%	93%	93%	93%
Mill Creek 2		91%	91%	91%	91%	91%	91%	91%	91%	91%	91%	91%	91%	91%	91%	91%	91%	91%	91%	91%	91%	91%
Mill Creek 3		89%	89%	89%	89%	89%	89%	89%	89%	89%	89%	89%	89%	89%	89%	89%	89%	89%	89%	89%	89%	89%
Mill Creek 4		90%	90%	90%	90%	90%	90%	90%	90%	90%	90%	90%	90%	90%	90%	90%	90%	90%	90%	90%	90%	90%
Timble County 1		94%	94%	94%	94%	94%	94%	94%	94%	94%	94%	94%	94%	94%	94%	94%	94%	94%	94%	94%	94%	94%
Timble County 2		0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
SO₂ EMISSIONS (TONS)																						
Brown 1	KU	6,416	7,412	8,367	9,236	3,824	418	391	406	356	420	438	437	490	454	489	421	463	488	495	498	501
Brown 2	KU	15,315	15,149	15,821	15,929	4,839	741	723	735	742	742	870	753	784	773	781	783	786	714	788	806	806
Brown 3	KU	30,775	34,268	36,656	36,847	12,936	1,731	1,680	1,528	1,753	1,787	1,801	1,641	1,895	1,879	1,727	1,931	1,999	2,028	2,036	2,068	2,063
GHent 1	KU	7,444	7,759	6,778	7,529	7,524	7,446	7,202	7,305	7,173	6,526	7,316	7,362	7,427	7,481	7,485	7,518	6,833	7,812	7,630	7,165	7,807
GHent 2	KU	15,841	17,745	18,574	5,545	2,110	1,995	1,975	1,785	2,010	1,993	2,016	2,033	2,048	2,034	1,888	2,088	2,123	2,144	2,152	2,130	2,153
GHent 3	KU	20,120	20,822	6,211	2,440	2,463	2,182	2,373	2,399	2,389	2,426	2,443	2,455	2,200	2,454	2,459	2,465	2,474	2,485	2,479	2,230	2,486
GHent 4	KU	20,796	20,871	20,980	21,151	5,114	2,422	2,386	2,413	2,405	2,434	2,445	2,209	2,454	2,462	2,461	2,484	2,475	2,484	2,230	2,486	2,487
Green River 3	KU	8,069	8,010	9,431	9,437	9,323	8,856	7,724	8,405	8,953	9,216	9,872	9,959	10,487	10,566	11,010	11,020	11,820	11,790	10,359	11,844	12,343
Green River 4	KU	12,977	13,709	14,544	14,406	15,352	11,961	12,402	13,043	13,453	13,877	14,452	14,395	15,437	15,308	16,252	15,887	16,483	16,842	16,793	15,257	17,171
Tyrone 3	KU	2,991	3,247	3,874	3,960	4,414	3,192	3,246	3,560	3,717	3,829	3,968	4,045	3,935	4,200	4,003	4,470	4,795	4,822	4,895	4,401	4,926
Cane Run 4	LGE	5,723	5,823	5,813	5,845	5,286	4,337	4,472	4,224	4,137	4,814	4,821	4,754	5,030	4,462	5,420	5,306	5,501	5,960	5,860	5,739	5,168
Cane Run 5	LGE	5,987	5,367	5,343	4,714	4,958	3,934	3,865	3,813	3,624	4,129	3,980	4,437	4,882	4,734	4,805	4,978	5,157	4,614	5,304	5,335	5,435
Cane Run 6	LGE	7,464	7,572	7,836	7,416	6,396	6,432	5,786	6,060	6,231	6,247	6,583	6,073	6,334	6,725	7,102	7,038	7,280	7,389	6,599	7,564	7,589
Mill Creek 1	LGE	4,899	4,521	4,720	4,383	4,963	4,078	4,216	3,736	4,361	4,107	4,486	4,234	4,530	4,292	4,620	3,969	4,878	4,416	4,714	4,485	4,777
Mill Creek 2	LGE	5,434	5,790	5,463	5,734	5,546	5,366	4,486	5,331	5,080	5,474	5,180	5,534	5,287	5,803	4,988	5,887	5,378	5,779	5,441	5,541	5,512
Mill Creek 3	LGE	10,437	10,480	10,053	10,648	9,962	10,330	9,583	10,304	8,890	10,428	9,882	10,534	9,956	10,592	10,005	10,844	9,216	10,555	10,053	10,733	10,080
Mill Creek 4	LGE	10,955	9,459	10,985	10,294	10,794	9,893	10,166	9,762	10,356	9,157	10,748	10,226	10,816	10,240	10,982	10,348					

2004 SO₂ Compliance Strategy
Appendix 8- SO₂ Emissions of Various SO₂ Compliance Plans

Case14- Option 0105: WFGD HS GH34,WFGD HS BR123

		SO ₂ SUMMARY BY YEAR																							
FUEL SO ₂ Content (MMBTU)		2004	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025			
Brown 1	KU	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7		
Brown 2	KU	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7		
Brown 3	KU	2.8	2.8	2.7	2.7	43.0	6.4	6.4	6.4	6.4	6.4	6.4	6.4	6.4	6.4	6.4	6.4	6.4	6.4	6.4	6.4	6.4	6.4	6.4	
Ghent 1	KU	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	
Ghent 2	KU	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	
Ghent 4	KU	1.2	1.2	17.3	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	
Green River 3	KU	1.2	1.2	1.2	23.8	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	
Green River 4	KU	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	
Tyrone 3	KU	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	
Cane Run 4	LGE	6.1	6.0	6.0	6.0	6.0	6.1	6.1	6.1	6.1	6.1	6.0	6.0	6.1	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	
Cane Run 5	LGE	6.1	6.0	6.0	6.0	6.1	6.0	6.1	6.1	6.1	6.1	6.0	6.1	6.1	6.0	6.1	6.0	6.0	6.0	6.0	6.1	6.1	6.1	6.1	
Cane Run 6	LGE	6.0	6.0	6.1	6.1	6.0	6.0	6.0	6.1	6.0	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1
Mill Creek 1	LGE	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1
Mill Creek 2	LGE	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1
Mill Creek 3	LGE	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1
Mill Creek 4	LGE	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1
Trimble County 1	LGE	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5
Trimble County 2	KU	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
SCRUBBER REMOVAL EFF.																									
Brown 1		0%	0%	0%	0%	96%	96%	96%	96%	96%	96%	96%	96%	96%	96%	96%	96%	96%	96%	96%	96%	96%	96%	96%	
Brown 2		0%	0%	0%	0%	96%	96%	96%	96%	96%	96%	96%	96%	96%	96%	96%	96%	96%	96%	96%	96%	96%	96%	96%	
Brown 3		0%	0%	0%	0%	96%	96%	96%	96%	96%	96%	96%	96%	96%	96%	96%	96%	96%	96%	96%	96%	96%	96%	96%	
Ghent 1		93%	93%	93%	93%	93%	93%	93%	93%	93%	93%	93%	93%	93%	93%	93%	93%	93%	93%	93%	93%	93%	93%	93%	
Ghent 2		0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
Ghent 3		0%	0%	98%	98%	98%	98%	98%	98%	98%	98%	98%	98%	98%	98%	98%	98%	98%	98%	98%	98%	98%	98%	98%	98%
Ghent 4		0%	0%	0%	96%	96%	96%	96%	96%	96%	96%	96%	96%	96%	96%	96%	96%	96%	96%	96%	96%	96%	96%	96%	
Green River 3		0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
Green River 4		0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
Tyrone 3		0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
Cane Run 4		83%	83%	83%	83%	83%	83%	83%	83%	83%	83%	83%	83%	83%	83%	83%	83%	83%	83%	83%	83%	83%	83%	83%	
Cane Run 5		85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	
Cane Run 6		85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	
Mill Creek 1		93%	93%	93%	93%	93%	93%	93%	93%	93%	93%	93%	93%	93%	93%	93%	93%	93%	93%	93%	93%	93%	93%	93%	
Mill Creek 2		91%	91%	91%	91%	91%	91%	91%	91%	91%	91%	91%	91%	91%	91%	91%	91%	91%	91%	91%	91%	91%	91%	91%	
Mill Creek 3		89%	89%	89%	89%	89%	89%	89%	89%	89%	89%	89%	89%	89%	89%	89%	89%	89%	89%	89%	89%	89%	89%	89%	
Mill Creek 4		90%	90%	90%	90%	90%	90%	90%	90%	90%	90%	90%	90%	90%	90%	90%	90%	90%	90%	90%	90%	90%	90%	90%	
Trimble County 1		94%	94%	94%	94%	94%	94%	94%	94%	94%	94%	94%	94%	94%	94%	94%	94%	94%	94%	94%	94%	94%	94%	94%	
Trimble County 2		0%	0%	0%	0%	0%	0%	94%	94%	94%	94%	94%	94%	94%	94%	94%	94%	94%	94%	94%	94%	94%	94%	94%	
SO₂ EMISSIONS (TONS)																									
		2004	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025			
Brown 1	KU	8,416	7,412	8,807	8,291	3,819	417	365	410	358	420	437	438	451	453	460	422	484	480	483	504	508	508	508	
Brown 2	KU	15,315	15,149	15,921	13,885	4,800	782	747	754	761	761	688	770	777	783	790	793	785	720	805	810	810	810	810	
Brown 3	KU	30,775	34,298	36,958	38,425	12,875	1,241	1,788	1,818	1,858	1,880	1,886	1,947	1,977	1,988	1,796	2,015	2,069	2,081	2,094	2,114	2,127	2,127	2,127	
Ghent 1	KU	1,744	1,758	5,778	7,545	7,922	7,353	7,489	7,476	7,398	6,845	7,520	7,481	7,587	7,574	7,557	7,817	8,878	7,686	7,886	7,870	7,843	7,843	7,843	
Ghent 2	KU	15,841	17,745	18,574	16,884	17,355	15,034	13,860	12,882	14,813	15,897	16,275	16,488	17,244	17,051	16,259	18,011	18,859	18,215	19,908	19,474	19,789	19,789	19,789	
Ghent 3	KU	20,120	20,822	6,211	2,441	2,483	2,193	2,385	2,420	2,418	2,437	2,448	2,481	2,204	2,459	2,465	2,472	2,479	2,487	2,482	2,482	2,491	2,491	2,491	
Ghent 4	KU	20,796	20,871	20,996	9,195	2,180	2,438	2,413	2,438	2,430	2,445	2,455	2,216	2,484	2,489	2,471	2,475	2,485	2,493	2,489	2,496	2,496	2,496	2,496	
Green River 3	KU	9,059	9,010	9,431	9,523	9,205	8,739	7,717	8,231	8,862	9,206	8,552	8,305	10,459	10,478	11,014	10,910	11,533	11,774	10,338	11,923	12,303	12,303	12,303	
Green River 4	KU	12,977	13,709	14,544	14,405	15,318	11,804	12,364	13,071	13,200	13,864	14,338	14,681	13,291	15,349	16,125	15,841	16,418	16,760	16,742	15,222	17,133	17,133	17,133	
Tyrone 3	KU	2,991	3,247	3,874	3,950	4,377	3,107	3,200	3,156	3,659	3,829	3,828	4,020	3,909	4,215	4,572	4,427	4,760	4,801	4,873	4,887	4,910	4,910	4,910	
Cane Run 4	LGE	5,723	5,823	5,813	5,688	5,489	4,957	3,913	4,983	4,968	4,964	4,987	5,139	5,292	4,732	5,961	5,509	5,711	5,798	5,885	5,781	5,885	5,885	5,885	
Cane Run 5	LGE	5,175	5,387	5,343	4,748	5,122	4,437	3,951	4,148	4,298	4,448	4,195	4,748	4,831	4,950	5,080	5,144	5,273	4,738	5,431	5,485	5,587	5,587	5,587	
Cane Run 6	LGE	7,484	7,572	7,436	7,499	6,580	6,835	6,237	6,494	6,681	6,872	6,873	6,374	7,188	7,111	7,277	7,309	7,447	7,578	6,711	7,877	7,880	7,880	7,880	
Mill Creek 1	LGE	4,689	4,52																						

2004 SO₂ Compliance Strategy
 Appendix 8- SO₂ Emissions of Various SO₂ Compliance Plans

Case15- Option 0205: WFGD HS GH3,WFGD HS BR123

SO₂ SUMMARY BY YEAR

FUEL SO ₂ Content (#MBTU)	Ownership	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	
Brown 1	KU	2.7	2.7	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8
Brown 2	KU	2.7	2.7	2.8	2.7	41.2	8.4	8.4	8.4	8.4	8.4	8.4	8.4	8.4	8.4	8.4	8.4	8.4	8.4	8.4	8.4	8.4	8.4
Brown 3	KU	2.8	2.8	2.7	2.7	42.3	8.4	8.4	8.4	8.4	8.4	8.4	8.4	8.4	8.4	8.4	8.4	8.4	8.4	8.4	8.4	8.4	8.4
Ghent 1	KU	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1
Ghent 2	KU	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2
Ghent 3	KU	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2
Ghent 4	KU	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2
Green River 3	KU	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6
Green River 4	KU	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6
Tyrone 3	KU	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8
Cane Run 4	LGE	6.1	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
Cane Run 5	LGE	6.1	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
Cane Run 6	LGE	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
Mill Creek 1	LGE	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1
Mill Creek 2	LGE	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1
Mill Creek 3	LGE	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1
Mill Creek 4	LGE	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1
Tumble County 1	LGE	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5
Tumble County 2	KU	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

SCRUBBER REMOVAL EFF.

Brown 1	0%	0%	0%	0%	98%	98%	98%	98%	98%	98%	98%	98%	98%	98%	98%	98%	98%	98%	98%	98%	98%	98%	98%
Brown 2	0%	0%	0%	0%	98%	98%	98%	98%	98%	98%	98%	98%	98%	98%	98%	98%	98%	98%	98%	98%	98%	98%	98%
Brown 3	0%	0%	0%	0%	98%	98%	98%	98%	98%	98%	98%	98%	98%	98%	98%	98%	98%	98%	98%	98%	98%	98%	98%
Ghent 1	83%	83%	83%	83%	83%	83%	83%	83%	83%	83%	83%	83%	83%	83%	83%	83%	83%	83%	83%	83%	83%	83%	83%
Ghent 2	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Ghent 3	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Ghent 4	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Green River 3	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Green River 4	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Tyrone 3	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Cane Run 4	83%	83%	83%	83%	83%	83%	83%	83%	83%	83%	83%	83%	83%	83%	83%	83%	83%	83%	83%	83%	83%	83%	83%
Cane Run 5	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%
Cane Run 6	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%
Mill Creek 1	83%	83%	83%	83%	83%	83%	83%	83%	83%	83%	83%	83%	83%	83%	83%	83%	83%	83%	83%	83%	83%	83%	83%
Mill Creek 2	91%	91%	91%	91%	91%	91%	91%	91%	91%	91%	91%	91%	91%	91%	91%	91%	91%	91%	91%	91%	91%	91%	91%
Mill Creek 3	89%	89%	89%	89%	89%	89%	89%	89%	89%	89%	89%	89%	89%	89%	89%	89%	89%	89%	89%	89%	89%	89%	89%
Mill Creek 4	90%	90%	90%	90%	90%	90%	90%	90%	90%	90%	90%	90%	90%	90%	90%	90%	90%	90%	90%	90%	90%	90%	90%
Tumble County 1	94%	94%	94%	94%	94%	94%	94%	94%	94%	94%	94%	94%	94%	94%	94%	94%	94%	94%	94%	94%	94%	94%	94%
Tumble County 2	0%	0%	0%	0%	0%	98%	98%	98%	98%	98%	98%	98%	98%	98%	98%	98%	98%	98%	98%	98%	98%	98%	98%

TONS SO₂ EMITTED

Brown 1	KU	8,418	7,744	7,759	8,867	8,231	3,816	417	358	412	358	412	358	412	358	412	358	412	358	412	358	412
Brown 2	KU	15,315	15,149	15,821	14,182	4,960	775	758	788	773	778	808	782	788	793	797	801	802	725	609	814	813
Brown 3	KU	30,775	34,298	36,856	36,477	13,117	1,906	1,841	1,868	1,918	1,944	1,953	1,991	2,022	2,017	1,831	2,065	2,104	2,124	2,119	2,139	2,151
Ghent 1	KU	7,344	7,759	8,778	7,577	7,871	7,806	7,583	7,555	7,485	8,781	7,814	7,585	7,815	7,858	7,808	7,866	8,521	7,713	7,729	7,721	7,719
Ghent 2	KU	15,341	17,745	18,574	17,109	16,956	15,320	14,535	13,480	15,371	16,023	16,544	16,778	17,518	17,306	16,458	16,311	19,113	19,352	19,810	19,786	20,008
Ghent 3	KU	20,120	20,822	21,111	2,450	2,481	2,208	2,411	2,440	2,436	2,465	2,475	2,220	2,478	2,480	2,489	2,500	2,489	2,500	2,484	2,290	2,503
Ghent 4	KU	20,796	20,871	20,986	21,387	18,319	20,878	19,828	20,519	20,485	21,058	21,452	19,418	21,925	22,007	22,451	22,329	22,831	23,125	20,715	23,219	23,341
Green River 3	KU	9,829	8,010	8,431	8,906	9,183	8,823	7,830	8,190	8,896	9,368	9,509	8,733	10,417	10,438	10,862	10,915	11,489	11,684	10,289	11,880	12,460
Green River 4	KU	12,977	13,709	14,844	14,325	15,382	11,810	12,103	12,900	13,227	13,189	14,262	14,403	13,237	15,212	16,083	15,780	16,381	16,758	16,865	16,186	17,082
Tyrone 3	KU	2,891	3,247	3,874	3,826	4,382	3,088	3,141	3,484	3,620	3,738	3,810	3,862	3,873	4,147	4,556	4,381	4,734	4,783	4,857	4,377	4,904
Cane Run 4	LGE	5,723	5,823	5,813	5,792	5,829	5,121	4,216	4,343	4,957	5,182	5,202	5,329	5,442	4,804	5,708	5,852	5,788	5,861	5,871	5,979	5,368
Cane Run 5	LGE	5,175	5,367	5,243	4,827	5,254	4,943	4,208	4,356	4,544	4,584	4,718	4,839	5,041	5,075	5,178	5,259	5,334	4,789	5,480	5,540	5,807
Cane Run 6	LGE	7,464	7,572	7,638	7,583	6,751	6,980	6,583	6,741	6,879	6,981	7,034	6,533	7,338	7,273	7,396	7,412	7,547	7,843	6,838	7,717	7,725
Mill Creek 1	LGE	4,889	4,521	4,220	4,445	4,728	4,255	4,423	4,679	4,517	4,297	4,587	4,782	4,832	4,378	4,891	4,655	4,461	4,751	4,468	4,787	4,364
Mill Creek 2	LGE	5,434	5,790	5,483	5,791	5,457	5,813	4,714	5,556	5,282	5,833	5,324	5,868	5,395	5,712	4,872	5,788	5,440	5,838	5,481	5,871	5,532
Mill Creek 3	LGE	10,437	10,480	10,083	10,887	10,051	10,471	9,793	10,487	8,096	10,542	9,864	10,811	10,012	10,833	10,032	10,884	9,258	10,881	10,745	10,741	10,088
Mill Creek 4	LGE	10,955	8,459	10,865	10,386	10,987	10,178	10,326	10,058	10,865	9,318	10,323	10,383	11,028	10,328	11,050	10,420	11,080	9,900	11,150	10,558	11,205
Tumble County 1	LGE	5,525	6,053	5,537	6,087	5,080	6,013	5,908	6,024	5,528	6,022	5,525	6,049	5,075	6,045	5,541	6,088	5,590	6,051	5,548	6,085	5,080
Tumble County 2	KU	0	0	0	0	0	1,097	1,887	1,882	1,871	1,882	1,886	1,891	1,886	1,893	1,887	1,884	1,885	1,886	1,885	1,891	1,886
Tumble County 2	LGE	0	0	0	0	0	385	658	661	658	661	663	664	663	664	665	667	666	666	666	668	668

SO₂ EMISSIONS (TONS)

Total	188,447	203,886	197,412	191,737	181,204	127,113	122,818	128,961	128,282	130,969	134,170	132,856	
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2004 SO₂ Compliance Strategy
Appendix 8- SO₂ Emissions of Various SO₂ Compliance Plans

Case 16- Option 0109: WFGD HS GH34,DFGD MS BR3

SO2 SUMMARY BY YEAR

FUEL SO2 Content (MMBTU)	Ownership	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Brown 1	KU	2.7	2.7	2.8	2.7	2.8	2.7	2.7	2.8	2.7	2.7	2.8	2.8	2.8	2.8	2.7	2.8	2.8	2.7	2.8	2.8	2.8
Brown 2	KU	2.7	2.7	2.8	2.7	2.8	2.7	2.7	2.8	2.7	2.7	2.8	2.8	2.7	2.7	2.8	2.8	2.7	2.7	2.7	2.7	2.7
Brown 3	KU	2.8	2.8	2.7	2.7	13.3	2.7	2.7	2.7	2.7	2.7	2.7	2.8	2.8	2.7	2.7	2.8	2.8	2.7	2.8	2.7	2.7
Ghent 1	KU	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1
Ghent 2	KU	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2
Ghent 3	KU	1.2	1.2	17.3	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1
Ghent 4	KU	1.2	1.2	1.2	23.9	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1
Green River 3	KU	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6
Green River 4	KU	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6
TYrone 3	KU	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8
Cane Run 4	LGE	6.1	6.0	6.0	6.0	6.0	6.0	6.1	6.0	6.1	6.0	6.1	6.0	6.1	6.0	6.1	6.0	6.1	6.0	6.1	6.0	6.0
Cane Run 5	LGE	6.1	6.0	6.0	6.0	6.0	6.0	6.1	6.0	6.1	6.0	6.1	6.0	6.1	6.0	6.1	6.0	6.1	6.0	6.1	6.0	6.0
Cane Run 6	LGE	6.0	6.0	6.1	6.1	6.1	6.1	6.1	6.0	6.1	6.1	6.1	6.1	6.1	6.1	6.0	6.1	6.0	6.1	6.0	6.1	6.0
Mill Creek 1	LGE	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1
Mill Creek 2	LGE	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1
Mill Creek 3	LGE	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1
Mill Creek 4	LGE	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1
Trimble County 1	LGE	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5
Trimble County 2	KU	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SCRUBBER REMOVAL EFF.																						
Brown 1		0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Brown 2		0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Brown 3		0%	0%	0%	0%	93%	93%	93%	93%	93%	93%	93%	93%	93%	93%	93%	93%	93%	93%	93%	93%	93%
Ghent 1		93%	93%	93%	93%	93%	93%	93%	93%	93%	93%	93%	93%	93%	93%	93%	93%	93%	93%	93%	93%	93%
Ghent 2		0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Ghent 3		0%	0%	96%	96%	96%	96%	96%	96%	96%	96%	96%	96%	96%	96%	96%	96%	96%	96%	96%	96%	96%
Ghent 4		0%	0%	0%	0%	96%	96%	96%	96%	96%	96%	96%	96%	96%	96%	96%	96%	96%	96%	96%	96%	96%
Green River 3		0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Green River 4		0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
TYrone 3		0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Cane Run 4		83%	83%	83%	83%	83%	83%	83%	83%	83%	83%	83%	83%	83%	83%	83%	83%	83%	83%	83%	83%	83%
Cane Run 5		85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%
Cane Run 6		85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%
Mill Creek 1		93%	93%	93%	93%	93%	93%	93%	93%	93%	93%	93%	93%	93%	93%	93%	93%	93%	93%	93%	93%	93%
Mill Creek 2		91%	91%	91%	91%	91%	91%	91%	91%	91%	91%	91%	91%	91%	91%	91%	91%	91%	91%	91%	91%	91%
Mill Creek 3		89%	89%	89%	89%	89%	89%	89%	89%	89%	89%	89%	89%	89%	89%	89%	89%	89%	89%	89%	89%	89%
Mill Creek 4		90%	90%	90%	90%	90%	90%	90%	90%	90%	90%	90%	90%	90%	90%	90%	90%	90%	90%	90%	90%	90%
Trimble County 1		94%	94%	94%	94%	94%	94%	94%	94%	94%	94%	94%	94%	94%	94%	94%	94%	94%	94%	94%	94%	94%
Trimble County 2		0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
TONS SO2 EMITTED																						
Brown 1	KU	8,416	7,412	8,867	9,231	9,247	8,004	8,045	8,426	7,319	8,702	9,680	8,969	9,309	9,280	9,716	8,677	9,871	10,002	10,063	10,180	10,195
Brown 2	KU	15,315	15,149	15,921	13,965	15,063	14,049	13,309	13,649	13,782	13,929	12,661	14,494	14,820	15,078	15,516	15,469	15,728	14,412	16,186	16,289	16,419
Brown 3	KU	30,775	34,298	36,856	36,425	13,584	2,899	2,587	2,331	2,828	2,684	2,707	2,772	2,854	2,855	2,855	2,814	3,016	3,056	3,063	3,076	3,109
Ghent 1	KU	7,744	7,758	5,776	7,545	7,837	7,588	7,531	7,500	7,521	6,750	7,878	7,873	7,843	7,837	7,843	7,877	6,918	7,892	7,714	7,702	7,709
Ghent 2	KU	15,841	17,745	18,574	16,884	17,781	15,412	14,442	13,354	15,474	16,521	16,892	17,273	17,897	17,930	16,738	16,881	19,440	19,713	20,087	20,040	20,280
Ghent 3	KU	20,120	20,622	6,211	2,441	2,486	2,196	2,387	2,425	2,419	2,436	2,448	2,461	2,485	2,483	2,487	2,485	2,488	2,485	2,485	2,484	2,464
Ghent 4	KU	20,796	20,871	20,996	8,196	2,161	2,441	2,415	2,440	2,431	2,443	2,455	2,216	2,464	2,471	2,473	2,477	2,487	2,484	2,484	2,501	2,500
Green River 3	KU	5,899	6,010	9,431	8,523	8,184	6,854	7,587	8,207	8,880	8,964	9,471	8,739	10,425	10,403	10,935	10,924	11,472	11,700	10,301	11,855	12,282
Green River 4	KU	12,977	13,709	14,544	14,406	15,347	11,990	12,190	13,005	13,307	13,804	14,337	14,445	13,258	15,329	16,173	15,944	16,466	16,346	16,797	15,288	17,162
TYrone 3	KU	2,991	3,247	3,874	3,950	4,361	3,121	3,187	3,511	3,645	3,785	3,926	4,006	3,889	4,181	4,590	4,414	4,801	4,803	4,889	4,391	4,926
Cane Run 4	LGE	5,723	5,823	5,813	5,848	5,589	5,008	4,091	4,815	5,067	5,294	5,325	5,447	5,538	4,992	5,773	5,734	5,854	5,905	5,932	6,026	5,422
Cane Run 5	LGE	5,715	5,367	5,343	4,748	5,200	4,548	4,094	4,318	4,544	4,631	4,293	4,323	5,104	5,128	5,218	5,301	5,389	4,837	5,522	5,810	5,846
Cane Run 6	LGE	7,464	7,572	7,836	7,499	6,867	6,892	6,570	6,771	6,899	6,954	7,074	6,553	7,343	7,297	7,401	7,431	7,562	7,647	6,855	7,739	7,739
Mill Creek 1	LGE	4,999	4,521	4,720	4,418	4,714	4,224	4,400	3,965	4,485	4,223	4,586	4,324	4,602	4,384	4,879	4,044	4,729	4,453	4,746	4,500	4,768
Mill Creek 2	LGE	5,434	5,780	5,463	5,753	5,430	5,583	4,685	5,531	5,237	5,807	5,304	5,862	5,385	5,999	4,964	5,779	5,435	5,829	5,478	5,870	5,531
Mill Creek 3	LGE	10,437	10,460	10,063	10,870	10,022	10,464	8,804	8,804	9,044	10,516	9,840	10,595	10,000	10,633	10,028	10,686	9,255	10,679	10,076	10,744	10,099
Mill Creek 4	LGE	10,965	9,459	10,965	10,313	10,934	10,138	10,534	10,040	10,856	9,270	10,882	10,344	10,993	10,512	11,039	10,404	11,965	9,584	11,124	10,862	11,204
Trimble County 1	LGE	5,525	6,053	5,537	6,067	5,591	6,012	5,505	6,028	5,520	6,042	5,507	6,043	5,541	6,070	5,550	6,052	5,550	6,052	5,550	6,052	5,591
Trimble County 2	KU	0	0	0	0	0	1,097	1,868	1,883	1,871	1,881	1,885	1,890	1,898	1,886	1,892	1,887	1,894	1,896	1,895	1,901	1,896
Trimble County 2	LGE	0	0	0	0	0	385	856	862	857	861	863	864	863	863	865	867	866	866	866	868	866
SO2 EMISSIONS (TONS)																						
Total		196,447	203,866	197,412	178,562	190,538	130,855	125,887	129,324	131,192	135,886	137,231	139,426	141,432	144,321	146,054	147,473	150,888	150,751	151,588	153,208	155,157
ALLOWANCES																						
KU EPA Allocated SO2 Allowances		83,343	83,343	83,343	83,343	83,343	41,872	41,872	41,872	41,872	41,872	29,170	29,170	29,170	29,170	29,170	29,170	29,170	29,170	29,170	29,170	29,170
LGE EPA Allocated SO2 Allowances		82,456	82,456	82,456	82,456	82,456	31,228	31,228														

2004 SO₂ Compliance Strategy
Appendix 8- SO₂ Emissions of Various SO₂ Compliance Plans

Case21- Option 1314: FS PRB GH234,FS PRB BR123

		SO2 SUMMARY BY YEAR																			
		2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025		
FUEL BO2 Content (WMBTU)																					
Brown 1	KU	2.7	2.7	2.8	2.8	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9		
Brown 2	KU	2.7	2.7	2.8	2.8	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9		
Brown 3	KU	2.8	2.8	2.7	2.6	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9		
Ghent 1	KU	0.4	0.4	0.4	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1		
Ghent 2	KU	1.2	1.2	1.2	1.0	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9		
Ghent 3	KU	1.2	1.2	1.0	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9		
Ghent 4	KU	1.2	1.2	1.2	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9		
Green River 3	KU	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6		
Green River 4	KU	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6		
Tyrone 3	KU	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8		
Cane Run 4	LGE	6.1	6.0	6.1	6.1	6.0	6.1	6.0	6.0	6.0	6.0	6.1	6.1	6.0	6.1	6.1	6.0	6.1	6.0		
Cane Run 5	LGE	6.1	6.0	6.0	6.1	6.1	6.1	6.0	6.0	6.0	6.0	6.0	6.1	6.1	6.0	6.1	6.1	6.0	6.1		
Cane Run 6	LGE	6.0	6.0	6.0	6.1	6.1	6.1	6.0	6.1	6.1	6.1	6.1	6.1	6.0	6.1	6.0	6.1	6.0	6.0		
Mill Creek 1	LGE	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1		
Mill Creek 2	LGE	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1		
Mill Creek 3	LGE	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1		
Mill Creek 4	LGE	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1		
Trimble County 1	LGE	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5		
Trimble County 2	KU	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
SCRUBBER REMOVAL EFF.																					
Brown 1		0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%		
Brown 2		0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%		
Brown 3		0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%		
Ghent 1		0%	0%	0%	93%	93%	93%	93%	93%	93%	93%	93%	93%	93%	93%	93%	93%	93%	93%		
Ghent 2		0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%		
Ghent 3		0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%		
Ghent 4		0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%		
Green River 3		0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%		
Green River 4		0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%		
Tyrone 3		0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%		
Cane Run 4		93%	93%	93%	93%	93%	93%	93%	93%	93%	93%	93%	93%	93%	93%	93%	93%	93%	93%		
Cane Run 5		85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%		
Cane Run 6		85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%		
Mill Creek 1		93%	93%	93%	93%	93%	93%	93%	93%	93%	93%	93%	93%	93%	93%	93%	93%	93%	93%		
Mill Creek 2		91%	91%	91%	91%	91%	91%	91%	91%	91%	91%	91%	91%	91%	91%	91%	91%	91%	91%		
Mill Creek 3		89%	89%	89%	89%	89%	89%	89%	89%	89%	89%	89%	89%	89%	89%	89%	89%	89%	89%		
Mill Creek 4		90%	90%	90%	90%	90%	90%	90%	90%	90%	90%	90%	90%	90%	90%	90%	90%	90%	90%		
Trimble County 1		94%	94%	94%	94%	94%	94%	94%	94%	94%	94%	94%	94%	94%	94%	94%	94%	94%	94%		
Trimble County 2		0%	0%	0%	0%	0%	98%	98%	98%	98%	98%	98%	98%	98%	98%	98%	98%	98%	98%		
TONS SO2 EMITTED																					
Brown 1	KU	8,416	7,412	8,860	8,710	3,308	3,072	2,840	2,892	2,823	3,101	3,213	3,248	3,362	3,488	3,125	3,586	3,670	3,734		
Brown 2	KU	15,315	15,149	15,888	13,240	5,457	5,259	5,186	5,177	4,889	5,332	5,414	5,487	5,602	5,814	5,845	5,184	5,905	5,875		
Brown 3	KU	30,775	34,298	38,334	34,115	12,822	11,955	11,289	10,225	11,823	11,881	11,858	12,248	12,849	12,523	11,323	13,412	13,743	13,907		
Ghent 1	KU	7,744	7,759	8,780	7,491	7,880	7,844	7,519	7,582	7,477	8,702	7,878	7,489	7,547	7,589	7,831	7,855	8,825	7,819		
Ghent 2	KU	15,841	17,745	18,484	14,833	15,812	14,081	13,848	12,871	14,444	14,712	14,828	15,188	15,412	15,251	13,990	15,751	16,005	16,238		
Ghent 3	KU	20,120	20,822	17,317	17,716	17,808	15,300	16,380	16,804	16,861	17,423	17,581	17,788	18,009	17,910	18,040	16,136	18,328	18,487		
Ghent 4	KU	20,798	20,871	20,985	18,096	15,806	17,239	16,906	17,285	17,248	17,805	17,721	18,087	18,070	18,031	17,983	18,204	18,298	18,421		
Green River 3	KU	18,059	8,010	9,421	9,542	9,221	8,960	7,914	8,231	6,824	8,871	9,518	8,972	10,146	10,651	11,153	11,112	11,479	11,955		
Green River 4	KU	12,977	13,708	14,528	14,378	15,371	11,940	12,110	13,037	13,282	13,844	14,168	14,867	15,185	15,282	16,312	15,886	16,322	16,830		
Tyrone 3	KU	2,861	3,247	3,889	4,095	4,371	3,228	3,328	3,414	3,875	3,718	3,832	4,078	3,835	4,231	4,581	4,556	4,723	4,814		
Cane Run 4	LGE	5,723	5,823	5,793	5,318	5,257	4,881	3,903	4,216	4,403	4,658	4,826	4,822	5,120	4,544	5,455	5,409	5,521	5,862		
Cane Run 5	LGE	9,175	9,387	9,323	4,507	4,877	4,387	3,578	3,787	4,145	4,161	4,009	4,482	4,727	4,882	4,986	5,013	5,186	4,882		
Cane Run 6	LGE	7,484	7,572	7,834	7,277	8,488	8,881	8,338	8,383	8,881	8,644	8,680	8,278	7,012	6,894	7,227	7,204	7,334	7,478		
Mill Creek 1	LGE	4,889	4,521	4,717	4,378	4,709	4,301	4,457	4,580	4,254	4,578	4,267	4,600	4,345	4,875	4,034	4,414	4,700	4,487		
Mill Creek 2	LGE	5,434	5,790	5,480	5,872	5,400	5,642	4,708	5,531	5,258	5,586	5,286	5,801	5,322	5,653	4,815	5,719	5,385	5,787		
Mill Creek 3	LGE	10,437	10,480	10,980	10,385	9,980	10,827	9,825	10,433	9,042	10,325	9,925	10,575	9,977	10,030	10,008	10,841	9,184	10,840		
Mill Creek 4	LGE	10,955	9,459	10,885	10,142	10,833	10,178	10,804	10,085	10,745	9,313	10,922	10,308	10,961	10,322	11,026	10,374	11,022	9,559		
Trimble County 1	LGE	5,525	6,053	5,537	6,070	5,082	6,028	5,902	6,033	5,520	6,029	5,527	6,050	5,882	6,042	5,548	6,058	5,534	6,034		
Trimble County 2	KU	0	0	0	0	0	1,098	1,874	1,882	1,821	1,885	1,888	1,888	1,882	1,891	1,892	1,896	1,896	1,895		
Trimble County 2	LGE	0	0	0	0	0	388	658	861	861	862	863	863	861	864	865	867	865	868		
SO2 EMISSIONS (TONS)																					
Total		186,447	203,886	208,126	196,264	158,481	152,357	148,380	150,807	154,217	158,886	159,793	160,208	160,983	168,273	168,712	178,046	171,018	173,856		
ALLOWANCES																					
KU EPA Allocated SO2 Allowances		83,343	83,343	83,343	83,343	83,343	41,872	41,872	41,872	41,872	41,872	41,872	29,170	29,170	29,170	29,170	29,170	29,170	29,170		
LGE EPA Allocated SO2 Allowances		82,458	82,458	82,458	82,458	82,458	21,228	21,228	21,228	21,228	21,228	21,228	21,880	21,880	21,880	21,880	21,880	21,880	21,880		
Total KULGE EPA Allocated SO2 Allowances		145,799	145,799	145,799	145,799	145,799	72,900	72,900	72,900	72,900	72,900	72,900	51,030	51,030	51,030	51,030	51,030	51,030	51,030		
KULGE Extension		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
KU's Portion of DMU Surplus/Shortfall		830	870	851	1,173	834	0	0	0	0	0	0	0	0	0	0	0	0	0		
Combined Company Purchases		0	0	6,488	48,291	12,848	79,457	75,490	77,907	81,318	83,889	108,763	108,179	108,933	115,244	115,882	110,017	119,388	122,828		
Self		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
TOTAL KULGE ALLOWANCES		146,629	146,669	153,148	159,264	158,481	152,357	148,380	150,807	154,217	158,886	159,793	160,208	160,983	168,273	168,712	178,046	171,018	173,85		

Appendix 9

To: File
From: Caryl Pfeiffer, Director Corporate Fuels & By-products
Date: September 2004
Re: PRB Fuel Issues at Ghent and E.W. Brown

When burning any coal type, one needs to take into consideration the characteristics of

- supply constraints
- fuel delivery logistics
- fuel unloading and handling on the generating station site
- coal mills and generating unit boiler design
- air pollution control equipment associated with the boiler
- combustion by-product handling and re-use

Currently Ghent 2, 3 & 4 and Brown 1, 2 & 3 rely on a supply of compliance and low sulfur coals produced in Kentucky, West Virginia, Pennsylvania and Southern Indiana (supplemented with up to a 1M tons/year of PRB coal into the Ghent Station). Relying on a regional coal supply reduces the physical distance fuel must be moved and decreases the potential for supply interruptions due to constraints and upsets in the fuel transportation system. Switching these stations to 100% PRB coal would make the Companies more dependant on coal produced only in the Western U.S. and would thus result in large quantities of coal having to be moved thousands of miles (instead of hundreds of miles) into Kentucky. Western railroads are already experiencing capacity constraints in their ability to move coal out of the Powder River Basin to the East. For delivery of PRB coal into Kentucky, we would have to rely on the Burlington Northern Sante Fe (BNSF) or the Union Pacific (UP) and a transloading facility on the Ohio River for Ghent and a combination of the BNSF or UP with the Norfolk Southern (NS) into Brown. In order to compensate for the transportation risks associated with PRB coal, inventory levels would have to be increased at each generating station site.

Coal receiving systems at both generating station sites were sized and constructed for the movement of Eastern bituminous coals. A switch to 100% PRB would tax the operating limitations of each coal unloading and handling system. Approximately 35% more tons of fuel would need to be unloaded just to compensate for the lower heating value of the PRB coal. In order to keep a comparable number of BTUs on the ground at each generating station, we would have to stockpile an additional 35% more PRB coal. In order to compensate for the transportation risks associated with relying on coal from the Western U.S., an additional 25% more PRB coal would have to be stockpiled to provide adequate inventory levels and ensure reliability of supply. Thus, the physical coal lay-down area (coal storage footprint) at each generating station site would need to be increased, resulting in a change in coal yard logistics and re-design of the stacker/reclaim areas and belt systems to move coal on-site. From our experiences with handling PRB coal at the Ghent Station site, we know that PRB coal is very difficult to handle when wet (PRB coal has a higher inherent moisture content and tends to be smaller in particle size and thus is stickier

than Eastern bituminous coals), thus coal transfer points and chutes would have to be re-designed to cope with the handling issues associated with PRB.

It is important to note, that any changes to the coal unloading and conveying systems could only be made after receiving the proper authorizations and permits from the Kentucky Department for Environmental Protection. Due to the physical characteristics of the PRB coal (high dusting potential), installation of extensive fugitive dust and fire suppression systems would be mandatory.

In order to accommodate a 100% PRB coal burn, the coal pulverizers and mills as well as the boilers at Ghent 2, 3 & 4 and Brown 1, 2 & 3 would have to be redesigned. Due to the low heating content of PRB fuel, additional quantities of coal would have to be processed through the pulverizers and mills in order to deliver enough BTUs to the boiler; thus these facilities need to be upgraded and their capacities increased. Spare pulverizer capacity has been consumed by the blending of PRB and compliance coal at Ghent 3 & 4 and we have determined that we would need to make a 30% improvement in the pulverizers in order to achieve full load. Boiler surface areas would also need to be added so that the heat released during combustion of PRB coal would be more effectively captured and converted to steam to drive the turbines. Any boiler modifications would have to be evaluated so as to ensure that no New Source Review would be triggered (i.e., there could not be a significant net increase in any regulated air pollutant). Boiler modifications would also have to be approved by the Kentucky Department of Housing, Building, and Construction. A full conversion of the each generating station to PRB could result in an increase in insurance rates.

A conversion to 100% PRB coal burn would significantly challenge the capabilities of existing air pollution control equipment associated with each boiler. Just as boilers are designed for a typical fuel, so is air pollution control equipment. In each case (Ghent 2, 3 & 4 and Brown 1, 2 & 3), Eastern bituminous coal was the design fuel for the electrostatic precipitators. KU has experimented with varying blends of PRB/Eastern bituminous coal on Ghent 3 & 4 since 2001 and has learned that commitment to PRB coal would require increased ESP maintenance. Even with just a blend of PRB coal, regular outages of the ESP for cleaning are required to maintain proper ESP performance (particulate removal). The present blend rate requires this on a six month cycle. It is anticipated that the cleaning frequency would have to occur at least once per quarter for operation at 100% PRB coal or that bag houses would have to be installed to ensure compliance with air permit emission limitations (particulates and opacity).

A 100% PRB burn at either of the generating stations would alter combustion by-product handling and re-use. Even though fly and bottom ash characteristics of PRB coal are different from that of bituminous coals, the overall ash loading would be lower on the PRB coal. Depending on the quantity and quality of the of coal ash produced from the burning of PRB coal and the ability to either re-use that ash or not, the consumption of ash pond space at each generating site may increase over time. Changes to the ash handling system would most likely have to be made in order to convey the PRB coal ash from each generating unit to the ash ponds on site.

Lastly, the switching to PRB coal at Ghent 2, 3 & 4 and Brown 1, 2 & 3 provides no fuel flexibility and no opportunity to consume coal mined in Kentucky. When you rely on the sulfur content of a coal as the sole compliance mechanism for attaining SO₂ emission reduction requirements, you severely limit the coals that can be burned and thus are subject to risks associated with fuel availability and pricing. We have seen this in the Eastern compliance coal market over the last several years where shortages of this coal have resulted in greater price volatility. For PRB, transportation fees into our area of the country make up the majority of the delivered coal cost. Thus, there is an added risk associated with the pricing of the transportation component of PRB.

On the other hand, if you rely on wet flue gas desulfurization as the compliance mechanism for attaining SO₂ emission reduction requirements, you maximize the coals that can be consumed because the sulfur content of the coal no longer becomes the driver in the fuel specification. The use of air pollution control equipment in general, greatly expands the universe of coals that can be utilized, since almost all of the SO₂, NO_x, and mercury emissions will be captured regardless of coal type. In turn, this increases the access to the most competitively priced coals. Generating units retrofit with FGDs at Ghent 2, 3 & 4 and Brown 1, 2 & 3 would be able to accommodate any Eastern bituminous fuel and could even handle a blend of Eastern bituminous with PRB. Thus, for these plants, the competition among fuel suppliers increases because there are a greater number of suppliers representing a greater extent of coals that can make valid offers of coal. For the plant, this results in more surety of supply and better pricing of that supply.

Appendix 10

Breakeven Fuel Gap Between Eastern Compliance and High Sulfur Fuel at Ghent

The breakeven fuel cost required to allow continued burning of Eastern compliance fuel at Ghent versus switching to a high sulfur fuel (and scrubbing) was determined via a linear statistical relationship and extrapolation. In order to extrapolate two cases are required.

The first uses the base forecast assumptions for Eastern Compliance and high sulfur fuel to determine the difference in total PVRR between whether or not the Gh234 WFGD is constructed.

<u>Base Eastern Compliance and Base High Sulfur Fuel Forecasts</u>		
		<u>PVRR (\$000)</u>
No Gh234 WFGD	=	\$14,910,754
Install Gh234 WFGD	=	<u>\$14,789,180</u>
Delta	=	-\$121,574
Average Annual Gap between Compliance and high sulfur		= -63 cents/mmBtu

The second case reduces the average annual gap between the forecasted prices for Eastern Compliance and high sulfur fuel by an arbitrary fixed amount. At Ghent 234 the average annual gap was reduced by 15 cents/mmBtu and both cases were rerun. Re-running of both cases are necessary as the reduction in the price of the current fuel (Eastern Compliance) will impact the production cost of both cases.

Reduce Avg Annual Gap between Compliance and High Sulfur = 15 cents/mmBtu

<u>Eastern Compliance (less 15c/mmBtu) and Base High Sulfur Fuel Forecasts</u>		
		<u>PVRR (\$000)</u>
No Gh234 WFGD	=	\$14,745,791
Install Gh234 WFGD	=	<u>\$14,737,066</u>
Delta	=	-\$8,725
Average Annual Gap between Compliance and high sulfur		= -48 cents/mmBtu

Graphing on the (X, Y) plane the relationships between the Avg. Annual Gap and the Delta PVRR produces the following two points:

(X, Y)= (Avg Annual Gap, Delta PVRR \$000)
Point 1= (-63, -\$121,574)
Point 2= (-48, -\$8,725)

The equation of the line between these two points is:

$$Y = 7523.3 X + 349746 \text{ or written another way}$$

$$\text{Delta PVRR} = 7523.3 (\text{Avg Annual Gap}) + 349746$$

Setting Delta PVRR to 0 and solving for the Avg. Annual Gap produces:

$$0 = 7523.3 (\text{Avg Annual Gap}) + 349746$$

$$\text{Avg Annual Fuel Gap} = \textbf{-46 cents/mmBtu}$$

Conclusions:

- Therefore, the average annual gap between the forecasted prices of Eastern Compliance and high sulfur coals must decrease by 17 cents/mmBtu (63 cents/mmBtu minus 46 cents/mmBtu) before the scrubbing alternative reaches a breakeven point with continued burning of Compliance coal at Ghent.
- An increase in the SO₂ market by a factor of 1.15 would necessitate a 19 cents/mmBtu reduction in the fuel gap to become breakeven.

Breakeven Fuel Gap between Medium Sulfur Fuel and High Sulfur Fuel at Brown

The breakeven fuel cost required to allow continued burning of medium sulfur fuel at Brown versus switching to a high sulfur fuel (and scrubbing) was determined via a linear statistical relationship and extrapolation. In order to extrapolate two cases are required.

The first uses the base forecast assumptions for medium sulfur and high sulfur fuel to determine the difference in total PVRR between whether or not the Gh234 WFGD is constructed.

<u>Base Medium Sulfur and Base High Sulfur Fuel Forecasts</u>		
	=	<u>PVRR (\$000)</u>
No Br123 WFGD	=	\$14,910,754
Install Br123 WFGD	=	<u>\$14,898,690</u>
Delta	=	-\$12,064
Average Annual Gap between Compliance and high sulfur		= -31 cents/mmBtu

The second case reduces the average annual gap between the forecasted prices for medium sulfur fuel and high sulfur fuel by an arbitrary fixed amount. At Brown123 the average annual gap was reduced by 10 cents/mmBtu and both cases were rerun. Re-running of both cases are necessary as the reduction in the price of the current fuel (medium sulfur) will impact the production cost of both cases.

Reduce Avg Annual Gap between Compliance and High Sulfur = 10 cents/mmBtu

<u>Medium Sulfur Fuel (less 10c/mmbtu) and Base High Sulfur Fuel Forecasts</u>		
	=	<u>PVRR (\$000)</u>
No Gh234 WFGD	=	\$14,860,398
Install Gh234 WFGD	=	<u>\$14,881,808</u>
Delta	=	\$21,410
Average Annual Gap between Compliance and high sulfur		= -21 cents/mmBtu

Graphing on the (X, Y) plane the relationships between the Avg. Annual Gap and the Delta PVRR produces the following two points:

(X, Y)= (Avg Annual Gap, Delta PVRR \$000)
Point 1= (-31, -\$12,064)
Point 2= (-21, \$21,410)

The equation of the line between these two points is:

$$Y = 3347.3 X + 90060 \text{ or written another way}$$

$$\text{Delta PVRR} = 3347.3 (\text{Avg Annual Gap}) + 90060$$

Setting Delta PVRR to 0 and solving for the Avg. Annual Gap produces:

$$0 = 3347.3 (\text{Avg Annual Gap}) + 90060$$

$$\text{Avg Annual Fuel Gap} = \mathbf{-27 \text{ cents/mmBtu}}$$

Conclusions:

- **Therefore, the average annual gap between the forecasted prices of medium sulfur and high sulfur coals must decrease by 4 cents/mmBtu (31 cents/mmBtu minus 27 cents/mmBtu) before the scrubbing alternative reaches a breakeven point with continued burning of medium sulfur fuel at Brown.**
- **An increase in the SO₂ market by a factor of 1.15 would necessitate a 16 cents/mmBtu reduction in the fuel gap to become breakeven.**

