

Empire District Gas Company
South System Gas Cost Inputs

Enclosure 1

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South System Line Loss	0.730%
Annual Burnertip Sales	2,654,717

Total Sales Volume @ Burnertip

Nov 10	274,914
Dec 10	508,300
Jan 11	564,768
Feb 11	429,675
Mar 11	321,883
Apr 11	163,719
May 11	77,263
Jun 11	59,139
Jul 11	41,675
Aug 11	49,194
Sep 11	55,487
Oct 11	108,700
	<u>2,654,717</u>

SSTAR Rates

Firm Rates

TSS	
No-Notice Fee (NNF)	\$ 0.0007
Reservation - FSS Deliverability (RED)	\$ 0.0280
Reservation - FSS Capacity	\$ 0.0013
Reservation - FTS-P (RES)	\$ 5.7944
Reservation - FTS-M (RES)	\$ 4.1671
FTS	
Production - Reservation (RES)	\$ 5.7944
Production - Balancing	\$ -
Market - Reservation (RES)	\$ 4.1671
Market - Balancing	\$ -

Commodity Rates

Production	
Commodity - FTS-P (CMD)	\$ 0.0098
Commodity Balancing Fee (CMB)	\$ 0.0007
FERC Annual Charge Adjustment (ACA)	\$ 0.0017
Production Field Zone	\$ 0.0122
Market	
Commodity - FTS-M (CMD)	\$ 0.0085
Commodity Balancing Fee (CMB)	\$ 0.0007
FERC Annual Charge Adjustment (ACA)	\$ 0.0017
Market Zone	\$ 0.0109

Injection/Withdrawal - FSS	\$ 0.0114
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Interruptible Rates

ITS-P	
Commodity	\$ 0.2003
ITS-M	
Commodity	\$ 0.1455

SSTAR Production Area Loss	1.84%
SSTAR Market Area Loss	0.96%
SSTAR Storage Injection Loss	3.59%

Note: From FERC Gas Tariff: 1st Revised Vol 1 Sheet No. 10 Effective 06/01/10;
1st Revised Sheet No. 11 Effective 06/01/10; and 1st Revised Sheet No. 13 Effective 06/01/10

Calculated Inputs

	<u>Firm</u>	<u>Storage</u>	<u>Total Firm</u>	<u>Interruptible</u>	<u>Total System</u>
Annual Throughput at Burnertip per Sales Forecast	1,942,217	712,500	2,654,717	0	2,654,717
Annual Throughput at Citygate	1,956,359	717,739	2,674,098	0	2,674,098
Annual Throughput at Production Area	2,041,674	731,193	2,772,867	0	2,772,867

**Empire District Gas Company
South System Gas Cost Inputs**

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FIRM	Annual Volume	Monthly Capacity Reserved	No. of Mth Reserved	Tariff Rate	Annual Cost
<u>Southern Star Pipeline</u>					
TSS					
No-Notice Fee (NNF)		39,618	12	\$ 0.0007	\$ 333
Reservation - FSS Deliverability (RED)		23,928	12	\$ 0.0280	\$ 8,040
Reservation - FTS-Production (RES)		14,119	12	\$ 5.7944	\$ 981,734
Reservation - FTS-Market (RES)		39,618	12	\$ 4.1671	\$ 1,981,106
				\$ -	\$ -
FTS					
Production - Reservation (RES)		10,651	12	\$ 5.7944	\$ 740,594
Production - Balancing		0	12	\$ -	\$ -
Market - Reservation (RES)		13,491	12	\$ 4.1671	\$ 674,620
Market - Balancing		0	12	\$ -	\$ -
				\$ -	\$ -
		<u>Volume %</u>			
Cheyenne Plains Reservation	1,616,000	100.00%		\$ 0.3500	\$ 565,600
Pipeline Commodity Costs	2,772,867			\$ 0.0249	\$ 69,044
Total Transportation Costs					\$ 5,021,071
Natural Gas Purchases	2,772,867			\$ 4.3151	\$ 11,965,197
Total Annual Cost					<u>\$ 16,986,268</u>
Firm Sales Volume at Burnertip	2,654,717				
Cost per MCF at Burnertip					<u>\$ 6.3985</u>

INTERRUPTIBLE

Southern Star Pipeline

ITS-P				<u>@150%</u>	
Commodity	2,772,867			\$ 0.3041	\$ 843,229
ITS-M				<u>@150%</u>	
Commodity	2,772,867			\$ 0.2219	\$ 615,299
		<u>Volume %</u>			
Cheyenne Plains Reservation	1,616,000	0.00%		\$ 0.3500	\$ -
Pipeline Commodity Costs	2,772,867			\$ 0.0249	\$ 69,044
Natural Gas Purchases	2,772,867			\$4.3151	\$ 11,965,197
Total Annual Cost					<u>\$ 13,492,769</u>
Interruptible Sales Volume at Burnertip	2,577,106				
Cost per MCF at Burnertip					<u>\$ 5.2356</u>

Empire District Gas Company
South System Gas Cost Inputs
Cheyenne Plains/WIC Transportation Charges

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	<u>Cheyenne Plains</u>	
		<u>Per Mcf</u>
Firm Transportation - FT		
Reservation Rate	\$ 10.6924	\$ 0.3500
Commodity Rate		\$ 0.0010
ACA Charge		\$ 0.0017

Fuel Percentage 0.94%
 L & U Percentage 0.07%

Note: Cheyenne Plains From FERC Gas Tariff: 8th Revised Sheet No. 20 Effective 6/1/09

Distribution	<u>SS</u>	<u>PEPL</u>	<u>ANR</u>	<u>Total</u>
Volume Percentage	65%	23%	12%	100.00%
Volume Flow through Cheyenne Plains				
Nov 09	300,000	-	-	
Dec 09	310,000	-	-	
Jan 10	310,000	-	-	
Feb 10	280,000	-	-	
Mar 10	310,000	-	-	
Apr 10	120,000	120,000	60,000	
May 10	124,000	124,000	62,000	
Jun 10	120,000	120,000	60,000	
Jul 10	124,000	124,000	62,000	
Aug 10	124,000	124,000	62,000	
Sep 10	120,000	120,000	60,000	
Oct 10	124,000	124,000	62,000	
	2,366,000	856,000	428,000	3,650,000
Volumes to Storage	<u>(750,000)</u>			

SUMMARY OF COMMODITY COSTS

SUMMARY OF COMMODITY COSTS													Totals
	Nov 10	Dec 10	Jan 11	Feb 11	Mar 11	Apr 11	May 11	Jun 11	Jul 11	Aug 11	Sep 11	Oct 11	
Sales Requirements	274,914	508,300	564,768	429,675	321,883	163,719	77,263	59,139	41,675	49,194	55,487	108,700	2,654,717
South System Loss	0.73%	0.73%	0.73%	0.73%	0.73%	0.73%	0.73%	0.73%	0.73%	0.73%	0.73%	0.73%	
South System Loss Volume	2,007	3,711	4,123	3,137	2,350	1,195	564	432	304	359	405	794	19,381
City Gate Volume	276,921	512,011	568,891	432,812	324,233	164,914	77,827	59,571	41,979	49,553	55,892	109,494	2,674,098
SSSTAR Market Area Loss	0.96%	0.96%	0.96%	0.96%	0.96%	0.96%	0.96%	0.96%	0.96%	0.96%	0.96%	0.96%	
SSSTAR Production Area Loss	1.84%	1.84%	1.84%	1.84%	1.84%	1.84%	1.84%	1.84%	1.84%	1.84%	1.84%	1.84%	
SSSTAR - Fuel Loss	7,753	14,336	15,929	12,119	9,079	4,617	2,179	1,668	1,175	1,388	1,565	3,066	74,874
Cheyenne Plains Volume	300,000	310,000	310,000	280,000	310,000	120,000	124,000	120,000	124,000	124,000	120,000	124,000	
Cheyenne Plains Fuel + L&U Loss	1.01%	1.01%	1.01%	1.01%	1.01%	1.01%	1.01%	1.01%	1.01%	1.01%	1.01%	1.01%	
Cheyenne Plains - Fuel Loss	3,030	3,131	3,131	2,828	3,131	1,212	1,252	1,212	1,252	1,252	1,212	1,252	23,895
Purchase Requirements at Production Area	287,704	529,478	587,951	447,759	336,443	170,743	81,258	62,451	44,406	52,193	58,669	113,812	2,772,867
Contracted Financial Futures	20,000	230,000	230,000	230,000	70,000	0	0	0	0	0	0	0	780,000
Contracted Price	\$ 5,265	\$ 4,988	\$ 4,988	\$ 4,987	\$ 5,446	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Total Cost	\$ 105,300	\$ 1,147,240	\$ 1,147,240	\$ 1,147,010	\$ 381,220	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 3,928,010
Physical Forwards	29,790	30,783	30,783	27,804	30,783	0	0	0	0	0	0	0	149,943
Average Price	\$ 7,072	\$ 6,520	\$ 6,450	\$ 6,447	\$ 6,430	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Total Cost	\$ 210,675	\$ 200,690	\$ 198,535	\$ 179,252	\$ 197,919	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 987,071
Natural Gas Market - Mid Continent	0	(0)	(0)	(0)	0	50,743	(0)	0	0	(0)	0	0	
Forecasted Price (NYMEX-WNG Basis)	\$ 3,434	\$ 3,816	\$ 4,035	\$ 4,066	\$ 3,995	\$ 3,925	\$ 3,958	\$ 4,019	\$ 4,095	\$ 4,147	\$ 4,169	\$ 4,252	
Natural Gas Market - Cheyenne Plains	7,367	341	173,569	129,955	235,660	120,000	81,258	62,451	44,406	52,193	58,669	113,812	
Forecasted Price (NYMEX-CIG Basis)	\$ 3,346	\$ 3,799	\$ 3,975	\$ 4,008	\$ 3,933	\$ 3,778	\$ 3,811	\$ 3,872	\$ 3,948	\$ 4,000	\$ 4,022	\$ 4,105	
Total Natural Gas Purchased at Market	7,367	341	173,569	129,955	235,660	170,743	81,258	62,451	44,406	52,193	58,669	113,812	1,130,424
Total Cost	\$ 24,650	\$ 1,294	\$ 689,849	\$ 520,859	\$ 926,733	\$ 652,466	\$ 309,632	\$ 241,780	\$ 175,294	\$ 208,746	\$ 235,937	\$ 467,142	\$ 4,454,382
Storage Withdrawal	230,547	288,354	153,599	60,000	0	0	0	0	0	0	0	0	712,500
Storage WACOG	\$ 3,643	\$ 3,643	\$ 3,643	\$ 3,643	\$ 3,643	\$ 3,643	\$ 3,643	\$ 3,643	\$ 3,643	\$ 3,643	\$ 3,643	\$ 3,643	
Total Cost	\$ 838,883	\$ 877,614	\$ 559,561	\$ 218,580	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 2,595,638
Forecasted Gas Commodity Cost	\$ 1,180,508	\$ 2,326,838	\$ 2,595,185	\$ 2,065,701	\$ 1,505,872	\$ 652,466	\$ 309,632	\$ 241,780	\$ 175,294	\$ 208,746	\$ 235,937	\$ 467,142	\$ 11,965,101
Purchase Requirements at Production Area	287,704	529,478	587,951	447,759	336,443	170,743	81,258	62,451	44,406	52,193	58,669	113,812	2,772,867
Gas Commodity Cost/Dth													\$ 4,3151

SUMMARY OF PIPELINE COMMODITY COSTS

[illegible]

**Empire District Gas Company
North System Gas Cost Inputs**

Enclosure 2

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North System Line Loss	3.430%
Annual Burnertip Sales	968,908

<u>PEPL Rates</u>	Tariff
<u>PEPL EFT Reservation Rates</u>	<u>Rate</u>
Field Zone Reservation	\$ 4.7300
Market Zone Access	\$ 3.3000
Market Zone Mileage 201-300 Block	\$ 1.8000
	\$ -
	\$ 9.8300

<u>PEPL EFT Commodity Rates</u>	
Field Zone Commodity	\$ 0.0195
Market Zone Access	\$ 0.0006
Market Zone Mileage 201-300 Block	\$ 0.0075
ACA Unit Charge	\$ 0.0019
	\$ -
	\$ -
Total Market Zone Commodity	\$ 0.0100

<u>PEPL IT Interruptible Rates EIT - Transmission Charges</u>	
Field Zone Base Rate	\$ 0.1750
Market Zone Access	\$ 0.1091
Market Zone Mileage 201-300 Block	\$ 0.0666
ACA Unit Charge	\$ 0.0019
	\$ -
	\$ -

<u>PEPL Storage Rates FS</u>	
Deliverability Charge Field Area	\$ 3.3500
Capacity Charge Field Area	\$ 0.4028

PEPL Field Zone Loss (Fuel Reimbursement-Trans Chrg)	0.47%
PEPL Market Zone Loss (Mileage 201-300 Fuel Reimb)	0.66%
FIELD Injection Charge Fuel Reimbursement %	1.59%
FIELD Withdrawal Charge Fuel Reimbursement %	0.72%

Note: From FERC Gas Tariff: PEPL 27th Revised Sheet No. 5 Effective 05/16/10; 26th Revised Sheet No. 8 Effective 05/16/10; 9th Revised Sheet No. 14 Effective 11/01/09; 7th Revised Sheet No. 19 Effective 10/01/09

<u>Calculated Inputs</u>	<u>Firm</u>	<u>Storage</u>	Total <u>Firm</u>	<u>Interruptible</u>	<u>Total</u>
Annual Throughput at Burnertip per Sales Forecast	225,340	722,000	947,340	21,568	968,908
Annual Throughput at Citygate	209,855	747,644	957,499	22,334	979,833
Annual Throughput at Production Area	208,043	768,549	976,592	22,589	999,181

Total Sales Volume @ Burnertip	Interruptible
Nov 10	103,854
Dec 10	177,896
Jan 11	203,162
Feb 11	151,963
Mar 11	113,888
Apr 11	63,195
May 11	33,640
Jun 11	14,957
Jul 11	14,440
Aug 11	15,276
Sep 11	17,153
Oct 11	37,916
	947,340
	21,568
	Interruptible 2.28%
	Firm 97.72%

**Empire District Gas Company
North System Gas Cost Inputs**

Enclosure 2

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	<u>Annual Volume</u>	<u>Monthly Capacity Reserved</u>	<u>No. Of Days Reserved</u>	<u>Tariff/ Contracted Rate</u>	<u>Annual Cost</u>
Transportation					
Firm					
<u>Panhandle Eastern Pipe Line</u>					
Contract 17005					
<u>EFT Reservation Rates</u>					
Contracted Winter Volumes and rate		17,000	151	\$ 9.8300	\$ 835,550
Contracted Summer Volumes and rate		9,000	214	\$ 9.8300	\$ 619,290
Capacity Release Nov\Mar to Conagra		1,900	151	\$ 9.3000	\$ (123,690)
Contract 17004					
FS Storage		66,667	365	\$ 0.4028	\$ 322,242
Contracted Winter Volumes & Rate		14,000	151	\$ 3.3500	\$ 234,500
Contracted Summer Volumes & Rate		8,700	214	\$ 3.3500	\$ 204,015
		<u>Volume %</u>			
Cheyenne Plains Reservation	209,247	97.72%		\$ 0.3500	\$ 71,569
Pipeline Commodity Costs	976,592			\$ 0.0306	\$ 29,884
Total Transportation Costs					\$ 2,193,360
Natural Gas Purchases	976,592			\$ 3.5457	\$ 3,462,702
Total Annual Cost					<u>\$ 5,656,062</u>
Firm Sales Volume at Burnertip	947,340				
Cost per MCF at Burnertip					<u>\$ 5.9705</u>

INTERRUPTIBLE

Panhandle Eastern Pipe Line

IT Interruptible Rates

				<u>@150%</u>	
Field Zone	22,589		\$	0.2625	\$ 5,930
Market Zone Access	22,589		\$	0.1637	\$ 3,698
Market Zone Mileage	22,589		\$	0.0999	\$ 2,257
ACA Unit Charge	22,589		\$	0.0029	\$ 66
		<u>Volume %</u>			
Cheyenne Plains Reservation	209,247	2.28%	\$	0.3500	\$ 1,667
Pipeline Commodity Costs	22,589		\$	0.0306	\$ 691
Natural Gas Purchases	22,589			\$3.5457	\$ 80,094
Total Annual Cost					<u>\$ 94,403</u>
Interruptible Sales Volume at Burnertip	21,568				
Cost per MCF at Burnertip					<u>\$ 4.3770</u>

**Empire District Gas Company
North System Gas Cost Inputs
Cheyenne Plains/WIC Transportation Charges**

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	<u>Cheyenne Plains</u>	
		<u>Per Mcf</u>
Firm Transportation - FT		
Reservation Rate	\$ 10.6924	\$ 0.3500
Commodity Rate		\$ 0.0010
ACA Charge		\$ 0.0017

Fuel Percentage 0.94%
L & U Percentage 0.07%

Note: Cheyenne Plains From FERC Gas Tariff: 8th Revised Sheet No. 20 Effective 6/1/09

Distribution	<u>SS</u>	<u>PEPL</u>	<u>ANR</u>	<u>Total</u>
Volume Percentage	65%	23%	12%	100.00%
Volume Flow through Cheyenne Plains				
Nov 09	300,000	-	-	
Dec 09	310,000	-	-	
Jan 10	310,000	-	-	
Feb 10	280,000	-	-	
Mar 10	310,000	-	-	
Apr 10	120,000	120,000	60,000	
May 10	124,000	124,000	62,000	
Jun 10	120,000	120,000	60,000	
Jul 10	124,000	124,000	62,000	
Aug 10	124,000	124,000	62,000	
Sep 10	120,000	120,000	60,000	
Oct 10	124,000	124,000	62,000	
	2,366,000	856,000	428,000	3,650,000
Volumes to Storage		<u>(646,753)</u>		

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	Nov 10	Dec 10	Jan 11	Feb 11	Mar 11	Apr 11	May 11	Jun 11	Jul 11	Aug 11	Sep 11	Oct 11	Total
SUMMARY OF COMMODITY COSTS													
Sales Requirements	103,854	177,896	203,162	151,963	113,889	83,195	33,640	14,957	14,440	15,276	17,153	37,916	947,340
North System Loss	3,43%	3,43%	3,43%	3,43%	3,43%	3,43%	3,43%	3,43%	3,43%	3,43%	3,43%	3,43%	3,43%
North System Loss Volume	3,562	6,102	6,968	5,212	3,906	2,168	1,154	513	485	524	588	1,301	32,493
City Gate Volume	107,416	183,998	210,130	157,175	117,794	65,383	34,794	15,470	14,935	15,800	17,741	39,217	979,833
PEPL Market Zone Fuel Loss	0.66%	0.66%	0.66%	0.66%	0.66%	0.66%	0.66%	0.66%	0.66%	0.66%	0.66%	0.66%	0.66%
PEPL Field Zone Fuel Loss	0.47%	0.47%	0.47%	0.47%	0.47%	0.47%	0.47%	0.47%	0.47%	0.47%	0.47%	0.47%	0.47%
PEPL - Fuel Loss	1,173	2,010	2,296	1,717	1,287	714	380	169	163	173	194	428	10,704
Cheyenne Plains Volume	0	0	0	0	0	120,000	124,000	120,000	124,000	124,000	120,000	124,000	1,011
Cheyenne Plains Fuel + L&U Loss	1.01%	1.01%	1.01%	1.01%	1.01%	1.01%	1.01%	1.01%	1.01%	1.01%	1.01%	1.01%	1.01%
Cheyenne Plains - Fuel Loss	0	0	0	0	0	1,212	1,252	1,212	1,252	1,252	1,212	1,252	8,644
Purchase Requirements at Production Area	108,589	186,008	212,426	158,892	119,081	67,289	36,426	18,851	16,350	17,225	19,147	40,897	999,181
Contracted Price	0	0	0	0	0	0	0	0	0	0	0	0	0
Contracted Financial	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Cost	0	0	0	0	0	0	0	0	0	0	0	0	0
Physical Forwards	0	0	0	0	0	0	0	0	0	0	0	0	0
Average Price	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Cost	0	0	0	0	0	0	0	0	0	0	0	0	0
Natural Gas Market - Mid Continent	4,376	4,634	6,754	5,387	41,845	(0)	3,958	4,019	4,095	4,147	4,169	4,252	(0)
Forecasted Price (NYMEX-PEPL Basis)	3,409	3,851	4,040	4,071	4,000	3,925	3,958	4,019	4,095	4,147	4,169	4,252	4,252
Natural Gas Market - Cheyenne Plains	0	0	0	0	0	67,289	36,426	16,851	16,350	17,225	19,147	40,897	40,897
Forecasted Price (NYMEX-CIG Basis)	3,346	3,799	3,975	4,008	3,933	3,778	3,811	3,872	3,948	4,000	4,022	4,105	4,105
Total Natural Gas Purchased at Market	4,376	4,634	6,754	5,387	41,845	67,289	36,426	16,851	16,350	17,225	19,147	40,897	277,181
Total Cost	14,918	17,845	27,283	21,929	167,381	254,183	138,802	65,237	64,541	68,891	77,001	167,861	1,085,870
Storage Withdrawal (17007)	104,213	181,374	205,672	153,505	77,236	0	0	0	0	0	0	0	722,000
Storage WACOG (17007)	3,403	3,403	3,403	3,403	3,403	3,403	3,403	3,403	3,403	3,403	3,403	3,403	3,403
Total Cost	354,637	617,216	699,902	522,378	262,834	-	-	-	-	-	-	-	2,456,967
Forecasted Gas Commodity Cost	369,553	635,061	727,185	544,307	430,215	254,183	138,802	65,237	64,541	68,891	77,001	167,861	3,542,837
Purchase Requirements at Production Area	108,589	186,008	212,426	158,892	119,081	67,289	36,426	18,851	16,350	17,225	19,147	40,897	999,181
Gas Commodity Cost/Dth													\$ 3,545,7
SUMMARY OF PIPELINE COMMODITY COSTS													
Panhandle Eastern Pipeline - Firm	105,038	179,924	205,478	153,885	115,186	63,915	34,024	15,127	14,604	15,450	17,349	38,348	947,34

Empire District Gas Company
Northwest System Gas Cost Inputs

Enclosure 3

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Northwest System Line Loss	1.56%
Annual Burnertip Sales	588,441

Total Sales Volume @ Burnertip	
Nov 10	64,533
Dec 10	110,279
Jan 11	123,396
Feb 11	90,855
Mar 11	73,375
Apr 11	35,440
May 11	17,393
Jun 11	11,705
Jul 11	10,053
Aug 11	11,416
Sep 11	11,865
Oct 11	28,131
	588,441
%	100.00%

ANR RATES

Transport Charge-STS SW Area SW Mainline	\$	0.9223
Annual Charge Adjustment	\$	0.0019
Deferred Transportation Cost Adj - STS (All Segments)	\$	(0.0083)
Cashout Negative Surcharge - CNS	\$	(0.0036)
	\$	-
	\$	0.9123
Transport Use Fee (1) - SW Southern Segment (ML-5)		1.29%
Transport Use Fee (2) - SW Central Segment (ML-6)		2.67%
Storage Use Fee - FSS and DDS Storage Services		0.84%

Note: From FERC Gas Tariff: ANR 10th Revised Sheet No. 6 Effective 11/01/06; 53rd Revised Sheet No. 17 Effective 06/01/10; 17th Revised Sheet No. 17A Effective 05/01/10; and 28th Revised Sheet No. 19 Effective 08/01/10.

Calculated Inputs

	<u>Firm</u>	<u>Storage</u>	Total <u>Firm</u>	<u>Interruptible</u>	<u>Total</u>
Annual Throughput at Burnertip per Sales Forecast	208,441	380,000	588,441	0	588,441
Annual Throughput at Citygate	211,599	386,022	597,621	0	597,621
Annual Throughput at Production Area	223,748	391,067	614,815	0	614,815

	Annual/ Seasonal Volume	<u>Volume %</u>	No. of Mths Reserved	Tariff Rate	Annual Cost
Transportation					
Cheyenne Plains Reservation	118,612	100.00%	\$	0.3500	\$ 41,514
ANR Transportation Cost	614,815		\$	0.9123	\$ 560,895
Pipeline Commodity Costs	614,815		\$	0.0019	\$ 1,168
Total Transportation Costs					\$ 603,577
Natural Gas Purchases	614,815		\$	3.5711	\$ 2,195,564
Total Annual Cost					<u>\$ 2,799,141</u>
Sales Volume at Burnertip	588,441				
Cost per MCF at Burnertip					<u>\$ 4.7569</u>

INTERRUPTIBLE

		<u>Volume %</u>			
Cheyenne Plains Reservation	428,000	100.00%	\$	0.3500	\$ 149,800
Pipeline Commodity Costs	578,668		\$	0.0019	\$ 1,099
ANR Transportation Cost	578,668		\$	<u>@150%</u> 1.3685	\$ 791,878
Natural Gas Purchases	578,668		\$	3.5711	\$ 2,066,481
Total Annual Cost					<u>\$ 2,859,458</u>
Sales Volume at Burnertip	557,933				
Cost per MCF at Burnertip					<u>\$ 5.1251</u>

Empire District Gas Company
Northwest System Gas Cost Inputs
Cheyenne Plains Transportation Charges

Enclosure 3

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	Cheyenne Plains	
		<u>Per Mcf</u>
Firm Transportation - FT		
Reservation Rate	\$ 10.6924	\$ 0.3500
Commodity Rate		\$ 0.0010
ACA Charge		\$ 0.0017

Fuel Percentage	0.94%
L & U Percentage	0.07%

Note: Cheyenne Plains From FERC Gas Tariff: 8th Revised Sheet No. 20 Effective 6/1/09

Distribution	<u>SS</u>	<u>PEPL</u>	<u>ANR</u>	<u>Total</u>
Volume Percentage	65%	23%	12%	100.00%
Volume Flow through Cheyenne Plains				
Nov 09	300,000	-	-	
Dec 09	310,000	-	-	
Jan 10	310,000	-	-	
Feb 10	280,000	-	-	
Mar 10	310,000	-	-	
Apr 10	120,000	120,000	60,000	
May 10	124,000	124,000	62,000	
Jun 10	120,000	120,000	60,000	
Jul 10	124,000	124,000	62,000	
Aug 10	124,000	124,000	62,000	
Sep 10	120,000	120,000	60,000	
Oct 10	124,000	124,000	62,000	
	2,366,000	856,000	428,000	3,650,000
Volumes from Storage			<u>(309,388)</u>	

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SUMMARY OF COMMODITY COSTS

	Nov 10	Dec 10	Jan 11	Feb 11	Mar 11	Apr 11	May 11	Jun 11	Jul 11	Aug 11	Sep 11	Oct 11	Totals
SUMMARY OF COMMODITY COSTS													
Sales Requirements	64,533	110,279	123,396	90,855	73,375	35,440	17,383	11,705	10,053	11,416	11,865	28,131	588,441
	<u>1.56%</u>	<u>1.56%</u>	<u>1.56%</u>	<u>1.56%</u>	<u>1.56%</u>	<u>1.56%</u>	<u>1.56%</u>	<u>1.56%</u>	<u>1.56%</u>	<u>1.56%</u>	<u>1.56%</u>	<u>1.56%</u>	
Northwest System Loss	1,007	1,720	1,925	1,417	1,145	553	271	183	157	178	185	439	9,180
Northwest System Loss Volume													
	<u>1.00%</u>	<u>1.00%</u>	<u>1.00%</u>	<u>1.00%</u>	<u>1.00%</u>	<u>1.00%</u>	<u>1.00%</u>	<u>1.00%</u>	<u>1.00%</u>	<u>1.00%</u>	<u>1.00%</u>	<u>1.00%</u>	
City Gate Volume	65,540	111,999	125,321	92,272	74,520	35,993	17,664	11,888	10,210	11,594	12,050	28,570	597,621
	<u>1.00%</u>	<u>1.00%</u>	<u>1.00%</u>	<u>1.00%</u>	<u>1.00%</u>	<u>1.00%</u>	<u>1.00%</u>	<u>1.00%</u>	<u>1.00%</u>	<u>1.00%</u>	<u>1.00%</u>	<u>1.00%</u>	
Contract 109149	22,077	39,623	44,336	32,481	26,642	11,507	6,049	3,627	3,241	3,825	2,803	9,967	
Contract 109149 Fuel %	<u>1.29%</u>	<u>1.29%</u>	<u>1.29%</u>	<u>1.29%</u>	<u>1.29%</u>	<u>1.29%</u>	<u>1.29%</u>	<u>1.29%</u>	<u>1.29%</u>	<u>1.29%</u>	<u>1.29%</u>	<u>1.29%</u>	
Group 1 Supply - Fuel Loss	285	511	572	419	344	148	78	47	42	47	36	129	2,658
	<u>1.00%</u>	<u>1.00%</u>	<u>1.00%</u>	<u>1.00%</u>	<u>1.00%</u>	<u>1.00%</u>	<u>1.00%</u>	<u>1.00%</u>	<u>1.00%</u>	<u>1.00%</u>	<u>1.00%</u>	<u>1.00%</u>	
Contract 109150	42,456	70,656	79,060	58,374	46,732	23,933	11,343	8,078	6,812	7,792	9,063	18,164	
Contract 109150 Fuel %	<u>2.67%</u>	<u>2.67%</u>	<u>2.67%</u>	<u>2.67%</u>	<u>2.67%</u>	<u>2.67%</u>	<u>2.67%</u>	<u>2.67%</u>	<u>2.67%</u>	<u>2.67%</u>	<u>2.67%</u>	<u>2.67%</u>	
Group 2 Supply - Fuel Loss	1,134	1,887	2,111	1,559	1,248	639	303	216	182	208	242	485	10,214
	<u>1.00%</u>	<u>1.00%</u>	<u>1.00%</u>	<u>1.00%</u>	<u>1.00%</u>	<u>1.00%</u>	<u>1.00%</u>	<u>1.00%</u>	<u>1.00%</u>	<u>1.00%</u>	<u>1.00%</u>	<u>1.00%</u>	
Cheyenne Plains Volume	0	0	0	0	0	60,000	62,000	60,000	62,000	62,000	60,000	62,000	
Cheyenne Plains Fuel + LAU Loss	<u>1.01%</u>	<u>1.01%</u>	<u>1.01%</u>	<u>1.01%</u>	<u>1.01%</u>	<u>1.01%</u>	<u>1.01%</u>	<u>1.01%</u>	<u>1.01%</u>	<u>1.01%</u>	<u>1.01%</u>	<u>1.01%</u>	
Cheyenne Plains - Fuel Loss	0	0	0	0	0	606	626	606	626	626	606	626	4,322
	<u>1.00%</u>	<u>1.00%</u>	<u>1.00%</u>	<u>1.00%</u>	<u>1.00%</u>	<u>1.00%</u>	<u>1.00%</u>	<u>1.00%</u>	<u>1.00%</u>	<u>1.00%</u>	<u>1.00%</u>	<u>1.00%</u>	
Purchase Requirements at Production Area	66,959	114,397	128,004	94,250	76,112	37,386	18,671	12,757	11,060	12,475	12,934	29,810	614,815
	<u>1.00%</u>	<u>1.00%</u>	<u>1.00%</u>	<u>1.00%</u>	<u>1.00%</u>	<u>1.00%</u>	<u>1.00%</u>	<u>1.00%</u>	<u>1.00%</u>	<u>1.00%</u>	<u>1.00%</u>	<u>1.00%</u>	
Contracted Financial Futures	0	0	0	0	0	0	0	0	0	0	0	0	0
Contracted Price	-	-	-	-	-	-	-	-	-	-	-	-	-
Total Cost	-	-	-	-	-	-	-	-	-	-	-	-	-
Physical Forwards	0	0	0	0	0	0	0	0	0	0	0	0	0
Average Price	-	-	-	-	-	-	-	-	-	-	-	-	-
Total Cost	-	-	-	-	-	-	-	-	-	-	-	-	-
Natural Gas Market - Mid Continent	4,523	6,145	4,292	8,650	76,112	(0)	(0)	0	(0)	0	0	0	
Forecasted Price (NYMEX+ANR Basis)	<u>3.446</u>	<u>3.831</u>	<u>4.077</u>	<u>4.113</u>	<u>4.055</u>	<u>3.965</u>	<u>3.998</u>	<u>4.059</u>	<u>4.135</u>	<u>4.187</u>	<u>4.209</u>	<u>4.292</u>	

SUMMARY OF PIPELINE COMMODITY COSTS

[illegible]

Empire District Gas Company
SCHEDULE 4 - CALCULATION OF
NEW RECOVERY BALANCE
2009-10 ACA YEAR

Line		South System		North System		Northwest System		TOTAL
		FIRM	INTERRUPT.	FIRM	INTERRUPT.	FIRM	INTERRUPT.	
1	ACA Recovery	\$ 1,272,094.70	\$ -	\$ (639,075.52)	\$ 7,603.39	\$ (100,449.75)	\$ -	\$ 540,172.82
2	PGA Regular Recovery	\$ 19,219,498.39	\$ -	\$ 6,089,235.07	\$ 115,017.98	\$ 3,118,955.46	\$ -	\$ 28,542,706.90
3	Balancing Penalties	\$ -	\$ -	\$ 9,893.80	\$ -	\$ -	\$ -	\$ 9,893.80
4	Balancing Fees	\$ 93,123.05	\$ -	\$ 20,885.22	\$ -	\$ 10,829.70	\$ -	\$ 124,837.97
5	Total Recovery	\$ 20,584,716.14	\$ -	\$ 5,480,938.57	\$ 122,621.37	\$ 3,029,335.41	\$ -	\$ 29,217,611.49
LESS:								
6	Purchased Gas Cost	\$ 18,212,290.77	\$ -	\$ 5,988,669.24	\$ 90,249.17	\$ 3,170,104.85	\$ -	\$ 27,461,314.03
7	Storage Costs	\$ 71,677.93	\$ -	\$ 98,157.62	\$ -	\$ 51,922.02	\$ -	\$ 221,757.57
8	Total Purchased Gas Cost	\$ 18,283,968.70	\$ -	\$ 6,086,826.86	\$ 90,249.17	\$ 3,222,026.87	\$ -	\$ 27,683,071.60
9	Gross Recovery Over/(Under) Cost	\$ 2,300,747.44	\$ -	\$ (605,888.29)	\$ 32,372.20	\$ (192,691.46)	\$ -	\$ 1,534,539.89
Carrying Costs								
10		\$ (4,164.60)	\$ 423.85	\$ 5,892.65	\$ (496.46)	\$ 1,021.00	\$ -	\$ 2,676.44
11	GR-2008-0368 Staff Corrections-Morgan Stanley	\$ 24,250.00	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 24,250.00
12	GR-2008-0368 Staff Corrections-Cheyenne Plains Allocation	\$ (5,265.00)	\$ -	\$ 3,849.00	\$ -	\$ 1,316.00	\$ -	\$ -
13	GR-2008-0368 Staff Corrections-Cash Out	\$ (35,655.00)	\$ -	\$ (661.00)	\$ -	\$ 3,169.00	\$ -	\$ (33,147.00)
14	GR-2008-0368 Staff Corrections-Finance Charge	\$ 675.00	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 675.00
15	Transportation ACA Adjustment to Beginning Balance	\$ -	\$ -	\$ -	\$ 53,508.30	\$ -	\$ -	\$ 53,508.30
16	Total Adjustments	\$ (20,159.60)	\$ 423.85	\$ 9,180.65	\$ 53,011.84	\$ 5,506.00	\$ -	\$ 47,962.74
17	Revenue Recovery Over/(Under) Cost for ACA Year	\$ 2,280,587.84	\$ 423.85	\$ (596,707.64)	\$ 85,384.04	\$ (187,185.46)	\$ -	\$ 1,582,502.63
18	Beginning ACA Recovery Balance, September 1, 2009	\$ (1,166,885.75)	\$ 33,443.03	\$ 786,979.67	\$ (57,166.99)	\$ 162,321.53	\$ -	\$ (241,308.51)
19	ACA Recovery Balance at 08/31/10	\$ 1,113,702.09	\$ 33,866.88	\$ 190,272.03	\$ 28,217.05	\$ (24,863.93)	\$ -	\$ 1,341,194.12
ACA Recovery Balance Sept 30, 2010, per General Ledger								
20		\$ 1,189,386.86	\$ -	\$ 155,623.30	\$ -	\$ (28,244.91)	\$ -	\$ 1,316,765.25
21	Less Jul Entry for ACA Revenue Recovery	\$ (25,498.11)	\$ -	\$ 12,156.65	\$ -	\$ 3,484.70	\$ -	\$ (9,856.76)
22	Less Jul Entry for Balancing Penalties & Fees Recovery	\$ (12,579.16)	\$ -	\$ (8,194.78)	\$ -	\$ (1,124.71)	\$ -	\$ (21,898.65)
23	Carrying Costs	\$ (4,164.60)	\$ 423.85	\$ 5,892.65	\$ (496.46)	\$ 1,021.00	\$ -	\$ 2,676.44
24	Transportation ACA Adjustment	\$ -	\$ -	\$ -	\$ 53,508.30	\$ -	\$ -	\$ 53,508.30
25	Total Adjustments	\$ (42,241.87)	\$ 423.85	\$ 9,854.52	\$ 53,011.84	\$ 3,380.99	\$ -	\$ 24,429.33
26	Ending ACA Recovery Balance - August 31, 2010	\$ 1,147,144.99	\$ 423.85	\$ 165,477.82	\$ 53,011.84	\$ (24,863.92)	\$ -	\$ 1,341,194.58
								(0.46)
								Total Difference
27	Sales Forecast	2,654,717		925,772	21,568	588,441	0	4,190,497
28	Calculated Estimated ACA Rates For 11/10 per CCF	\$ (0.04321)	\$ -	\$ (0.02055)	\$ (0.13083)	\$ 0.00423	\$ -	\$ -
29	Effective Rates at 11/09 per CCF	\$ 0.04528	\$ (0.00611)	\$ (0.08422)	\$ 0.03680	\$ (0.02909)	\$ -	\$ -
30	Change in ACA Rates	\$ (0.08849)	\$ 0.00611	\$ 0.06367	\$ (0.16762)	\$ 0.03332	\$ -	\$ -
								Check (Needs to be zero)
								33,442.90 (33,443.03) (24,794.21) 24,794.79 0.01 0.00 \$ (0.46)

Empire District Gas Company
ACA Carrying Cost
2009-2010 ACA Year Ending 8/31/10
South System

	<u>Aug-09</u>	<u>Sep-09</u>	<u>Oct-09</u>	<u>Nov-09</u>	<u>Dec-09</u>	<u>Jan-10</u>	<u>Feb-10</u>	<u>Mar-10</u>	<u>Apr-10</u>	<u>May-10</u>	<u>Jun-10</u>	<u>Jul-10</u>	<u>Aug-10</u>	<u>Total</u>
Firm ACA Recovery Balance - Under/(Over)	\$ 1,166,885.75	\$ 1,309,863.01	\$ 1,599,622.42	\$ 1,836,086.12	\$ 2,611,129.38	\$ 1,854,073.68	\$ 1,144,436.66	\$ (494,381.55)	\$ (1,467,912.27)	\$ (1,545,587.42)	\$ (1,514,808.27)	\$ (1,328,539.25)	\$ (1,117,866.69)	
Interruptible ACA Recovery Balance - Under/(Over)	\$ (33,443.03)	\$ (33,443.03)	\$ (33,443.03)	\$ (33,443.03)	\$ (33,443.03)	\$ (33,443.03)	\$ (33,443.03)	\$ (33,443.03)	\$ (33,443.03)	\$ (33,443.03)	\$ (33,443.03)	\$ (33,443.03)	\$ (33,443.03)	
Prime Rate		3.25%	3.25%	3.25%	3.25%	3.25%	3.25%	3.25%	3.25%	3.25%	3.25%	3.25%	3.25%	
minus 2 percentage points		<u>-2.00%</u>	<u>-2.00%</u>	<u>-2.00%</u>	<u>-2.00%</u>	<u>-2.00%</u>	<u>-2.00%</u>	<u>-2.00%</u>	<u>-2.00%</u>	<u>-2.00%</u>	<u>-2.00%</u>	<u>-2.00%</u>	<u>-2.00%</u>	
Interest Rate per Tariff		1.25%	1.25%	1.25%	1.25%	1.25%	1.25%	1.25%	1.25%	1.25%	1.25%	1.25%	1.25%	
Interest credited to Customers on Firm Over Recovered Balance									\$ (1,022.03)	\$ (1,621.85)	\$ (1,593.96)	\$ (1,530.27)	\$ (1,316.64)	\$ (7,084.75)
Interest credited to EDG on Firm Under Recovered Balance	\$ 1,289.97	\$ 1,565.87	\$ 1,789.43	\$ 2,393.47	\$ 2,403.15	\$ 1,457.61	\$ 349.86							\$ 11,249.35
														\$ 4,164.60
Interest credited to Customers on Interrupt. Over Recovered Balance	\$ (34.84)	\$ (36.00)	\$ (34.84)	\$ (36.00)	\$ (36.00)	\$ (32.51)	\$ (36.00)	\$ (34.84)	\$ (36.00)	\$ (34.84)	\$ (36.00)	\$ (36.00)	\$ (36.00)	\$ (423.85)
Interest credited to EDG on Interrupt. Under Recovered Balance														\$ (423.85)

Enclosure 5

Empire District Gas Company
ACA Carrying Cost
2009-2010 ACA Year Ending 8/31/10
North System

	<u>Aug-09</u>	<u>Sep-09</u>	<u>Oct-09</u>	<u>Nov-09</u>	<u>Dec-09</u>	<u>Jan-10</u>	<u>Feb-10</u>	<u>Mar-10</u>	<u>Apr-10</u>	<u>May-10</u>	<u>Jun-10</u>	<u>Jul-10</u>	<u>Aug-10</u>	<u>Total</u>
Firm ACA Recovery Balance - Under/(Over)	\$ (786,979.67)	\$ (697,930.97)	\$ (563,118.31)	\$ (449,134.03)	\$ (123,891.89)	\$ (167,356.26)	\$ (254,181.46)	\$ (583,758.64)	\$ (765,089.60)	\$ (624,937.90)	\$ (509,761.95)	\$ (346,549.12)	\$ (191,982.77)	
Interruptible ACA Recovery Balance - Under/(Over)	\$ 57,166.99	\$ 55,455.23	\$ 52,332.27	\$ 49,637.79	\$ 48,288.04	\$ 45,644.24	\$ 43,345.53	\$ 40,692.14	\$ 38,938.44	\$ 36,715.63	\$ 33,595.91	\$ 33,595.91	\$ (70,823.91)	
Prime Rate		3.25%	3.25%	3.25%	3.25%	3.25%	3.25%	3.25%	3.25%	3.25%	3.25%	3.25%	3.25%	
minus 2 percentage points		<u>-2.00%</u>	<u>-2.00%</u>	<u>-2.00%</u>	<u>-2.00%</u>	<u>-2.00%</u>	<u>-2.00%</u>	<u>-2.00%</u>	<u>-2.00%</u>	<u>-2.00%</u>	<u>-2.00%</u>	<u>-2.00%</u>	<u>-2.00%</u>	
Interest Rate per Tariff		1.25%	1.25%	1.25%	1.25%	1.25%	1.25%	1.25%	1.25%	1.25%	1.25%	1.25%	1.25%	
Interest credited to Customers on Firm Over Recovered Balance	\$ (773.39)	\$ (678.69)	\$ (527.21)	\$ (308.40)	\$ (156.75)	\$ (204.91)	\$ (450.97)	\$ (702.53)	\$ (748.11)	\$ (590.99)	\$ (460.86)	\$ (289.83)	\$ (5,892.65)	
Interest credited to EDG on Firm Under Recovered Balance														\$ (5,892.65)
Interest credited to Customers on Interrupt. Over Recovered Balance													\$ (20.04)	\$ (20.04)
Interest credited to EDG on Interrupt. Under Recovered Balance	\$ 58.66	\$ 58.01	\$ 53.11	\$ 52.70	\$ 50.55	\$ 43.26	\$ 45.23	\$ 41.47	\$ 40.72	\$ 36.62	\$ 36.16			\$ 516.50
														\$ 496.46

Enclosure 5

**Empire District Gas Company
ACA Carrying Cost
2009-2010 ACA Year Ending 8/31/10
Northwest System**

	<u>Aug-09</u>	<u>Sep-09</u>	<u>Oct-09</u>	<u>Nov-09</u>	<u>Dec-09</u>	<u>Jan-10</u>	<u>Feb-10</u>	<u>Mar-10</u>	<u>Apr-10</u>	<u>May-10</u>	<u>Jun-10</u>	<u>Jul-10</u>	<u>Aug-10</u>	<u>Total</u>
Firm ACA Recovery Balance - Under/(Over)	\$ (162,321.53)	\$ 146,574.73	\$ 59,208.85	\$ 92,894.72	\$ (43,218.53)	\$ (113,031.36)	\$ (201,812.49)	\$ (231,770.62)	\$ (270,906.03)	\$ (177,975.43)	\$ (120,960.34)	\$ (45,289.80)	\$ 25,884.93	
Interruptible ACA Recovery Balance - Under/(Over)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Prime Rate		3.25%	3.25%	3.25%	3.25%	3.25%	3.25%	3.25%	3.25%	3.25%	3.25%	3.25%	3.25%	
minus 2 percentage points		<u>-2.00%</u>	<u>-2.00%</u>	<u>-2.00%</u>	<u>-2.00%</u>	<u>-2.00%</u>	<u>-2.00%</u>	<u>-2.00%</u>	<u>-2.00%</u>	<u>-2.00%</u>	<u>-2.00%</u>	<u>-2.00%</u>	<u>-2.00%</u>	
Interest Rate per Tariff		1.25%	1.25%	1.25%	1.25%	1.25%	1.25%	1.25%	1.25%	1.25%	1.25%	1.25%	1.25%	
Interest credited to Customers on Firm Over Recovered Balance	\$ (8.20)				\$ (84.09)	\$ (153.05)	\$ (233.35)	\$ (261.81)	\$ (241.59)	\$ (155.70)	\$ (89.47)	\$ (10.44)	\$ (1,237.71)	
Interest credited to EDG on Firm Under Recovered Balance		\$ 110.75	\$ 79.22	\$ 26.74									\$ 216.71	
													\$ (1,021.00)	
Interest credited to Customers on Interrup. Over Recovered Balance	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Interest credited to EDG on Interrup. Under Recovered Balance	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	

Enclosure 5

**Empire District Gas Company
South System
2010-2011 Winter Season Residential Revenue Impact from Winter PGA/ACA Filing**

Original Calculation Filed

PGA/ACA per MCF

Month	Previous PGA/ACA Rates Factor	Month	New PGA/ACA Rates Factor	PGA/ACA Rate Change	Revenue Impact (Winter Season)
11/09	7.5228	11/10	5.9664	(1.5564)	(\$304,050)
12/09	7.5228	12/10	5.9664	(1.5564)	(\$559,927)
01/10	7.5228	01/11	5.9664	(1.5564)	(\$598,784)
02/10	7.5228	02/11	5.9664	(1.5564)	(\$460,005)
03/10	7.5228	03/11	5.9664	(1.5564)	(\$336,438)

Estimated Residential Winter Season Change in Revenue (\$2,259,203)

Percent Change Between PGA Factors -20.69%

Residential Sales Volume Forecast 1,773,818

Month	Estimated Customer Usage Mcf/Mnth	Estimated % Mcf/Yr	Estimated Company Sales Mcf/Mnth
Jan	14.59	21.69%	384,724
Feb	11.20	16.66%	295,557
Mar	8.26	12.19%	216,164
Apr	4.39	6.36%	112,876
May	1.83	2.62%	46,453
Jun	1.28	1.81%	32,083
Jul	0.78	1.10%	19,485
Aug	0.97	1.36%	24,100
Sep	1.10	1.55%	27,464
Oct	2.36	3.37%	59,801
Nov	7.59	11.01%	195,355
Dec	13.83	20.28%	359,757
TOTAL	68.18	100%	1,773,818

**Empire District Gas Company
North System
2010-2011 Winter Season Residential Revenue Impact from Winter PGA/ACA Filing**

Original Calculation Filed

PGA/ACA per MCF

Month	Previous PGA/ACA Rates Factor	Month	New PGA/ACA Rates Factor	PGA/ACA Rate Change	Revenue Impact (Winter Season)
11/09	5.7689	11/10	5.7650	(0.0039)	(\$274)
12/09	5.7689	12/10	5.7650	(0.0039)	(\$451)
01/10	5.7689	01/11	5.7650	(0.0039)	(\$530)
02/10	5.7689	02/11	5.7650	(0.0039)	(\$400)
03/10	5.7689	03/11	5.7650	(0.0039)	(\$298)

Estimated Residential Winter Season Change in Revenue (\$1,953)

Percent Change Between PGA Factors -0.07%

Residential Sales Volume Forecast 599,930

Month	Estimated Customer Usage Mcf/Mnth	Estimated % Mcf/Yr	Estimated Company Sales Mcf/Mnth
Jan	16.36	22.67%	136,017
Feb	12.31	17.10%	102,567
Mar	9.24	12.75%	76,479
Apr	5.24	7.08%	42,470
May	2.46	3.28%	19,668
Jun	0.38	0.50%	2,979
Jul	0.62	0.81%	4,839
Aug	0.79	1.02%	6,133
Sep	0.71	0.91%	5,474
Oct	2.22	2.93%	17,572
Nov	8.63	11.69%	70,144
Dec	13.97	19.27%	115,588
TOTAL	72.93	100%	599,930

**Empire District Gas Company
Northwest System
2010-2011 Winter Season Residential Revenue Impact from Winter PGA/ACA Filing**

Original Calculation Filed

PGA/ACA per MCF

Month	Previous PGA/ACA Rates Factor	Month	New PGA/ACA Rates Factor	PGA/ACA Rate Change	Revenue Impact (Winter Season)
11/09	4.8011	11/10	4.7992	(0.0019)	(\$79)
12/09	4.8011	12/10	4.7992	(0.0019)	(\$127)
01/10	4.8011	01/11	4.7992	(0.0019)	(\$158)
02/10	4.8011	02/11	4.7992	(0.0019)	(\$110)
03/10	4.8011	03/11	4.7992	(0.0019)	(\$93)

Estimated Residential Winter Season Change in Revenue (\$567)

Percent Change Between PGA Factors -0.04%

Residential Sales Volume Forecast 358,221

Month	Estimated Customer Usage Mcf/Mnth	Estimated % Mcf/Yr	Estimated Company Sales Mcf/Mnth
Jan	17.23	23.21%	83,152
Feb	11.97	16.12%	57,755
Mar	10.16	13.63%	48,839
Apr	4.79	6.30%	22,556
May	1.97	2.56%	9,168
Jun	0.80	1.03%	3,680
Jul	0.69	0.88%	3,165
Aug	0.87	1.12%	4,001
Sep	1.10	1.40%	5,002
Oct	2.60	3.36%	12,038
Nov	8.90	11.67%	41,811
Dec	14.11	18.72%	67,053
TOTAL	75.19	100%	358,221

EMPIRE DISTRICT GAS COMPANY
Schedule 9 - Analysis of Change in Overall PGA Rates per CCF
2009-2010 ACA Year Ending 8/31/10

	South System				North System				Northwest System			
	Current Rates	Proposed Rates	Change		Current Rates	Proposed Rates	Change		Current Rates	Proposed Rates	Change	
			\$	%			\$	%			\$	%
Transportation	\$ 0.23342	\$ 0.18914	\$ (0.04428)	-19.0%	\$ 0.24190	\$ 0.23153	\$ (0.01037)	-4.3%	\$ 0.10602	\$ 0.10257	\$ (0.00345)	-3.3%
Gas Cost	\$ 0.47358	\$ 0.45071	\$ (0.02287)	-4.8%	\$ 0.41921	\$ 0.36552	\$ (0.05369)	-12.8%	\$ 0.40318	\$ 0.37312	\$ (0.03006)	-7.5%
PGA	\$ 0.70700	\$ 0.63985	\$ (0.06715)	-9.5%	\$ 0.66111	\$ 0.59705	\$ (0.06406)	-9.7%	\$ 0.50920	\$ 0.47569	\$ (0.03351)	-6.6%
ACA	\$ 0.04528	\$ (0.04321)	\$ (0.08849)	-195.4%	\$ (0.08422)	\$ (0.02055)	\$ 0.06367	75.6%	\$ (0.02909)	\$ 0.00423	\$ 0.03332	114.5%
Total Rate	\$ 0.75228	\$ 0.59664	\$ (0.15564)	-20.7%	\$ 0.57689	\$ 0.57650	\$ (0.00039)	-0.1%	\$ 0.48011	\$ 0.47992	\$ (0.00019)	0.0%