MGE

GR-2001-382

Company planned hedge considers normal planned storage withdrawals and volumes w/ fixed price

Staff calculations for hedge effect compare Company planned hedges to a minimal hedge of 30% of normal requirements

Staff proposed adjustment - Do not accept Company forecasts for flowing supplies and storage w/d for First-of-Month as Reasonable, so Revised FOM

Highly Confidential

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S
6									0 for H<0,										
7							(C+ D)	(B - G)	Else =H			(J - K)	(I x L)	(F - E)			(P - O)	(Q x N)	(M+R)
8							Hedge Effect							Storage Effect					
9	Month	30% of Normal Req	Company's Normal Monthly Storage w/d	Volumes w/ Fixed Price	Actual Volumes Withdrawn	Expected Storage Withdrawals (for revised flowing supplies)	Planned Hedged Volumes	30% Normal - Planned Hedged	Volumes Short for Minimum Planned Hedge	NYMEX close	Available Hedged Price	Futures Gain/ (Loss)	(Credit)/ Charge for Minimum Hedge	Storage Expected - Actual	Storage WACOG	Williams FOM	FOM - WACOG	Storage (Credit)/ Charge	Total Adjustment
10	Nov-00	2,220,108	4,150,166	0	5,673,557	3,464,267	4,150,166	(1,930,058)	0	$ 4.541	$ 4.652	$ (0.111)	$0	(2,209,290)	$ 4.261	$ 4.430	$ 0.169	$ (372,565)	$ (372,565)
11	Dec-00	3,712,640	3,454,240	620,000	6,727,710	5,521,252	4,074,240	(361,600)	0	$ 6.016	$ 4.726	$ 1.290	$0	(1,206,458)	$ 4.224	$ 5.900	$ 1.676	$ (2,021,998)	$ (2,021,998)
12	Jan-01	4,160,526	3,464,251	620,000	170,523	1,257,104	4,084,251	76,275	76,275	$ 9.978	$ 4.705	$ 5.273	$402,198	1,086,581	$ 4.279	$ 9.980	$ 5.701	$ 6,194,598	$ 6,596,796
13	Feb-01	3,384,049	3,162,867	2,237,309	2,467,950	4,440,494	5,400,176	(2,036,127)	0	$ 6.293	$ 4.475	$ 1.818	$0	1,972,544	$ 4.279	$ 6.290	$ 2.011	$ 3,967,515	$ 3,967,515
14	Mar-01	2,527,042	2,247,507	0	1,816,292	2,197,065	2,247,507	279,535	279,535	$ 4.998	$ 4.239	$ 0.759	$212,167	380,773	$ 4.285	$ 5.030	$ 0.745	$ 283,499	$ 495,666
15	Total	15,984,365	16,479,031	3,477,309	16,856,032	16,880,182	19,956,340	(3,971,975)	355,810				$614,365	24,150				$ 8,051,049	$ 8,665,414

		FOM Plans vs Expected			
18	Month	Company Planned Flowing Supplies	Expected Flowing Supplies	Company Planned Storage w/d	Expected Planned Storage w/d
19	Nov-00	3,228,660	5,437,950	4,278,150	2,088,880
20	Dec-00	8,979,150	10,185,608	3,046,494	2,460,038
21	Jan-01	12,562,471	11,475,890	1,735,070	2,821,651
22	Feb-01	8,537,004	6,564,460	2,433,424	4,965,968
23	Mar-01	5,862,286	5,481,513	2,022,285	3,178,058
24	Total	39,169,571	39,145,421	13,515,423	15,494,573

Sources:

a winter months of 2000/01 ACA period
b see worksheet "Normals"
c from DR #28; see worksheet "Normals"
d DR #2 - Duke Invoices
e from worksheet "Storage Actuals"
f see worksheet "Normals"
g column c + column d
h column b - column g
i if column h is < 0, then enter 0; if column h is > 0 then enter number in column h
j see sheet "NYMEX close"
k see sheet "Available Hedge Price"
l column j - column k
m column i x column l
n column f - column e
o see sheet "hedges"
p Inside FERC's Gas Market Report Williams Index for Nov 2000 - March 2001
q column p - column o
r column q x column n
s column m + column r

Hedges for Winter Months

	William Storage				PEPL				Total Storage		Fixed Prices			Total Hedged	
Month	WACOG	Volumes w/drawn	Williams FOM	Storage Hedge	WACOG	Volumes w/drawn	PEPL FOM	Storage Hedge	Volumes Withdrawn	Total Cost of Volumes W/D	Price	Volume	FP Hedge	Volumes	Amount
Nov-00	$ 4.267	5,627,352	$ 4.43	$24,010,948	$ 3.596	46,205	$ 4.41	$ 166,147	5,673,557	$24,177,095	$ -	0	0	5,673,557	$24,177,095
Dec-00	$ 4.267	6,298,345	$ 5.90	$26,874,053	$ 3.596	429,365	$ 5.88	$1,543,935	6,727,710	$28,417,988	$4.790	310,000	$1,484,900	7,347,710	$31,368,088
											$4.720	310,000	$1,463,200		
Jan-01	$ 4.267	-	$ 9.98	$ -	$ 3.596	207,359	$ 9.92	$ 745,633	207,359	$ 745,633	$4.775	310,000	1,480,250	827,359	3,740,233
											$4.885	310,000	1,514,350		
Feb-01	$ 4.338	2,269,206	$ 6.29	$ 9,844,791	$ 3.596	198,744	$ 6.22	$ 714,655	2,467,950	$10,559,446	$4.615	280,000	1,292,200	4,705,259	26,284,851
											$4.705	280,000	1,317,400		
											$8.490	558,010	4,737,505		
											$7.980	560,000	4,468,800		
											$6.990	559,299	3,909,500		
Mar-01	$ 4.338	1,686,681	$ 5.03	$ 7,317,592	$ 3.596	129,611	$ 5.01	$ 466,063	1,816,292	$ 7,783,655	$ -	-	-	1,816,292	7,783,655
				$68,047,385				$3,636,433	16,892,868	$71,683,818			21,668,105	20,370,177	$93,351,922

Missouri Gas Energy
GR-2001-382

Month	NYMEX Closing Price	Date
November, 2000	4.541	10/28/00
December, 2000	6.016	11/28/00
January, 2001	9.978	12/27/00
February, 2001	6.293	1/29/01
March, 2001	4.998	2/26/01

Source: NYMEX closing prices taken from The Wall Street Journal

Missouri Gas Energy
GR-2001-382

Table 1: First of Month Nominations on Duke must be made 6 business days before FOM. So, Staff reviewed decisions made on 10/24/00, 11/22/00, 12/21/00, 1/24/01, and 2/21/01.

Information Known As Of:	10/24/00	11/22/00		12/21/00		01/24/01	02/21/01
From Storage Analysis Report:	Oct-00	Nov-00		Dec-00		Jan-01	Feb-01
Forecasted demand and storage inj & w/d entered for actual HDD through:	10/23/00	11/21/00		12/20/00	Rev 12/20 to include 12/31 [4]	01/23/01	02/20/01
Actual HDD through this date	256	838		1,368	1,368	1,076	956
Forecasted HDD for remainder of month	77	246		514	553	254	231
Known & expected HDD for month	333	1,084		1,882	1,921	1,330	1,187
Expected monthly HDD as % of normal HDD (calculated this - not in report)		165.0%		175.4%	179.0%	109.2%	125.5%
EOM Storage Balances			Revised Nov-00 to include ISS [3]		Rev 12/20 to include 12/31 [4]		
TSS	14,948,357	10,708,780	11,208,780	4,227,928	4,112,139	3,927,321	1,637,647
FSS	1,121,968	1,121,952	1,121,952	1,041,777	1,041,777	1,041,777	1,041,777
PEPL/WS	1,453,926	1,009,107	1,009,107	598,035	591,696	372,676	189,435
Total Storage Inventory	17,524,251	12,839,839	13,339,839	5,867,740	5,745,812	5,341,774	2,848,859
% of MSQ	98.6%	72.3%	75.1%	33.0%	32.3%	30.1%	16.0%
Inventory remaining to be filled [1]	243,376						
From Company Reliability Report:	Nov-00	Dec-00		Jan-01		Feb-01	Mar-01
Forecasted Demand:							
Base Case - 30 Year Normal Weather	7,400,361	12,375,465		13,868,421		11,213,497	8,423,472
Low Case	5,587,935	10,592,504		10,077,482		8,819,953	6,845,539
High Case	9,140,788	17,896,663		16,186,584		13,732,070	10,514,864
[illegible]ical HDD data	Nov-00	Dec-00		Jan-01		Feb-01	Mar-01
Warmest month HDD	398	763		841		646	529
normal month HDD	657	1,073		1,218		946	691
coldest month HDD	877	1,606		1,629		1,274	1,057
Using Company heatload & baseload factors w/ Reliability Report w/ historical HDD	Nov-00	Dec-00		Jan-01		Feb-01	Mar-01
Number of days in month	30	31		31		28	31
estimated demand w/ warmest HDD	5,591,673	9,457,584		10,273,551		8,090,819	7,009,684
estimated demand w/ normal HDD	8,301,101	12,700,529		14,217,391		11,229,153	8,704,384
estimated demand w/ coldest HDD	10,602,546	18,278,302		18,516,908		14,660,398	12,533,151
From Company Supply/Demand Summary:	Nov-00	Dec-00		Jan-01		Feb-01	Mar-01
Normal Monthly Demand	7,425,361	12,400,465		13,893,421		11,238,497	8,448,472
Daily Average Demand	247,512	400,015		448,175		401,375	272,531
Demand to be met w/ storage w/d [2]							
TSS	138,333	91,935		49,355		79,914	61,115
FSS	0	0		0		0	0
PEPL/WS	4,272	6,339		6,615		6,994	4,120
Total Storage w/d	142,605	98,274		55,970		86,908	65,235
Fuel Requirements	2,715	7,909		13,036		10,426	6,810
Daily Avg Demand still to be met (with flowing or ?)	107,622	309,650		405,241		324,893	214,106
Less Planned Flowing Supplies	107,622	289,650		405,241		304,893	189,106
Daily Avg Demand still to be met with ____	0	20,000		0		20,000	25,000
From DR28 response:	Nov-00	Dec-00		Jan-01		Feb-01	Mar-01
Planned Normal Storage Withdrawals	4,150,166	3,454,240		3,464,251		3,162,867	2,247,507

To table 3-3 col. 1

MTL-13
Page 4

Missouri Gas Energy
GR-2001-382

Table 2: Storage Inventory - Actuals

	EOM Storage Inventory [3]						
	Sep-00	Oct-00	Nov-00	Dec-00	Jan-01	Feb-01	Mar-01
Williams SA-0014 (TSS)	14,122,908	15,593,505	9,966,153	3,747,983	3,784,819	2,515,613	870,709
Williams SA-0072 (FS)	975,369	1,121,952	1,121,952	1,041,777	1,041,777	41,777	0
PEPL WS-012626	778,088	0	0	0	0	0	0
PEPL WS-012627	165,143	1,051,108	1,004,903	575,538	368,179	169,435	39,824
Total	16,041,508	17,766,565	12,093,008	5,365,298	5,194,775	2,726,825	910,533

Given the information known when decisions were made regarding first-of-month nominations, Staff believes that the FOM nominations would have been different - November FOM nominations would have been higher to allow storage to be reserved for the normally colder months of December and January and to assure that the Company had sufficient withdrawal capabilities to cover a possible late winter cold snap. Storage balances and FOM nominations for this option is presented below:

Table 3-1: Storage withdrawals expected based on distribution of normal HDD

	Normal HDD	Monthly Distr.	Storage Distr.
Nov-00	657	14.3%	2,474,336
Dec-00	1,073	23.4%	4,122,699
Jan-01	1,218	26.6%	4,679,820
Feb-01	946	20.6%	3,634,737
Mar-01	691	15.1%	2,677,578
Total	4,585	100.0%	17,589,170

Storage distribution is based on the percentage of normal HDD occurring in that month times the total storage inventory. For November, would use the total MSQ less 500,000 allowed by Company for injections in Nov if weather is warmer than normal. For Dec - Mar, Company would know the beginning balance at start of November, so adjust accordingly - including additional 150,000 ISS allowed in Nov.

check: Oct end-of-month inv = 17,766,565
total expected storage if adjust Nov by 150,000 from ISS 17,739,170

Table 3-2: Staff's calculation of expected storage withdrawal and flowing supplies for Company planned normals

	Nov-00	Nov-00 Rev	Dec-00	Dec-00 Rev	Jan-01	Feb-01	Mar-01
Normal Monthly Demand	7,425,361	7,425,361	12,400,465	12,400,465	13,893,421	11,238,497	8,448,472
Daily Average Demand	247,512	247,512	400,015	400,015	448,175	401,375	272,531
Daily Demand to be met w/ storage w/d	82,478		132,990		150,962	129,812	86,373
plus storage w/d allowed for ISS in Nov	5,000						
less storage for excess from prior month			13,126		(59,941)	47,544	16,145
Subtotal of daily storage w/d	87,478	68,962	146,116	79,356	91,021	177,356	102,518
Daily Fuel Requirements	2,715	2,715	7,909	7,909	13,036	10,426	6,810
Expected Daily Flowing Supplies	162,749	181,265	261,808	328,568	370,190	234,445	176,823
% of planned normal met with storage (includes fuel)	35.0%	27.6%	35.8%	19.5%	19.7%	43.1%	36.7%
% of planned normal met with flowing supplies (includes fuel)	65.0%	72.4%	64.2%	80.5%	80.3%	56.9%	63.3%
Check if planned daily flowing covers warm weather requirements (used Company numbers for low-case)	186,265		341,694		325,080	314,998	220,824

storage would need to be adjusted prior to making nominations based on expected end-of-month inventory for previous month

This is the warm weather requirement less 150,000 for ISS in Nov

This is the warm weather requirement less any excess storage w/d not pulled in Nov

Did not adjust for Feb & Mar - not as much of an issue in Feb and Mar since most of winter has past and have better handle on storage volumes available to meet requirements for the rest of the winter

MTL-13
Page 5

Missouri Gas Energy
GR-2001-382

3-3: *Effect of revised daily flowing supplies on expected end-of-month (EOM) storage inventory*

Information Known As Of:	11/22/00	12/21/00	01/24/01	02/21/01
From Storage Analysis Report:	Nov-00	Dec-00	Jan-01	Feb-01
Forecasted demand and storage inj & w/d entered for actual HDD through:	11/21/00	12/20/00	01/23/01	02/20/01
Actual HDD through this date	838	1,368	1,076	956
Forecasted HDD for remainder of month	246	553	254	231
Known & expected HDD for month	1,084	1,921	1,330	1,187
Expected monthly HDD as % of normal *HDD (calculated this - not in report)*	165.0%	179.0%	109.2%	125.5%
Revised Expected EOM Storage Balances:				
EOM Storage Balances from above	13,339,839	5,745,612	5,341,774	2,848,859
Plus additional inv from prior month(s)		2,209,290	3,415,748	2,329,167
Plus additional demand that would have been covered with flowing supplies instead of storage w/d	2,209,290	1,206,458	(1,086,581)	(1,972,544)
	15,549,129	9,161,360	7,670,941	3,205,482
Storage Inv expected for normal weather	15,142,225	11,019,530	6,339,710	2,704,973
Excess from storage for colder weather	(406,904)	1,858,170	(1,331,231)	(500,509)
So need to recover any excess w/d in next month (per day) or can w/d any additional storage	(13,126)	59,941	(47,544)	(16,145)

Table 3-4: Effect of revised daily flowing supplies on actual end-of-month storage inventory

	Nov-00	Dec-00	Jan-01	Feb-01	Mar-01	Total	
Actual EOM Storage Balances	12,093,008	5,365,298	5,194,775	2,726,825	910,533	16,856,032	Actual
Plus additional inv from prior month(s)		2,209,290	3,415,748	2,329,167	356,623		
s additional demand that would have en covered with flowing supplies instead of storage w/d	2,209,290	1,206,458	(1,086,581)	(1,972,544)	(380,773)		
	14,302,298	8,781,046	7,523,942	3,083,448	886,383		
Actual Expected Net Withdrawals	3,464,267	5,521,252	1,257,104	4,440,494	2,197,065	16,880,182	Expected

Table 3-5: Comparison of Company and Staff FOM planned flowing supplies and storage withdrawals

		Company Planned Demand to be met with:				*Staff revision: Expected storage withdrawal and flowing supplies for Company planned normals:*			
	Normal Daily Avg Demand + Fuel	Daily Flowing Supplies	Flowing Supplies as % of Daily Avg for Month	Daily Storage w/d	Storage as % of Daily Avg for Month	Daily Flowing Supplies	Flowing Supplies as % of Daily Avg for Month	Daily Storage w/d	Storage as % of Daily Avg for Month
Nov-00	250,227	107,622	43.0%	142,605	57.0%	181,265	72.4%	68,962	27.6%
Dec-00	407,924	289,650	71.0%	98,274	24.1%	328,568	80.5%	79,356	19.5%
Jan-01	461,211	405,241	87.9%	55,970	12.1%	370,190	80.3%	91,021	19.7%
Feb-01	411,801	304,893	74.0%	86,908	21.1%	234,445	56.9%	177,356	43.1%
Mar-01	279,341	189,106	67.7%	85,235	23.4%	176,823	63.3%	102,518	36.7%

From DR-28

DR-21?

MTL-13
Page 6

Missouri Gas Energy
GR-2001-382

[1] Company states that wants to allow 500,000 so that if November is warmer than normal, still have room to inject; Company also stated in DR62 since storage was fuller than anticipated moved 500,000 to an ISS contract to allow for November injections

[2] Storage w/d planned for Nov-00 would include planned 4,000,000 TSS + 150,000 ISS (or 138,333/day) plus the PEPL/WS w/d (128,160 planned for November compared to 150,166 noted as normal w/d in the DR28 response)

[3] Report for numbers in previous column shows Oct 31 balance as 15,093,505 which would not include the ISS balance of 500,000 so TSS is adjusted to account for the ISS

[4] The forecasted HDD for the remainder of Dec is only through 12/30/00; so the HDD and the storage balances are adjusted to include 12/31/00 - based on Company rationale. Additional demand for 39 HDD is 433,822 (taken from 12/2 which had 39 HDD).

So if 12/31 demand is:	433,822	
These are taken from the Storage Analysis Report and are the same each day for the forecasted dates of 12/21 - 12/30	(51,219)	KN 107th & Elm
	(9,997)	Served KPOC
	(25,835)	Served PEPL (this looks like it includes WS and Dec plan is 6,339/day from WS)
	(230,982)	WNG Flowing
	115,789	needed from TSS

[5] Company states that storage reports available from Williams about the 13th of the month for the prior month. So Company knew actual prior months EOM balance when nominations made for following month.

[6] Recall that November storage withdrawals allow for 5,000 per day from ISS

MTL-13
Page 7

MGE
Case No. GR-2001-387
Schedule B

Month of purchase	Month Hedged Nov-00	Dec-00	Jan 2001	Feb-01	Mar-01
Jun-00	4.312	4.388	4.376	4.138	3.898
Jul-00	4.048	4.138	4.129	3.942	3.758
Aug-00	4.520	4.591	4.557	4.308	4.083
Sep-00	5.240	5.340	5.298	5.028	4.752
Oct-00	5.139	5.177	5.168	4.869	4.724
Average	4.652	4.726	4.705	4.476	4.239

Source: *Nymex closing prices simple average by month*
Date: *March 22, 2002*

June	6/1/00	6/2/00	6/5/00	6/6/00	6/7/00	6/8/00	6/9/00	6/12/00	6/13/00	6/14/00	6/15/00	6/16/00	6/19/00	6/20/00	6/21/00	6/22/00	6/23/00	6/26/00	6/27/00	6/28/00	6/29/00	6/30/00	Avg
Nov-00	4.150	4.092	4.383	4.286	3.983	4.140	4.155	4.215	4.168	4.250	4.404	4.455	4.155	4.188	4.413	4.543	4.446	4.525	4.600	4.415	4.423	4.466	4.312
Dec-00	4.250	4.187	4.465	4.355	4.070	4.215	4.220	4.280	4.240	4.320	4.470	4.530	4.230	4.285	4.500	4.620	4.521	4.595	4.665	4.488	4.493	4.536	4.388
Jan-01	4.260	4.192	4.466	4.350	4.070	4.205	4.210	4.268	4.232	4.309	4.454	4.513	4.213	4.275	4.486	4.600	4.503	4.575	4.640	4.465	4.471	4.518	4.376
Feb-01	4.055	3.990	4.245	4.135	3.860	3.990	3.994	4.049	4.015	4.082	4.216	4.271	3.971	4.040	4.238	4.342	4.243	4.297	4.350	4.195	4.200	4.240	4.138
Mar-01	3.845	3.785	4.020	3.920	3.652	3.773	3.776	3.830	3.798	3.855	3.976	4.021	3.730	3.810	3.980	4.078	3.983	4.019	4.060	3.925	3.930	3.965	3.898

July	7/5/00	7/6/00	7/7/00	7/10/00	7/11/00	7/12/00	7/13/00	7/14/00	7/17/00	7/18/00	7/19/00	7/20/00	7/21/00	7/24/00	7/25/00	7/26/00	7/27/00	7/28/00	7/31/00	Avg
Nov-00	4.166	4.100	4.302	4.290	4.306	4.101	4.218	4.205	4.084	4.085	3.956	3.932	3.907	3.810	3.760	3.890	3.951	3.958	3.908	4.048
Dec-00	4.238	4.185	4.390	4.385	4.400	4.195	4.305	4.295	4.150	4.165	4.043	4.015	3.987	3.892	3.843	3.975	4.050	4.061	4.020	4.138
Jan-01	4.216	4.160	4.380	4.380	4.395	4.191	4.295	4.280	4.138	4.150	4.034	4.006	3.979	3.890	3.841	3.970	4.048	4.060	4.019	4.129
Feb-01	3.95	3.945	4.145	4.150	4.175	3.961	4.090	4.090	3.983	3.975	3.886	3.842	3.819	3.736	3.698	3.810	3.888	3.905	3.868	3.942
Mar-01	3.7	3.705	3.905	3.920	3.959	3.756	3.695	3.900	3.788	3.802	3.702	3.692	3.669	3.585	3.553	3.660	3.738	3.753	3.719	3.758

August	8/1/00	8/2/00	8/3/00	8/4/00	8/7/00	8/8/00	8/9/00	8/10/00	8/11/00	8/14/00	8/15/00	8/16/00	8/17/00	8/18/00	8/21/00	8/22/00	8/23/00	8/24/00	8/25/00	8/28/00	8/29/00	8/30/00	8/31/00	A
Nov-00	4.080	4.297	4.342	4.380	4.390	4.437	4.456	4.488	4.495	4.371	4.299	4.474	4.491	4.530	4.800	4.590	4.662	4.602	4.683	4.738	4.697	4.850	4.840	4.5
Dec-00	4.180	4.395	4.442	4.440	4.450	4.483	4.605	4.538	4.650	4.445	4.373	4.535	4.575	4.618	4.862	4.665	4.720	4.670	4.750	4.800	4.770	4.920	4.910	4.5
Jan-01	4.175	4.385	4.432	4.425	4.425	4.460	4.477	4.510	4.522	4.422	4.353	4.505	4.540	4.579	4.810	4.625	4.667	4.620	4.696	4.744	4.720	4.861	4.850	4.5
Feb-01	4.003	4.190	4.227	4.205	4.160	4.200	4.212	4.245	4.258	4.177	4.120	4.249	4.284	4.324	4.540	4.368	4.399	4.352	4.432	4.480	4.465	4.590	4.580	4.3
Mar-01	3.840	3.995	4.022	3.990	3.938	3.948	3.955	3.986	4.001	3.942	3.895	4.000	4.035	4.074	4.287	4.110	4.133	4.089	4.182	4.213	4.205	4.323	4.315	4.0

September	9/1/00	9/5/00	9/6/00	9/7/00	9/8/00	9/11/00	9/12/00	9/13/00	9/14/00	9/15/00	9/18/00	9/19/00	9/20/00	9/21/00	9/22/00	9/25/00	9/26/00	9/27/00	9/28/00	9/29/00	Avg
Nov-00	4.805	5.030	5.157	5.100	4.999	5.135	5.106	5.157	5.312	5.300	5.394	5.477	5.433	5.402	5.256	5.412	5.450	5.447	5.124	5.166	5.240
Dec-00	4.875	5.104	5.233	5.187	5.100	5.236	5.209	5.260	5.412	5.400	5.495	5.586	5.548	5.517	5.383	5.525	5.685	5.582	5.231	5.281	5.340
Jan-01	4.815	5.043	5.172	5.140	5.070	5.203	5.178	5.225	5.367	5.355	5.445	5.525	5.495	5.470	5.360	5.465	5.525	5.522	5.222	5.256	5.298
Feb-01	4.640	4.763	4.884	4.865	4.815	4.938	4.913	4.955	5.088	5.075	5.152	5.228	5.210	5.203	5.100	5.225	5.260	5.257	4.971	5.026	5.028
Mar-01	4.365	4.483	4.597	4.580	4.540	4.661	4.636	4.676	4.799	4.785	4.856	4.930	4.923	4.923	4.840	4.960	4.990	4.998	4.727	4.778	4.752

October	10/2/00	10/3/00	10/4/00	10/5/00	10/6/00	10/9/00	10/10/00	10/11/00	10/12/00	10/13/00	10/16/00	10/17/00	10/18/00	10/19/00	10/20/00	10/23/00	10/24/00	10/25/00	10/26/00	10/27/00	10/30/00	10/31/00	Avg
Nov-00	5.352	5.348	5.290	5.152	5.006	5.150	5.134	5.508	5.630	5.537	5.384	5.439	5.228	4.951	4.937	5.072	4.620	4.659	4.664	4.541			5.139
Dec-00	5.435	5.438	5.383	5.248	5.113	5.230	5.236	5.599	5.728	5.649	5.492	5.653	5.349	5.071	5.055	5.193	4.940	4.771	4.753	4.652	4.485	4.490	5.177
Jan-01	5.460	5.398	5.348	5.215	5.066	5.217	5.211	5.511	5.693	5.624	5.475	5.636	5.344	5.081	5.082	5.200	4.960	4.795	4.777	4.677	4.520	4.531	5.168
Feb-01	5.160	5.168	5.116	5.000	4.861	5.007	5.001	5.301	5.442	5.377	5.242	5.295	5.121	4.891	4.875	5.000	4.780	4.612	4.697	4.497	4.362	4.381	4.869
Mar-01	4.906	4.903	4.864	4.765	4.658	4.769	4.764	5.056	5.180	5.122	4.991	5.040	4.877	4.858	4.846	4.757	4.555	4.400	4.382	4.267	4.157	4.191	4.724

Missouri Gas Energy Company
Case No. GR-2001-382

Highly Confidential

		Williams				Panhandle		
Month		SA-0014 (TSS)	SA-0072 (FS)	TA-8249 effective 6/15/01	SA-8250 effective 6/15/01	WS-012826	IOS #15097/ FS #017073 (10/00)	Total
July, 2000	Beg Bal	8,029,102	485,293			419,098	179,143	9,112,636
	Injections	2,997,192	166,466			125,178	-	3,288,836
	Withdrawals	-	-			-	-	-
	Ending Bal	11,026,294	651,759			544,276	179,143	12,401,472
	MSQ	15,355,923	1,122,000			914,000	357,700	17,749,623
	Balance as % of MSQ	71.8%	58.1%			59.5%	50.1%	69.9%
Aug, 2000	Beg Bal	11,026,294	651,759			544,276	179,143	12,401,472
	Injections	1,903,998	166,470			125,178	-	2,195,646
	Withdrawals	-	-			-	-	-
	Ending Bal	12,930,292	818,229			669,454	179,143	14,597,118
	MSQ	15,355,923	1,122,000			914,000	357,700	17,749,623
	Balance as % of MSQ	84.2%	72.9%			73.2%	50.1%	82.2%
Sep, 2000	Beg Bal	12,930,292	818,229			669,454	179,143	14,597,118
	Injections	1,192,616	157,140			94,634	-	1,444,390
	Transfer In	-	-			14,000	-	14,000
	Withdrawals	-	-			-	-	-
	Transfer Out	-	-			-	(14,000)	(14,000)
	Ending Bal	14,122,908	975,369			778,088	165,143	16,041,508
	MSQ	15,355,923	1,122,000			914,000	357,700	17,749,623
	Balance as % of MSQ	92.0%	86.9%			85.1%	46.2%	90.4%
Oct, 2000	Beg Bal	14,122,908	975,369			778,088	165,143	16,041,508
	Injections	1,470,597	146,583			-	108,006	1,725,186
	Transfer In		-			-	777,959	777,959
	Withdrawals		-			-	-	-
	ISS	500,000						500,000
	Transfer Out	(500,000)	-			(778,088)	-	(1,278,088)
	Ending Bal	15,593,505	1,121,952			-	1,051,108	17,766,565
	MSQ	15,173,829	1,122,000				1,471,800	17,767,629
	Balance as % of MSQ	102.8%	100.0%				71.4%	100.0%
	MDWQ	459,813	34,000				20,000	513,813
	Days of max deliverability	33.9	33.0				52.6	34.6
Nov, 2000	Beg Bal	15,593,505	1,121,952			-	1,051,108	17,766,565
	Injections	-					-	-
	Withdrawals	(5,627,352)	-				(46,205)	(5,673,557)
	Ending Bal	9,966,153	1,121,952				1,004,903	12,093,008
	MSQ	15,173,829	1,122,000				1,471,800	17,767,629
	Balance as % of MSQ	65.7%	100.0%				68.3%	68.1%
	MDWQ	459,813	34,000				20,000	513,813
	Days of max deliverability	21.7	33.0				50.2	23.5
Dec, 2000	Beg Bal	9,966,153	1,121,952			-	1,004,903	12,093,008
	Injections	-						-
	Withdrawals	(6,218,170)	(80,175)				(429,365)	(6,727,710)
	Ending Bal	3,747,983	1,041,777			-	575,538	5,365,298
	MSQ	15,173,829	1,122,000				1,471,800	17,767,629
	Balance as % of MSQ	24.7%	92.9%				39.1%	30.2%
	MDWQ	459,813	34,000				20,000	513,813
	Days of max deliverability	8.2	30.6				28.8	10.4
Jan, 2001	Beg Bal	3,747,983	1,041,777			-	575,538	5,365,298
	Injections	36,836	-				-	36,836
	Withdrawals	-	-				(207,359)	(207,359)
	Ending Bal	3,784,819	1,041,777			-	368,179	5,194,775
	MSQ	15,173,829	1,122,000				1,471,800	17,767,629
	Balance as % of MSQ	24.9%	92.9%				25.0%	29.2%
	MDWQ	459,813	34,000				20,000	513,813
	Days of max deliverability	8.2	30.6				18.4	10.1

DR62 shows for Oct-00, 500,000 moved to ISS-Market Area, SA-0092

MGE Workpapers sent to Company 5-29-02.xls, Storage Actuals

Missouri Gas Energy Company
Case No. GR-2001-382

Highly Confidential

Month		Williams				Panhandle		
		SA-0014 (TSS)	SA-0072 (FS)	TA-8249 effective 6/15/01	SA-8250 effective 6/15/01	WS-012626	IOS #15097/ FS #017073 (10/00)	Total
Feb, 2001	Beg Bal	3,784,819	1,041,777			-	368,179	5,194,775
	Injections	-	-				-	-
	Transfer In	1,000,000	-				-	1,000,000
	Withdrawals	(2,289,208)	-				(198,744)	(2,467,950)
	Transfer Out	-	(1,000,000)				-	(1,000,000)
	Ending Bal	2,515,613	41,777			-	169,435	2,726,825
	MSQ	15,173,829	1,122,000				1,471,800	17,767,829
	Balance as % of MSQ	16.6%	3.7%				11.5%	15.3%
	MDWQ	459,813	34,000				20,000	513,813
	Days of max deliverability	5.5	1.2				8.5	5.3
Mar, 2001	Beg Bal	2,515,613	41,777			-	169,435	2,726,825
	Injections	-	-				-	-
	Transfer In	41,777	-				-	41,777
	Withdrawals	(1,686,681)	-				(129,611)	(1,816,292)
	Transfer Out	-	(41,777)				-	(41,777)
	Ending Bal	870,709	-			-	39,824	910,533
	MSQ	15,173,829	1,122,000				1,471,800	17,767,629
	Balance as % of MSQ	5.7%	0.0%				2.7%	5.1%
	MDWQ	459,813	34,000				20,000	513,813
	Days of max deliverability	1.9	-				2.0	1.8
Apr, 2001	Beg Bal	870,709	-			-	39,824	910,533
	Injections	3,738,055	160,495				199,320	4,097,870
	Transfer In	-	600,000				-	600,000
	Withdrawals	-	-				-	-
	Transfer Out	(600,000)	-				-	(600,000)
	Ending Bal	4,008,764	760,495			-	239,144	5,008,403
	MSQ	15,173,829	1,122,000				1,471,800	17,767,629
	Balance as % of MSQ	26.4%	67.8%				16.2%	28.2%
May, 2001	Beg Bal	4,008,764	760,495			-	239,144	5,008,403
	Injections	3,504,602	-				205,964	3,710,566
	Transfer In	472,443	-				-	472,443
	Withdrawals	-	-				-	-
	Transfer Out	-	(472,443)				-	(472,443)
	Ending Bal	7,985,809	288,052			-	445,108	8,718,969
	MSQ	15,173,829	1,122,000				1,471,800	17,767,629
	Balance as % of MSQ	52.6%	25.7%				30.2%	49.1%
June, 2001	Beg Bal	7,985,809	288,052	-	-	-	445,108	8,718,969
	Injections	-	-	2,213,757	-		199,320	2,413,077
	Transfer In	-	-	9,064,291	-			9,064,291
	Withdrawals	-	-	-	-			-
	Transfer Out	(7,985,809)	-	-	-		-	(7,985,809)
	Ending Bal	-	288,052	11,278,048	-	-	644,428	12,210,528
	MSQ		1,122,000	16,007,772	288,057		1,471,800	17,767,629
	Balance as % of MSQ		25.7%	70.5%			43.8%	68.7%

MTL-13
Page 10

2001 Normals Information - Summarized

	Reliability Report	Data From: DR21 Response							Baseload - Heatload Calc.		DR28 Response: Original Plan				
	Monthly Usage Estimate	HDD	Monthly Usage Estimate	Daily Storage w/d Estimate	No. Of Days/ Month	Monthly Storage Estimate	Storage as % of Estimated Usage	Storage as % of MSQ	Normal HDD	Monthly Usage Estimate	Williams SA-0014	Williams SA-0072	PEPL FS-017073	Total Monthly Storage w/d	Storage as % of MSQ
-00	7,400,361	657	7,425,361	142,605	30	4,278,150	57.6%	24.1%	657	8,301,101	4,000,000	0	150,166	4,150,166	23.4%
-00	12,375,465	1,073	12,400,465	98,274	31	3,046,494	24.6%	17.1%	1,073	12,700,529	2,849,985	374,000	230,255	3,454,240	19.4%
-01	13,868,421	1,218	13,893,421	55,970	31	1,735,070	12.5%	9.8%	1,218	14,217,391	2,849,985	374,000	240,266	3,464,251	19.5%
-01	11,213,497	946	11,238,497	86,908	28	2,433,424	21.7%	13.7%	946	11,229,153	2,558,612	374,000	230,255	3,162,867	17.8%
-01	8,423,472	691	8,448,472	65,235	31	2,022,285	23.9%	11.4%	691	8,704,384	2,097,341	0	150,166	2,247,507	12.6%
	53,281,216	4,585	53,406,216			13,516,423	25.3%	76.1%	4,585	55,152,558	14,355,923	1,122,000	1,001,108	16,479,031	92.7%
from Reliability Report:			0.2%							3.5%					

DR28 response seems to be most consistent with other responses provided by the Company - e.g. allow 500,000 from MSQ so can inject in November and withdraw in March; and planned larger amount of rawals in November (The DR21 response shows total w/d as much less than the planned withdrawals of up to 500,000 of MSQ)
use the DR28 response for normal storage withdrawals:

	Normal Monthly Storage w/d	EOM Balance Expected for Normal w/d (given expected inventory levels) [1]
-00	4,150,166	13,117,463
-00	3,454,240	9,663,223
-01	3,464,251	6,198,972
-01	3,162,867	3,036,105
-01	2,247,507	788,598
otal	16,479,031	

	Storage withdrawals expected based on distribution of normal HDD		
	Normal HDD	Monthly Distr.	Storage Distr.
Nov-00	657	14.3%	2,474,336
Dec-00	1,073	23.4%	4,041,039
Jan-01	1,218	26.6%	4,587,126
Feb-01	946	20.6%	3,562,743
Mar-01	691	15.1%	2,602,384
Total	4,585	100.0%	17,267,629

1 EOM balance for Nov-00 is calculated from combined MSQ of storage contracts, less 500,000 allowed by Company *for injections in Nov if weather is warmer than normal, less normal Nov storage w/d (DR28)*

Actual Storage Withdrawals	
Nov-00	5,673,657
Dec-00	6,727,710
Jan-01	207,359
Feb-01	2,467,950
Mar-01	1,816,292
Total	16,892,868

Normal Estimated Usage Using Company Numbers from 2000/2001		
Month	Estimated Usage	x 30%
November	7,400,361	2,220,108
December	12,375,465	3,712,640
January	13,868,421	4,160,526
February	11,213,497	3,364,049
March	8,423,472	2,527,042
Total	53,281,216	15,984,365

Total MSQ - all storage contracts 17,767,629

Monthly Demand - calculated using Company's baseload and heatload numbers in 2000/2001 Reliability Report

The Company estimates the peak day as (baseload + (heatload/HDD * adjusted peak HDD)= 47,605 + (10,461.1129*85)).

Month	Normal HDD	Days	Base Load	Heat Load	Total
November	657	30	1,428,150	6,872,951	8,301,101
December	1,073	31	1,475,755	11,224,774	12,700,529
January	1,218	31	1,475,755	12,741,636	14,217,391
February	846	28	1,332,940	9,896,213	11,229,153
March	691	31	1,475,755	7,228,629	8,704,384
Total	4,585	151	7,188,355	47,964,203	55,152,558

Month	Actual HDD	Days	Base Load	Heat Load	Total
November	853	30	1,428,150	8,923,329	10,351,479
December	1,425	31	1,475,755	14,907,086	16,382,841
January	1,111	31	1,475,755	11,622,296	13,098,051
February	982	28	1,332,940	10,272,813	11,605,753
March	777	31	1,475,755	8,128,285	9,604,040
Total	5,148	151	7,188,355	53,853,809	61,042,164
% Diff from Normal	12.3%	0.0%	0.0%	12.3%	10.7%
% of Normal	112.3%	100.0%	100.0%	112.3%	110.7%

Month	Normal HDD	Actual HDD	% of Norma
November	657	853	129.8%
December	1,073	1,425	132.8%
January	1,218	1,111	91.2%
February	846	982	103.8%
March	691	777	112.4%
Total	4,585	5,148	112.3%