CASE NUMBER:

99-070

RECEIVA

SEP - 3 1999

PUBLIC COMMISSION

Western Kentucky Gas Company Case No. 99-070 KPSC Data Request #2 Dated August 19, 1999 DR Item 49 Witness: Gary Smith

Data Request:

Refer to Exhibit GLS-6 of the Direct Testimony of Gary L. Smith. Provide the calculations, along with a narrative description, of how the Mcf volume reductions resulting from residential and commercial conservation and energy efficiency measures were derived.

Response:

For further information regarding the identification of the declining trend in residential and commercial usage, please refer to the First KPSC Data Request - Item 59(b), and to the Second KPSC Data Request - Item (6).

On Exhibit GLS-6, Column (b), line 4, a (627,923) Mcf residential adjustment is shown for the "conservation and energy efficiency" adjustment. The method utilized in "bridging" the reference period to the test period is shown on Exhibit PSC-DR#2, Item 49, Sheets 1-3. These sheets modeled the number of customers (including growth of 1,700 per year) and the normalized monthly volumes (shown in column h). For example, Sheet 1, "bridges" the reference period (found on Exhibit GLS-4, Schedule 3 of 5, in Volume 2 of 10, Tab 11 of the Application) through FY 1999. The base load Constant (column e) and heating load Coefficient (column c) are reduced slightly to simulate the noted declining trend of 1.7 Mcf per customer per year. The "check" calculation of the change from prior year is shown on line 16, column h. Sheet 2 continues the projection through FY 2000, with Test Year volumes highlighted. Sheet 3 models FY 2001 with Test Year volumes highlighted. The adjustment of (627,923) compensates for the annual rate of decline per customer per year, as well as any timing differences resulting from the monthly projection.

Similarly, on Exhibit GLS-6, Column (b), lines 4-5, a (127,548) Mcf 'commercial' adjustment is shown for the "conservation and energy efficiency" adjustment. The same method of "bridging" the reference period to the test period is shown on Exhibit PSC-DR#2, Item 49, Sheets 4-9 for these customers. However, the 'commercial' customers are segmented into their classifications of commercial and public authority, to project these classes separately. On these sheets, the annual "check" calculation is shown on the commercial sheets 7-9, for the sum of the

Western Kentucky Gas Company Case No. 99-070 KPSC Data Request #2 Dated August 19, 1999 DR Item 49 Witness: Gary Smith

commercial and public authority classes. Again, Test Year volumes are highlighted on the respective sheets. The adjustment of (127,548) compensates for the annual rate of decline per customer per year, as well as any timing differences resulting from the monthly projection. On Exhibit GLS-6, Column (b), line 4, a (627,923) Mcf residential adjustment is shown for the "conservation and energy efficiency" adjustment. The method utilized in "bridging" the reference period to the test period is shown on Exhibit PSC-DR#2, Item 49, Sheets 1-3. These sheets modeled the number of customers (including growth of 1,700 per year) and the normalized monthly volumes (shown in column h). For example, Sheet 1, "bridges" the reference period (found on Exhibit GLS-4, Schedule 3 of 5, in Volume 2 of 10, Tab 11 of the Application) through FY 1999. The base load Constant (column e) and heating load Coefficient (column c) are reduced slightly to simulate the noted declining trend of 1.7 Mcf per customer per year. The "check" calculation of the change from prior year is shown on line 16, column h. Sheet 2 continues the projection through FY 2000, with Test Year volumes highlighted. Sheet 3 models FY 2001 with Test Year volumes highlighted. The adjustment of (627,923) compensates for the annual rate of decline per customer per year, as well as any timing differences resulting from the monthly projection.

Western Kentucky Gas Company Projection from Reference Period to Test Year FY 1999

Item 49

PSC-DR2

Sheet 1 of 9

Normalized Including Unbilled	()		781,593	1,462,580	2,293,152	2,656,162	2,142,383	1,571,225	828,852	458,273	237,688	234,132	233,515	301,043		13,200,598		
Normalized Volumes	(h)		538,377	1,129,453	1,885,379	2,475,644	2,396,522	1,858,130	1,195,938	639,846	346,306	235,043	233,247	266,713		156,361 13,200,598	84.42	(1.73)
No. of Customers	(g)		152,184	155,562	157,621	158,148	158,150	158,663	158,114	156,980	156,108	155,321	154,912	154,565		156,361		1,700
Normalized Usage per Customer	(£)		3.5377	7.2605	11.9615	15.6540	15.1535	11.7112	7.5638	4.0760	2.2184	1.5133	1.5057	1.7256				
Constant	(e)		1.5057	1.5057	1.5057	1.5057	1.5057	1.5057	1.5057	1.5057	1.5057	1.5057	1.5057	1.5057		1.5057		
Product	(p)		2.0320	5.7548	10.4558	14.1483	13.6478	10.2055	6.0581	2.5703	0.7127	0.0076	0.0000	0.2199				
X Coefficient	(0)		0.0152	0.0152	0.0152	0.0152	0.0152	0.0152	0.0152	0.0152	0.0152	0.0152	0.0152	0.0152				
Lagged Normal DDavs ((p)	ass 1 Rate 1	134.0	379.5	689.5	933.0	0.006	673.0	399.5	169.5	47.0	0.5	0.0	14.5		4,340	/ Customer	Prior Year
Month	(a)	Residential - Class 1 Rate 1	Oct-98	Nov-98	Dec-98	[an-99	Feh-99	Mar-99	Apr-99	May-99	Finn-99	.Iul-99	A119-99	Sep-99	ı	Total	Average Usage / Customer	Change From Prior Year
Line		X I		. 2	۳ (۲	4	٠ ٠	, v	2	· 00	0	01	1 2	12	13	14	15 A	16 C

Western Kentucky Gas Company Projection from Reference Period to Test Year FY 2000

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Sheet 2 of 9

Normalized Including Unbilled	(1)		773,750	1,448,887	2,272,251	2,632,110	2,122,668	1,556,273	820,228	452,824	234,107	230,601	230,000	296,983		13,0/0,682		
Normalized Volumes	(h)		532,488	1,118,529	1,867,915	2,453,143	2,374,687	1,840,778	1,184,241	632,899	341,831	231,499	229,738	262,935	,	13,070,683	82.69	(1.73)
No. of Customers	(g)		153,884	157,262	159,321	159,848	159,850	160,363	159,814	158,680	157,808	157,021	156,612	156,265		158,061		1,700
Normalized Usage per Customer	(f)		3.4603	7.1125	11.7242	15.3467	14.8557	11.4788	7.4101	3.9885	2.1661	1.4743	1.4669	1.6826				
Constant	(e)		1.4669	1.4669	1.4669	1.4669	1.4669	1.4669	1.4669	1.4669	1.4669	1.4669	1.4669	1.4669		1.4669		
Product	(p)		1.9934	5.6456	10.2573	13.8798	13.3888	10.0119	5.9432	2.5216	0.6992	0.0074	0.0000	0.2157				
X Coefficient	(3)		0.0149	0.0149	0.0149	0.0149	0.0149	0.0149	0.0149	0.0149	0.0149	0.0149	0.0149	0.0149				
Lagged Normal DDavs ((q)	ass 1 Rate 1	134.0	379.5	689.5	933.0	0.006	673.0	399.5	169.5	47.0	0.5	0.0	14.5		4,340	/ Customer	rior Year
Month	(a)	Residential - Class 1 Rate 1	Oct-99	Nov-99	Dec-99	Jan-00	Feb-00	Mar-00	Apr-00	May-00	Jun-00	Jul-00	Aug-00	Sep-00		Total	Average Usage / Customer	Change from Prior Year
Line		X I	-	. 4	m	4	2	9	7	∞	6	10	11	12	13	14	15 A	16 C

Western Projecti FY 2001	Western Kentucky Gas Company Projection from Reference Period FY 2001	/ Gas Comp eference Per	Western Kentucky Gas Company Projection from Reference Period to Test Year FY 2001	ear				13,034,849	PSC-DR2 Item 49 Sheet 3 of 9	
Line	Month	Lagged Normal	X Coefficient	Product	Constant	Normalized Usage per Customer	No. of Customers	Normalized Volumes	Normalized Including Unbilled	
	(a)	(p)	(0)	(p)	(e)	(f)	(g)	(h)	(1)	
	Residential - Class 1 Rate	Class 1 Rate	 1							
-	Oct-00	134.0	0.0146	1.9549	1.4282	3.3831	155,584	526,352	765,537	
. 2	Nov-00	379.5	0.0146	5.5364	1.4282	6.9646	158,962	1,107,102	1,434,545	
l (1)	Dec-00	689.5	0.0146	10.0588	1.4282	11.4870	161,021	1,849,644	2,250,363	
4	Jan-01	933.0	0.0146	13.6112	1.4282	15.0394	161,548	2,429,580	2,606,923	
ν.	Feb-01	0.006	0.0146	13.1297	1.4282	14.5579	161,550	2,351,824	2,102,031	
9	Mar-01	673.0	0.0146	9.8181	1.4282	11.2463	162,063	1,822,605	1,540,639	
7	Apr-01	399.5	0.0146	5.8281	1.4282	7.2563	161,514	1,171,989	811,228	
00	Mav-01	169.5	0.0146	2.4728	1.4282	3.9010	160,380	625,638	447,150	
6	Jun-01	47.0	0.0146	0.6857	1.4282	2.1139	159,508	337,179	230,392	
10	Jul-01	0.5	0.0146	0.0073	1.4282	1.4355	158,721	227,839	226,937	
: =	Aug-01	0.0	0.0146	0.0000	1.4282	1.4282	158,312	226,097	226,353	
12	Sep-01	14.5	0.0146	0.2115	1.4282	1.6397	157,965	259,011	292,762	
13								•		
14	Total	4,340	1		1.4282		159,761	12,934,860	12,934,860	
15	Average Usage / Customer	ge / Custome	. 15				1	80.96		
16	Change From Prior Year	Prior Year					1,700	(1.73)		

Western Kentucky Gas Company Projection from Reference Period to Test Year FY 1999

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Normalized	Including	Unbilled	Θ
	Normalized	Customers Volumes	(h)
	No. of No.		(g)
Normalized	Usage per	Customer	()
		Constant	(e)
		Product	(p)
	×	Coefficient	(၁)
Lagged	Normal	DDays	(Q)
		Month	(a)
	Line	No.	

Public Authority (Est) - Class 2 Rate 1

	T UDITY THE			.1						
_	Oct-98	134.0	0.16548	22.1743	22.3892	44.5635	1,498	66,755	92,908	
2	Nov-98	379.5	0.16548	62.7996	22.3892	85.1888	1,531	130,424	166,241	
ım	Dec-98	689.5	0.16548	114.0984	22.3892	136.4876	1,561	213,057	257,183	
4	Jan-99	933.0	0.16548	154.3928	22.3892	176.7820	1,573	278,078	297,736	
٠ ٧	Feb-99	0.006	0.16548	148.9319	22.3892	171.3211	1,541	264,006	237,035	
9	Mar-99	673.0	0.16548	111.3680	22.3892	133.7572	1,582	211,604	180,429	
7	Apr-99	399.5	0.16548	66.1092	22.3892	88.4984	1,578	139,651	00,700	
· ∞	Mav-99	169.5	0.16548	28.0488	22.3892	50.4380	1,558	78,582	58,938	
6	Jun-99	47.0	0.16548	7.7776	22.3892	30.1668	1,536	46,336	34,690	
10	Jul-99	0.5	0.16548	0.0827	22.3892	22.4719	1,521	34,180	34,099	
: =	Aug-99	0.0	0.16548	0.0000	22.3892	22.3892	1,511	33,830	33,875	
12	Sep-99	14.5	0.16548	2.3995	22.3892	24.7887	1,507	37,357	41,027	
13										
14	Total	4,340			22.3892		1,541	1,533,860	0 1,533,861	
15	Average Usage / Customer	/ Customer						995.10	0.00	

Western Kentucky Gas Company Projection from Reference Period to Test Year FY 2000

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Normalized Including Unbilled	(I)		92,338	165,185	102 230
Normalized Usage per No. of Normalized Product Constant Customer Customers Volumes	(h)		66,360	129,606	011 601
No. of Customers	(g)		1,498	1,531	1 571
Normalized Usage per Customer	(J)		44.2994	84.6547	105 (105
Constant	(e)		22.2725	22.2725	
Product	(p)	1	22.0269	62.3822	777
X Coefficient	(c)	Public Authority (Est) - Class 2 Rate 1	0.16438	0.16438	0 1 / 100
Lagged Normal DDays	(p)	rity (Est) - (134.0	379.5	
Line No. Month	(a)	ublic Autho	Oct-99	Nov-99	6
Line No.		ᆈ	-	7	•

	00.00	988.87						e / Customer	Average Usage / Custome	15
1,524,260	0	1,524,259	1,541		22.2725			4,340	Total	14
										13
40,803		37,157	1,507	24.6560	22.2725	2.3835	0.16438	14.5	Sep-00	12
33,699		33,654	1,511	22.2725	22.2725	0.0000	0.16438	0.0	Aug-00	11
33,922		34,002	1,521	22.3547	22.2725	0.0822	0.16438	0.5	Jul-00	10
34,509		46,078	1,536	29.9984	22.2725	7.7259	0.16438	47.0	Jun-00	6
58,596		78,110	1,558	50.1349	22.2725	27.8624	0.16438	169.5	May-00	∞
880'66		138,773	1,578	87.9423	22.2725	8699.59	0.16438	399.5	Apr-00	7
179,280		210,248	1,582	132,9002	22.2725	110.6277	0.16438	673.0	Mar-00	9
235,509			1,541	170.2144	22.2725	147.9419	0.16438	0.006	Feb-00	5
295,807			1,573	175.6390	22.2725	153.3665	0.16438	933.0	Jan-00	4
255,524		211,691	1,561	135.6125	22.2725	113.3400	0.16438	689.5	Dec-99	ĸ
165,185		129,606	1,531	84.6547	22.2725	62.3822	0.16438	379.5	Nov-99	7
92,338		66,360	1,498	44.2994	22.2725	22.0269	0.16438	134.0	Oct-99	_

	to Test Year	
Western Kentucky Gas Company	Projection from Reference Period to Test Year	2001
Western]	Projection	FY 2001

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Normalized	Including	Unbilled	<u>(</u>)
	Normalized	Customer Customers Volumes	(h)
	No. of	Customers	(g)
Normalized	Usage per	Customer	(f)
		Constant	(e)
		Product	(p)
	×	Coefficient	(c)
Lagged	Normal	DDays	(q)
		Month	(a)
	Line	No.	

Public Authority (Est) - Class 2 Rate 1

-	Oct-00	134.0	0.16328	21.8795	22.1558	44.0353	1,498	65,964	91,769
7	Nov-00	379.5	0.16328	61.9647	22.1558	84.1205	1,531	128,789	164,129
3	Dec-00	689.5	0.16328	112.5815	22.1558	134.7373	1,561	210,325	253,864
4	Jan-01	933.0	0.16328	152.3402	22.1558	174.4960	1,573	274,482	293,878
ς.	Feb-01	0.006	0.16328	146.9519	22.1558	169.1077	1,541	260,595	233,983
9	Mar-01	673.0	0.16328	109.8874	22.1558	132.0432	1,582	208,892	178,132
7	Apr-01	399.5	0.16328	65.2303	22.1558	87.3861	1,578	137,895	98,476
∞	May-01	169.5	0.16328	27.6759	22.1558	49.8317	1,558	77,638	58,254
6	Jun-01	47.0	0.16328	7.6742	22.1558	29.8300	1,536	45,819	34,328
10	Jul-01	0.5	0.16328	0.0816	22.1558	22.2374	1,521	33,823	33,744
11	Aug-01	0.0	0.16328	0.0000	22.1558	22.1558	1,511	33,477	33,522
12	Sep-01	14.5	0.16328	2.3676	22.1558	24.5234	1,507	36,957	40,578
13									
14	Total	4,340			22.1558		1,541	1,514,656	0 1,514,657
15	Average Usage / Customer	/ Customer						982.64	0.00

Vestern Kentucky Gas Company	ojection from Reference Period to Test Year	
Vestern Kentucky	rojection from Ref	VY 1999

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Normalized Including Unbilled	(i)		321,635	574,343	884,046	1,017,247	811,035	619,928	346,326	208,933	126,486	124,550	123,552	147,823		0 5,305,904	0.00	(3.0000)
Normalized Volumes	(h)		233,382	452,436	733,905	950,762	902,484	725,656	481,750	275,791	166,169	124,831	123,405	135,334		5,305,905	298.71	354.31
No. of Customers	(g)		17,152	17,684	18,028	18,079	17,703	18,185	18,138	17,980	17,749	17,598	17,457	17,403		17,763		19,304
Normalized Usage per Customer	(t)		13.6068	25.5845	40.7092	52.5893	50.9792	39.9041	26.5603	15.3388	9.3622	7.0935	7.0691	7.7765				
Constant	(e)		7.0691	7.0691	7.0691	7.0691	7.0691	7.0691	7.0691	7.0691	7.0691	7.0691	7.0691	7.0691		7.0691		
Product	(p)		6.5377	18.5154	33.6401	45.5202	43.9101	32.8350	19.4912	8.2697	2.2931	0.0244	0.0000	0.7074				
X Coefficient	(0)	2 Rate 1	0.04879	0.04879	0.04879	0.04879	0.04879	0.04879	0.04879	0.04879	0.04879	0.04879	0.04879	0.04879				Com + PA)
Lagged Normal DDays	(p)	Est) - Class	134.0	379.5	689.5	933.0	0.006	673.0	399.5	169.5	47.0	0.5	0.0	14.5		4,340	re / Customer	Prior Year (0
Month	(a)	Commercial (Est) - Class 2 Rate 1	Oct-98	Nov-98	Dec-98	Jan-99	Feb-99	Mar-99	Apr-99	Mav-99	Jun-99	Jul-99	Aug-99	Sep-99	ı	Total	Average Usage / Customer	Change From Prior Year (Com + PA)
Line No.		- 1	***	2	ı m	4	ν.	9	7	00	6	10	11	12	13	14	15	16 (

Western Kentucky Gas Company Projection from Reference Period to Test Year FY 2000

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Normalized Including Unbilled	Œ		323,358	578,469	891,086	1,025,575	817,568	624,250	347,964	209,250	126,021	124,094	123,112	147,646		5,338,393	0.0000
															•	0	0.00
Normalized Volumes	(h)		234,172	455,323	739,456	958,441	909,963	731,031	484,737	276,782	166,111	124,380	122,967	135,031		5,338,394	296.69 351.31
No. of Customers	(g)		17,382	17,914	18,258	18,309	17,933	18,415	18,368	18,210	17,979	17,828	17,687	17,633		17,993	19,534
Normalized Usage per Customer	(J)		13.4722	25.4172	40.5004	52.3481	50.7424	39.6976	26.3903	15.1995	9.2392	6.9767	6.9524	7.6579			
Constant	(e)		6.9524	6.9524	6.9524	6.9524	6.9524	6.9524	6.9524	6.9524	6.9524	6.9524	6.9524	6.9524		6.9524	
Product	(p)		6.5198	18.4648	33.5480	45.3957	43.7900	32.7452	19.4379	8.2471	2.2868	0.0243	0.0000	0.7055			
X Coefficient	(0)	2 Rate 1	0.04866	0.04866	0.04866	0.04866	0.04866	0.04866	0.04866	0.04866	0.04866	0.04866	0.04866	0.04866			Com + PA)
Lagged Normal DDays	(q)	Est) - Class	134.0	379.5	689.5	933.0	0.006	673.0	399.5	169.5	47.0	0.5	0.0	14.5		4,340	e / Customer Prior Year (0
Month	(a)	Commercial (Est) - Class 2 Rate 1	Oct-99	Nov-99	Dec-99	Jan-00	Feb-00	Mar-00	Apr-00	May-00	Jun-00	Jul-00	Aug-00	Sep-00		Total	Average Usage / Customer Change From Prior Year (Com + PA)
Line No.		∪ i	-	. 2	3	4	5	9	7	· ∞	6	10	11	12	13	14	15 4

Western Kentucky Gas Company Projection from Reference Period to Test Year FY 2001

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Normalized	Including	Unbilled	(i)
	Normalized	Customer Customers Volumes	(h)
	No. of N	Customers	(g)
Normalized	Usage per	Customer	(J)
		Constant	(e)
		Product	(p)
	×	Coefficient	(၁)
Lagged	Normal	DDays	(Q)
		Month	(a)
	Line	No.	

Commercial (Est) - Class 2 Rate 1

	Commercial (ESI) - Class z Nate I	EST) - CIASS	Z DAIC I							
	Oct-00	134.0	0.04852	6.5012	6.8357	13.3369	17,612	234,888	324,989	686
7	Nov-00	379.5	0.04852	18.4119	6.8357	25.2476	18,144	458,092	582,454	454
. "	Dec-00	689.5	0.04852	33.4519	6.8357	40.2876	18,488	744,837	897,927	927
4	Jan-01	933.0	0.04852	45.2656	6.8357	52.1013	18,539	906'596	1,033,677	212
Ś	Feb-01	0.006	0.04852	43.6646	6.8357	50.5003	18,163	917,237	823,914	914
9	Mar-01	673.0	0.04852	32.6514	6.8357	39.4871	18,645	736,237	628,424	424
7	Apr-01	399.5	0.04852	19.3822	6.8357	26.2179	18,598	487,600	349,507	507
· 00	Mav-01	169.5	0.04852	8.2235	6.8357	15.0592	18,440	277,691	209,497	497
6	Jun-01	47.0	0.04852	2.2803	6.8357	9.1160	18,209	165,993	125,502	502
10	Jul-01	0.5	0.04852	0.0243	6.8357	0098.9	18,058	123,877	123,584	584
: =	Aug-01	0.0	0.04852	0.0000	6.8357	6.8357	17,917	122,475	122,619	619
12	Sep-01	14.5	0.04852	0.7035	6.8357	7.5392	17,863	134,672	147,411	411
13	1									
14	Total	4,340			6.8357		18,223	5,369,505	0 5,369,505	505
15	Average Usage / Customer	c / Customer					•	294.66	0.00	
16	Change From Prior Year (Com + PA)	Prior Year (C	com + PA)				19,764	348.31	(3.0000)	

Western Kentucky Gas Company Case No. 99-070 KPSC Data Request #2 Dated August 19, 1999 DR Item 50, a - d Witness: Gary Smith

Data Request:

Refer to the Direct Testimony of Gary L. Smith and the response to Item 59(B) of the Commission's July 16, 1999 Order.

- a. Define what customer actions Western includes in its references to conservation effects.
- b. Has Western conducted any surveys or studies in an attempt to determine the specific actions or measures customers have undertaken that have caused the decline in usage? If yes, provide the results and a narrative description of Western's analysis of the results. If no, explain why such surveys of studies have not been conducted.
- c. Has Western attempted to quantify the impact of improved appliance efficiency and technological innovations in equipment when examining its declining sales volumes? If yes, provide the results of that analysis. If no, explain why Western has not considered the impacts of these factors.
- d. Has Western been able to determine what portion of the decline in usage is due to normal occurrences such as: (1) new, better insulated homes equipped with more efficient energy-using appliances accounting for a larger percentage of its total customer base; (2) naturally occurring replacement of older, less efficient appliances with newer, more efficient appliances; and (3) reduced usage per customer due to changing demographics, such as smaller household size and increases in multi-family residences as a percentage of total residences?

Response:

a. As stated in testimony and the response to Item 59(b) of the KPSC data request dated July 16, 1999, Western only recently discovered the striking trend of declining residential and commercial usage.

Western Kentucky Gas Company Case No. 99-070 KPSC Data Request #2 Dated August 19, 1999 DR Item 50, a - d Witness: Gary Smith

Although uncertain of the factors contributing to the decline, Western's forward looking volume adjustment was labeled "Conservation and Energy Efficiency". As Western prepared responses to these data requests, we updated weather normalized volumes and observed that average residential, and commercial, usage continues to decline (see Item 6 of this PSC data request).

The actions, or occurrences Western expects may be contributing to this trend would mainly be those points raised by the PSC staff in subpart (d) of this data request Item: (1) newer, more energy efficient homes, (2) natural replacement of appliances with higher efficiency units; and (3) changing demograhics

- b. Western has not progressed far into its determination of the factors contributing to this declining usage trend. To date, Western has conducted a preliminary analysis of the comparative usage for new customers as compared to the total customer base. This analysis is described in Western's response to AG DR #1, Item 137. Western intends to investigate these trends further, but does not presently have definitive plans as to how we will proceed. We are assessing industry information resources for insight into how to effectively analyze this matter. On that note, we have learned that the Gas Research Institute is going to initiate a project to "determine the causes that have contributed to the decline in residential usage at the national and regional level".
- c. No. Western has not yet attempted to quantify the impact of improved equipment technologies on this trend. As stated in part (b) of this request, Western intends to investigate these trends further, but does not presently have definitive plans as to how we will proceed.
- d. No. Western has not investigated the relative impact of these factors at this point. As stated in sub-part (b) above, however, Western has conducted preliminary analyses comparing the relative level of normalized usage for new customers vs. the existing customer base.

Western Kentucky Gas Company Case No. 99-070 KPSC Data Request #2 Dated August 19, 1999 DR Item 51 a and b Witness: Gary Smith

Data Request:

Refer to the response to Item 50 of the Commission's July 15, 1999 Order.

- a. Many of the gas distribution companies regulated by the Commission that make quarterly Gas Cost Adjustment ("GCA") filings have tariff provisions that permit out-of-time filings when such filings are warranted. These provisions provide the flexibility to respond to significant gas supply cost changes. Would Western be able and agreeable to operating under a similar tariff provision?
- b. While this rate application is pending, Western will continue to make monthly GCA filings, with the last filing prior to the end of the suspension period being due in early January of 2000 with rates to be effective February 1, 2000. Assuming this case stays on schedule, would Western be able to convert to a quarterly filing schedule after the conclusion of this proceeding with its first quarterly filing on April 1, 2000 for rates to be effective May 1, 2000? If not, explain why.

Response:

- a. Western would be agreeable to making quarterly Gas Cost Adjustments that also provides for out-of-time filings. The Commission may want to take notice of the current PBR tariff language pursuant to Western's annual balancing adjustment filings in February. Western will need to make an out-of-time filing to comply with this particular provision.
- b. Western would be able to convert to a quarterly basis within the time period referenced.

Western Kentucky Gas Company Case No. 99-070 KPSC Data Request #2 Dated August 19, 1999 DR Item 52 a Witness: Smith

Data Request:

Refer to the response to Item 51 of the Commission's July 16, 1999 Order.

a. Provide copies of the orders from the Tennessee, Georgia, and South Carolina commissions in which the respective sharing ratios were established for another Atmos business unit.

Response:

a. See attached orders.

Tennessee Docket No. 92-02987

This docket lowered margin recovery to 90%. See Appendix B, Section 8.c, on page 4.

Georgia Docket No. 9998

This special contract order, with customer name redacted, established 75% margin loss recovery.

South Carolina Docket 87-428-G

Order date 5/16/88 provided for (100%) margin loss recovery up to the level of spot savings. Also see order from PGA review in Docket 98-005-G, page 4, 5th line in paragraph 1 where it discusses margin losses. Margin losses are recovered via South Carolina's Balancing Adjustment under the GCA tariff, item M. See response to AG DR 58 for South Carolina tariff provisions.

BEFORE THE TENNESSEE PUBLIC SERVICE COMMISSION September 21, 1992 Nashville, Tennessee

IN RE:

PETITION OF UNITED CITIES GAS COMPANY TO PLACE INTO EFFECT REVISED TARIFF SHEETS

DOCKET NO. 92-02987

ORDER

This matter is before the Tennessee Public Service Commission upon the Petition of United Cities Gas Company for a rate increase of \$2,896,960 in annual revenue. The Petition was filed on March 30, 1992, and was heard by the Commission on September 2, 1992, Commissioner Frank Cochran, and Commissioner Keith Bissell presiding.

Appearances were entered as follows:

For the Petitioner:

Jack M. Irion Bomar, Shofner, Irion & Rambo 104 Depot Street, P.O. Box 129 Shelbyville, TN 37160

For the Intervenors
Associated Valley Industries Intervenor Group:

Daniel R. Loftus Boult, Cummings, Conners & Berry P.O. Box 198062 Nashville, Tn 37219

For the Commission Staff:

D. Billye Sanders, Assistant General Counsel 460 James Robertson Parkway Nashville, TN 37243-0505

In addition, there were two Petitions to Intervene filed on behalf of Nashville Gas Company and Chattanooga Gas Company, both filed on September 1, 1992. Upon objection of the Staff and recommendation of the Administrative Judge, these Interventions were denied as not having been timely filed.

In August of 1992, the Commission's Utility Service Division conducted a service hearing in Columbia (August 1), Maryville (August 30), Elizabethton (August 25) and Union City (August 27) to allow the public the opportunity to discuss the quality of service provided by United Cities Gas Company. The Director of the Utility Service Division presented a summary of the hearings to the Commission and indicated that they are investigating any concerns raised by the eight customers who attended.

The Commission considered the petition, exhibits, testimony of witnesses, and the resolution of the issues as described below at its Commission Conference held on September 18, 1992. In accordance with <u>Tennessee Code Annotated</u> §4-5-314, the Commission makes the following findings of fact and conclusions of law:

I. Description of Petitioner.

United Cities Gas Company ("United Cities," "Company," or "Petitioner") is a natural gas distribution company, organized and existing under the laws of the States of Illinois and Virginia. It operates franchises in the following areas of Tennessee which will be affected by the revised tariffs filed herewith, to-wit:

- (1) Bristol, Tennessee, and environs in Sullivan County;
- (2) Columbia, Tennessee, and environs in Maury County;
- (3) Elizabethton, Tennessee, and environs in Carter County;

- (4) Franklin and Nolensville, Tennessee, and environs in Williamson County;
- (5) Greeneville, Tennessee, and environs in Greene County;
- (6) Johnson City and Jonesboro, Tennessee, and environs in Washington County;
- (7) Kingsport, Tennessee, and environs in Sullivan County;
- (8) Lynchburg, Tennessee, and environs in Moore County;
- (9) Maryville and Alcoa, Tennessee, and environs in Blount County;
- (10) Morristown, Tennessee, and environs in Hamblen County;
- (11) Murfreesboro, Tennessee, and environs in Rutherford County;
- (12) Shelbyville, Tennessee, and environs in Bedford County;
- (13) Spring Hill, Tennessee, and environs in Maury and Williamson County;
- (14) Union City, Tennessee, and environs in Obion County.

United Cities last filed an application for general rate relief in the year 1989 in <u>Docket No. U-89-10017</u>. Since 1970, United Cities' rates have been subject to a Purchased Gas Adjustment (PGA) provision in its rate tariff which permits the Company to track increases or decreases in its purchased gas cost. This PGA has recently been revised pursuant to the generic proceeding in <u>Docket No. G-86-1</u>. United Cities' rates are also subject to an experimental Weather Normalization Adjustment (WNA) which was approved pursuant to the generic proceeding in <u>Docket No. 91-01712</u>.

II. Criteria for Establishing Just and Reasonable Rates.

The Commission has traditionally considered petitions such as this one, filed pursuant to <u>Tennessee Code Annotated</u> §65-5-203, in light of the following considerations:

- 1. The investment or rate base upon which the utility should be permitted to earn a fair rate of return.
- 2. The proper level of revenues for the utility.
- 3. The proper level of expenses for the utility.
- 4. The rate of return the utility should earn.
- 5. The safety, adequacy and efficiency of the services provided the utility.

III. Prehearing Conference and Resolution of Issues.

The parties attended a prehearing conference on August 27, 1992 conducted before Administrative Judge, Mack H. Cherry. Prior to this date the parties had held informal settlement negotiations and an agreement was reached between the Company and the Staff on capital structure and rate of return. At the prehearing conference various stipulations and positions were discussed, however, no additional stipulations were agreed upon. Following this prehearing conference a Prehearing Conference Order was filed with the Commission, and is attached as Appendix A to this Order.

On the date of the hearing, settlement of the case was reached as between the Commission Staff and United Cities Gas Company. Their agreement is fully set out in a stipulation filed with the Commission and attached to this Order as Appendix B. This stipulation is adopted and incorporated by reference as a part of

It should be noted that this stipulation is this Order. agreement between the Staff and the Company only. The industrial Intervenors are not a party thereto. Upon representation of the that a complete settlement might be possible, Commission allowed additional time for further discussions. These further discussions ultimately led to a settlement among all three parties on the issue of rate design. Once the rate design issue was resolved, it was announced at the hearing that the industrial (AVIG). while not necessarily supporting intervenors stipulation agreement, between the Company and Staff, did not oppose the same.

IV. The Settlement.

A. Methodology and Underlying Principles.

The parties agreed at the outset, and it is specifically understood that their settlement represents a negotiated settlement in the public interest with respect to the various Neither United Cities, the rate matters described below. Commission, its Staff, nor the Intervenors shall be prejudiced proceeding except bound thereby in any other specifically provided herein. Neither United Cities, the Commission, its Staff, nor the Intervenors shall be deemed to have approved, accepted or agreed to any concept, methodology, theory, or principle underlying or supposed to underlie any of the matters provided for in said settlement except specifically provided.

B. Revenue Deficiency.

For purposes of determining the revenue deficiency, and for no other purpose, the parties agreed to use as a starting point the Staff's test period, rate base, revenues, expenses, and rate of return. After extensive discussions the Company and the Staff agreed upon a revenue deficiency of \$1,700,000. This figure is found in the Joint Exhibit attached to the which Joint Exhibit is also adopted and stipulation, incorporated by reference as a part of this Order. The Commission, upon consideration of all evidence, finds the settlement as to the revenue deficiency to be reasonable and approves the same.

C. Rate Design

Certain rate design issues are covered in the stipulations between the Company and the Staff, which incorporated herein by reference. However, additional rate subsequent settlement design issues were covered by the Staff between the Company, the and Associated Industries Group (AVIG) as follows:

The parties agreed that the rates of the industrial customers with a two part rate and interruptible and transportation customers should be reduced by \$550,000. The commodity charge for the first 2,000 mcf would accordingly be reduced by \$.054 per mcf (i.e. from \$.95 to \$.896) and for quantities over 2,000 mcf the rate would be reduced by \$.11

per mcf (i.e., from \$.76 to \$.650). An equal percentage of the rate shift due to the reduction in rates for the above classes of customers will be spread among commercial and residential customers.

In reaching just and reasonable rates the Commission considers, among other things, the utility's total cost, the value of the service provided to individual customers or customer groups, the impact of the rate change on the various classes of customers, and customers' ability to convert to alternate fuels. Taking these factors into consideration, the rate design appears to be reasonable and is approved.

D. Other Issues.

The remaining issues in this proceeding were likewise settled as between United Cities and the Commission's Staff. Their agreements are set forth in the attached and incorporated stipulation to which reference is hereby made.

V. Commission Determination.

The Commission has fully reviewed the settlement as described above and finds it to be reasonable and in the public interest. Therefore, the Commission approves and ratifies the foregoing settlement and resolution of the issues as a whole and orders that the same be implemented as indicted below.

IT IS THEREFORE ORDERED:

- 1. That the Petition of United Cities Gas Company for a rate increase of \$2,896,960 is denied.
- 2. That the Company shall file tariffs consistent with this Order and designed to produce \$1,700,000 in additional annual revenue, to become effective as of October 1, 1992, for service rendered on and after that date.
- 3. That the stipulations between the Commission Staff and United Cities Gas Company which are attached as Appendix B are hereby approved as though copied into this Order verbatim.
- 4. That any party aggrieved with the Commission's decision in this matter may file a Petition for Reconsideration with the Commission within ten (10) days from and after the date of this Order: and
- 5. That any party aggrieved with the Commission's decision in this matter has the right of judicial review by filing a Petition for Review in the Tennessee Court of Appeals, Middle Section, within thirty (30) days from and after the date of this Order.

ATTEST:

EXECUTIVE DIRECTOR

COMMISSIONER

COMMISSIONER

BEFORE THE TENNESSEE PUBLIC SERVICE COMMISSION Nashville, Tennessee September 2, 1992

IN RE: PETITION OF UNITED CITIES GAS COMPANY TO PLACE INTO EFFECT REVISED TARIFF SHEETS.

DOCKET NO. 92-02987

PRE-HEARING CONFERENCE ORDER

This Pre-hearing Conference was held pursuant to a Notice of Hearing and Procedural Schedule issued in this matter July 31, 1992.

The Pre-Hearing Conference took place August 27, 1992 In Nashville, Tennessee before Administrative Judge Mack H. Cherry. Representatives of United Cities Gas Company (Petitioner), the Associated Valley Industries Intervention Group (Intervener) and the Commission Staff attended.

The following determinations and agreements were reached.

Ι.

The hearing will commence at 10 a.m., September 2, 1992 at the Commission Hearing Room in Nashville as opposed to 9:30 a.m. reflected in the original Notice of Hearing.

11.

The parties agreed to provide stipulations which could be made a part of this Pre-hearing Conference Order not later than Monday afternoon, August 31, 1992. It was learned Monday that the parties had reached agreement. However, this agreement has not been reduced to writing at this time. It will be submitted at the time of the hearing.

111.

Since the agreement between the parties has not yet been reduced to writing, there exists the contingency that any agreement might be premature. In the event the parties do not come to agreement as earlier anticipated, the parties should be expected to first Identify those issues on which they now agree as well as those issues on which they disagree. In this event, it should be anticipated that the Petitioner will first present testimony followed by the intervener and the Commission Staff. Post hearing briefs would then be due September 10, 1992.

IV.

Interventions on behalf of Chattanooga Gas Company and Nashville Gas Company were filed September 1, 1992. These interventions have not been timely filed pursuant to T.C.A. Section 4-5-310 in that they were not filed seven days prior to the date of the hearing. However, the Commission may grant one or both of these interventions should it be found that the interventions are "In the Interests of justice and shall not impair the orderly and prompt conduct of the proceedings". See T.C.A. Section 4-5-310(b).

ENTERED THIS 2nd DAY OF SEPTEMBER, 1992.

MACK H. CHERRY ADMINISTRATIVE JUDGE

BEFORE THE TENNESSEE PUBLIC SERVICE COMMISSION Nashville, Tennessee

IN RE: UNITED CITIES GAS COMPANY REQUEST FOR A RATE INCREASE DOCKET NO. 92-02987

STIPULATIONS BETWEEN THE COMMISSION STAFF AND UNITED CITIES GAS COMPANY

At the prehearing conference on August 27, 1992, in this docket, the Administrative Judge instructed the parties to submit a list of stipulations and issues remaining in this docket. Subsequent to the prehearing conference all issues have been resolved as between the Commission Staff (Staff) and United Cities Gas Company (United Cities or Company). These stipulations are not, however, necessarily joined in by the Intervenor. As was anticipated at the prehearing conference, the other party in this case, Associated Valley Industries Intervention Group (AVIIG) did not participate in the development of these stipulations.

Stipulations

Methodology and Underlying Principles.

The parties agreed at the outset, and it is specifically understood that their settlement represents a negotiated settlement in the public interest with respect to the various rate matters described below. Neither United Cities, the Commission, its Staff, nor AVIIG shall be prejudiced or bound thereby in any other proceeding except as specifically provided

herein. Neither United Cities, the Commission, its Staff, nor AVIIG shall be deemed to have approved, accepted or agreed to any concept, methodology, theory, or principle underlying or supposed to underlie any of the matters provided for in said settlement except as specifically provided.

2. Revenue Deficiency.

The Company's original rate request was for a rate increase of \$2,896,960. The initial filing incorporated an agreed-upon capital structure and overall rate of return of 11.03% (incorporating a return on equity of 12.60%), and this settlement likewise incorporates these returns. After extensive discussions the Company and the Staff have agreed upon a revenue deficiency of \$1,700,000. The Company and Staff will prepare a joint exhibit showing calculations of the revenue deficiency.

3. FAS 106 Costs.

The parties have agreed that United Cities will be authorized to defer, as a regulatory asset, Other Postretirement Employee Benefits (OPEB) calculated in accordance with FAS 106, in excess of the current cash basis. (This amount shall be referred to as the deferred balance.) A generic proceeding will be initiated no later than the first quarter of 1993 to determine the manner in which these FAS 106 costs will be treated for ratemaking purposes. In that proceeding the Commission will decide whether an amount in excess of the current cash basis may be recovered. United Cities will be allowed to recover carrying

charges on any portion of the deferred balance as determined recoverable in the generic docket. Carrying charges will be computed on the same basis as such charges are presently computed for PGA balances.

Management Audit.

United Cities has agreed to a management audit on matters other than purchased gas costs which are currently being audited. Said audit shall be conducted by a nationally recognized accounting or consulting firm. The consultant shall be selected by the Commission upon recommendation of the Staff, with the right of the Company to object to said recommendation. The Company will be involved in the selection of the finalist list from which the Staff will make its recommendation, and any dispute between the Company and Staff during this process shall be resolved by the Commission. The costs of this audit, as specified in the consultant's contract, with carrying charges computed on the same basis as such charges are presently computed for PGA balances, shall be deferred until the Company's next rate case. The audit shall begin on or after April 1, 1993.

5. Accumulated Deferred Federal Income Taxed (ADFIT)

ADFIT are currently reflected on the Company's books on a Company-wide basis. The Company has agreed to separate future accruals of the Tennessee portion of ADFIT. The Company and Staff agreed to do a study to determine how, consistent with IRS

requirements, the current accrued balance will be separated to identify portions attributable to Tennessee.

6. Weather Normalization Adjustment.

The parties have agreed that the WNA methodology shall continue as specified in Docket No. 91-01712.

7. Depreciation Study.

The parties agree that the rates in the Company's Depreciation Study, filed as Exhibit 11 to the original filing, should be approved.

8. Tariff and Rate Design Issues.

- a. The parties have agreed to the miscellaneous charges included on the attached Schedule 2.
- b. The Company currently recovers 100% of margin loss that occurs as a result of negotiated rates. The parties have agreed to lower this recovery level to 90%.
- c. The parties have agreed that the Company shall recover 90% of margin loss resulting from customers shifting from 2-part rates, as discussed in the next subsection, to interruptible rates. This recovery would be limited to only those customers eligible for the 2-part rate as of the effective date of the Commission's order adopting this stipulation. This margin recovery on such eligible 2-part rate customers will be in effect until the effective date of the Company's next rate case.
- d. The Company agrees to implement a 2-part, demand-commodity rate schedule for those customers using 27,000 Mcf/year

or more. The commodity margin for this rate will be the Company's current interruptible margin.

- e. An equal percentage of the agreed-upon revenue increase will be spread to all customers other than the demand-commodity, interruptible, and transportation customers.
- f. The Company has agreed to require a one-time contribution in aid of construction for telemetering equipment and applicable taxes from all new customers on its large firm tariff and all transportation customers (new and existing).
- g. Other agreed-to rates and/or tariff provisions include: (1) an experimental school rate to encourage the use of air conditioning equipment (Schedule 3), (2) an economic development rate to encourage new gas load and to promote jobs and industrial growth (Schedule 4), (3) tariff provisions applicable to mobile home parks, (4) balancing provisions applicable to transportation customers which mirror the similar provisions of the Company's upstream pipeline supplier.
- 9. Should the Commission modify the stipulations, the parties reserve the right to present testimony on the various issues raised in this case.

Respectfully submitted this 2nd day of September, 1992.

Jack Irion, Attorney

for United Cities Gas Company

D. Billye Sanders

Assistant General Counsel



<u>1998</u>

Georgia Public Serbice Commission

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EXECUTIVE SECRETARY

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IN RE:

Docket No. 9998-U Proposed Negotiated Contract Between United Cities

Gas Company and (Filed October 5, 1998;

amended March 8, 1999)

Please be advised that in the Administrative Session on Tuesday, March 16, 1999, the Commission considered and approved the "Negotiated Contract Between United Cities Gas Company (Company or UCG) and (Customer)", subject to the conditions as set forth herein this Order.

WHEREFORE, it is

ORDERED, that the Company shall recover forty percent (40%) of the lost revenue from firm customers, thirty five percent (35%) from interruptible customers, the Company shall absorb the remaining twenty five (25%); and it is

ORDERED FURTHER, that the following language must be added to the contract. "In the event United Cities Gas Company elects to become subject to the provisions of O.C.G.A § 46-4-154, either party may, by written notice thereof, terminate this agreement at the earlier of the final order of the Georgia Public Service Commission in United Cities' filing of election docket or the then current term of the agreement"; and it is

ORDERED FURTHER, that the Company shall file an amended contract; and it is

ORDERED FURTHER, that jurisdiction over this proceeding is expressly retained for the purpose of entering such further order or orders as this Commission may deem just and proper, and it is

ORDERED FURTHER, that a motion for reconsideration, rehearing, or oral argument shall not stay the effectiveness of this order unless expressly so ordered by the Commission.

The above by action of the Commission in Administrative Session on March 16, 1999.

Helen O'Leary
Executive Secretary

Stan Wise
Chairman

3/5/90

3-25 89

Date

Date

SW/HOL/DP

c: Jim Hurt, CUC

RP Oder Book

BEFORE

THE PUBLIC SERVICE COMMISSION OF

SOUTH CAROLINA

DOCKET NO. 87-428-G - ORDER NO. 88-473

May 16, 1988

IN RE: Annual Review of Purchased Gas Adjustments)
and Purchasing Policies of United Cities Gas) ORDER
Company

On August 14, 1987, the South Carolina Public Service Commission (the Commission) issued its Order No. 87-900 which requires the annual review of the purchased gas adjustment and the gas purchasing policy of United Cities Gas Company (the Company.

A public hearing was held concerning these matters on Wednesday, April 6, 1988 at 10:30 a.m. A Petition to Intervene was filed by the Consumer Advocate of South Carolina. Testifying on behalf of United Cities was William S. Culpepper and Bobby J. Cline. Testifying on behalf of the Commission Staff was Brent L. Sires.

United Cities Gas Company serves approximately 4,300 customers of Gaffney, South Carolina. Natural gas sales to industrial customers account for almost seventy-five (75%) percent of total company sales in South Carolina. Approximately fifty-six (56%) percent of this 75% is subject to alternate fuel switching. The remainder of the Company's annual sales is to residential and small commercial customers. The purpose of United Cities' testimony in this proceeding was to explain how

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the Company's best cost "gas purchasing practice" makes lower cost gas supplies available to its customers while maintaining the security of supply for firm customers. United Cities' sole interstate pipeline supplier to its Gaffney service area is Transcontinental Gas Pipeline Corporation (Transco). The Company purchases under Transco's small general service contract G-2, which is a single part rate.

United Cities current contract is for maximum delivery of 6,700 Dth per day with additional storage gas available to meet the Company's peak day firm requirements. The Company historically has relied solely on Transco's natural gas supply and has been contractually unable to purchase natural gas from any other source. In the early part of 1982, Transco's commodity cost of gas approached the market clearing levels of alternate fuels, and the Company began to suffer load loss. In April of 1983, Transco, in an effort to compete with the alternate fuel market, enacted a special marketing program which was known as the Industrial Sales Program (ISP). This program remained in effect until May, 1985. Under the ISP, the quantities of gas available from Transco to the distribution companies were based on the availability of lower cost gas supplies to Transco and the amount of fuel switchable load on the distributor's system.

United Cities, being a small customer of Transco, was eligible for minimum volumes. Volumes allocated to United Cities were dedicated to the Company's customers, who otherwise would

DOCKET NO. 87-428-G - ORDER NO. 88-473 MAY 16, 1988 PAGE 3

have switched to alternate fuel. With the advent of FERC Order 436, pipelines began opening their system for transportation of lower cost gas supplies. Transco, however, chose not to accept the conditions imposed by Order 436, but continued transporting under Section 311 for certain transactions that were "grandfathered". United Cities had no transportation contract in place, and was unable to purchase "spot" gas supplies until August of 1986. During the period August 1986 through December, 1987, United Cities purchased approximatley 950,000 Dekatherms of its customers natural gas requirements from sources other than Transcontinental's traditional gas supply. The savings already passed to the customers through the purchased gas adjustment totals approximately \$1.1 million.

United Cities, as a small, sole supplied distributor, has limited ability to reduce its gas cost. Nevertheless, United Cities has been able to purchase spot supplies from TEMCO and realize some savings. Purchases of this lower cost gas has enabled the Company to reduce gas cost paid by our customers, but also has saved the residential or captive customers dollars as a result of retaining industrial load. Any loss of industrial load due to non-competitive gas prices is ultimately borne by high priority customers. It is the Company's intent to purchase competitive supplies of gas for all classes of customers.

The Company has been experiencing several problems with its current PGA methodology and is proposing the revised PGA Rider to

DOCKET NO. 87-428-G - ORDER NO. 88-473 MAY 16, 1988 PAGE 4

eliminate, or at least reduce, these problems. First, the current PGA is calculated every month, using one month of gas cost. This can, and does, cause a wide fluctuation of the PGA factor from month to month. Second, the PGA factor is applied to a customer's previous month's consumption, while the base rate is applied to the current month's consumption. This causes confusion when the consumer tries to compute his monthly bill. It is also confusing to the Company's own personnel and makes it more difficult to administer the PGA. Third, due to the combination of a fluctuating monthly PGA and the fact that the Company does not know that PGA factor to be charged to a customer until after the customer has consumed the gas, it is extremely difficult to quote a price to industrial customers. Fourth, the Company cannot compute the PGA until the needed volume data is available from its pipeline supplier, Transcontinental Gas Pipe Line Corporation, usually around the 6th the 7th day of the This creates a time crunch in preparing the PGA filing, and causes a 2 to 5 day delay in the billing of United Cities' customers.

The proposed PGA Rider will solve, or at least reduce, the problems with the current Rider. The problem of the fluctuating PGA can be solved by the use of twelve months of historical purchase and sales volumes in the PGA computation. The use of twelve months of cost and volumes creates a smoothing effect, a more constant average rate per therm. Also, the PGA factor will

DOCKET NO. 87-428-G - ORDER NO. 88-473 MAY 16, 1988 PAGE 5

not be computed on a monthly basis, but as the suppliers change rates or if there is a significant change in purchase and sales volumes. This, too, will reduce PGA fluctuation. The PGA factor under the new Rider will be applied to the current month's consumption, not to the previous month's consumption, which will help a customer to better understand his billing, and will reduce administrative burden on Company personnel. The more constant PGA factor, computed less frequently, applied to current gas consumption, not gas already consumed, will enable the Company to give more accurate price quotes to industrial customers. Finally, the twelve month volumes used in the PGA computation will have a thirty-day lag before the effective date of the PGA, eliminate the need to call the pipeline supplier, remove the time crunch in preparing the filing, and end the delay in billing customers.

There are three other significant changes to the PGA Rider. The first is that the Company is proposing to zero-base the PGA, or in other words, remove all gas cost from base rates and include all gas cost in the PGA. By zero-basing the PGA, the base rates will contain only the gross margin approved by the Commission and will eliminate the need of periodic filings to restate the base cost of gas. The rates charged customers will be the same under either method, but by zero-basing, the administrative burden by Commission Staff and Company personnel will be reduced. The second change is the inclusion of language

to allow the recovery of any surcharge levied by suppliers in the PGA computation. This will eliminate the need for special filings and will reduce the administrative burden for Commission Staff and Company personnel. The third, and final, change is the inclusion of margin loss incurred from sales under negotiated Rate Schedule 851 in the annual true-up, referred to in the PGA Rider as the "Balancing Adjustment". The Company has been fortunate in its ability to purchase cheaper spot market gas to avoid the need of negotiating rates, but due to the uncertainty of Transcontinental Gas Pipe Line remaining an "open access" system, the Company is requesting the ability to recover any future margin loss.

Mr. Sires testified that the Company's request to modify its PGA Rider to alleviate these problems is warranted. The Gas Department does not oppose the Company's request to remove all gas costs from the base rates and include these gas costs in the PGA. This type of rate structure has previously been approved for use by another gas company under this Commission's jurisdiction and there was no dissatisfaction expressed by the Company's customers. Mr. Sires recommended, should the Commission approve the Company's request, that the Company be required to furnish its customers an explanation of the revised billing format along with the first bills rendered containing the revision. Also due to the continuing changes authorized by FERC concerning the interstate transmission companies, he recommended

DOCKET NO. 87-428-G - ORDER NO. 88-473 MAY 16, 1988 - PAGE 7

. .

that the Company's proposal, allowing the recovery of supplier surcharges, be incorporated in the Company's PGA, as long as such surcharges relate only to gas cost. It is Mr. Sires' opinion, however, that all recoveries of such surcharges be subject to Commission approval before inclusion in the PGA.

Mr. Sires also testified concerning the Company's proposal to recover any future margin losses experienced by the Company. The proposal by United is an attempt to avoid industrial revenue margin losses and is consistent with the intent of the procedures used by our other gas Companies. However, the Gas Department is of the opinion that the proposed procedure should provide the other customers on the system with sufficient protection against any abnormal rate variations occurring as a result of their having to make up the margin losses. If the Commission decides in favor of the proposal, it is the Gas Department's recommendation that a provision be added, as follows, to section five (5) of the Company's Purchased Gas Adjustment Rider.

M=Margin losses incurred from sales under Rate Schedule 851 to the extent that such losses do not exceed the savings realized from the spot market gas entering the system during the same period that the margin losses were incurred. Margin losses do not include revenue losses incurred when no sales are made to an industrial customer.

The Company shall file with the Commission documentation as needed to substantiate all changes of the PGA factor. The Company is to file with the Commission, on a monthly basis, the following: 1) invoices from all suppliers; 2) any industrial

DOCKET NO. 87-428-G - ORDER NO. 88-473 MAY 16, 1988 PAGE 8

revenue margin losses referenced in the M component of the Purchased Gas Adjustment Rider; and. 3) any additional material the Commission may need to monitor the revised Purchased Gas Adjustment Rider.

After a thorough review of the record, the Commission finds that the gas purchasing policies of United Cities Gas Company for the period examined were reasonable. The Commission further approves United's purchased gas adjustment clause with the Commission Staff's recommended modification as set out hereinabove.

IT IS THEREFORE ORDERED:

- 1. That the gas purchasing policies of United are hereby approved.
- 2. That the proposed purchased gas adjustment clause of United is hereby approved with the Commission Staff's proposed modification.
- 3. That this Order shall remain in full force and effect until further Order of the Commission.

BY ORDER OF THE COMMISSION:

Chairman

ATTEST:

ACTIN(Executive Director (SEAL)

BEFORE

THE PUBLIC SERVICE COMMISSION OF

SOUTH CAROLINA

DOCKET NO. 98-005-G - ORDER NO. 98-824

OCTOBER 26, 1998

IN RE:	Annual Review of Purchased Gas Adjustment)	ORDER
	(PGA) and Gas Purchasing Policies of United)	
	Cities Gas Company.)	

INTRODUCTION

This matter comes before the Public Service Commission of South Carolina ("Commission") on annual review of the Purchased Gas Adjustment ("PGA") and Gas Purchasing Policies of United Cities Gas Company, a Division of Atmos Energy Corporation ("United Cities" or "Company").

By letter dated April 13, 1998, the Commission's Executive Director instructed United Cities to publish one time a prepared Notice of Filing concerning the review scheduled before the Commission. The Notice of Filing indicated the nature of the proceeding and advised all interested parties of the manner and time in which to file appropriate pleadings for participation in the proceedings. United Cities was also instructed to directly notify all of its customers who would be affected by the review proceeding. United Cities submitted documentation indicating that it had complied with the instructions of the Executive Director. A Petition to Intervene was received from the Consumer Advocate for the State of South Carolina ("Consumer Advocate").

A public hearing regarding the Company's Purchased Gas Adjustment and Gas Purchasing Policies was convened on October 8, 1998, at 10:30 A.M. in the

Commission's hearing room at Koger Executive Center, 101 Executive Center Drive, Columbia, South Carolina. The Honorable Philip T. Bradley, Chairman, presided. Jerry W. Amos, Esquire and Kevin A. Hall, Esquire represented United Cities. Mr. Hall requested that Mr. Amos, a member in good standing in the North Carolina Bar, be admitted pro hac vice to participate in the proceeding before the Commission. The Commission granted the motion to admit Mr. Amos pro hac vice. Hana Pokorna-Williamson, Esquire, represented the Consumer Advocate, and Florence P. Belser, Staff Counsel, represented the Commission Staff.

United Cities presented the testimony and exhibits of Mark A. Martin, Rate

Analyst of Atmos Energy Corporation, United Cities Gas Company Division. The

Consumer Advocate did not present a witness. The Commission Staff presented Norbert

M. Thomas, Public Utilities Accountant, and Brent L. Sires, Utilities Rate Analyst, to
report the findings of the Staff.

FINDINGS OF FACT

Based upon the testimony and exhibits received into evidence at the hearing and the entire record of these proceedings, the Commission now makes the following findings of fact:

1. United Cities is a natural gas utility providing natural gas service in its service area within South Carolina, and its operations in South Carolina are subject to the jurisdiction of the Commission pursuant to S.C. Code Ann. §58-5-10, et seq. (1976), as amended.

- 2. United Cities' presently approved PGA Rider mechanism was last amended by Commission Order No. 94-1126, dated October 28, 1994, in Docket No. 94-009-G. United Cities is operating its PGA Rider in compliance with Commission Order No. 94-1126.
- 3. United Cities' net Balancing Adjustment resulted in an over-recovery of (\$140,872) in gas costs for the twelve months ended June 30, 1998.
- 4. The appropriate Balancing Adjustments for United Cities is (\$0.0106) per therm applicable to Firm customers and (\$0.0041) per therm applicable to Optional or Interruptible customers.
- 5. United Cities' gas purchasing policies for the year under review were prudent and reasonable.

EVIDENCE AND CONCLUSIONS

EVIDENCE AND CONCLUSIONS FOR FINDING OF FACT NO. 1.

The evidence supporting this finding concerning United Cities' business and legal status is contained in prior Commission Orders in the docket files of the Commission of which the Commission takes judicial notice. This finding of fact is essentially informational, procedural, and jurisdictional in nature, and the matters which it involves are uncontested.

EVIDENCE AND CONCLUSIONS FOR FINDING OF FACTS NOS. 2, 3, AND 4.

The evidence supporting these findings is contained in the testimony of Company witness Martin and Staff Witnesses Thomas and Sires. In Order No. 94-1126 dated

October 28, 1994, the Commission approved the PGA Rider presently used by United

Cities. (Testimony of Sires, p. 2, ll. 1 – 4; Testimony of Martin, p. 3, ll. 6 – 8.) Staff
Witness Sires testified that his examination of the Company's PGA filings indicated that
United Cities is operating the PGA Rider in compliance with Order No. 94-1126.
(Testimony of Sires, p.2, ll. 4-7).

According to the testimony of Staff Witness Thomas, the Accounting Department reviewed the calculations included in the annual PGA true-up and traced amounts included in the calculations to the books and records of the Company. A net Balancing Adjustment of (\$140,872) was computed for the twelve months ended June 30, 1998, and the net balancing adjustments of (0.0106) per therm applicable to Firm customers and (\$0.0041) per therm applicable to Optional or Interruptible customers reflects an over-recovery for the twelve months ended June 30, 1998. (Testimony of Thomas, p. 2, 11.7 – 20.) The activity included in the true-up computation for the period July 1997 through June 30, 1998, included the following:

Invoice Gas Costs representing the monthly demand and commodity charges associated with gas purchases - For the twelve months under review, Demand Costs were \$918,147 and Commodity Costs were \$5,199,068. From these amounts Storage Injections of (\$723,578) were deducted, Storage Withdrawals of \$660,967 were added, margin losses of \$179,714 were included in accordance with the Company's approved PGA, and net Cash-outs from Transportation customers of (\$15,784) were deducted for Total Invoiced Commodity Costs of \$5,300,387. (Testimony of Thomas, p. 2, l. 21 – p.3, l.

- 2. Firm Demand Costs Recovered, Optional Demand Costs Recovered and Commodity Costs Recovered For the twelve months ended June 30, 1998, Firm Demand Cost Recoveries were \$871,034, Optional Demand Cost Recoveries were \$183,420, and Commodity Cost Recoveries were \$5,379,520. These recoveries resulted in an over-recovery of Firm Demand of (\$113,564), or (\$0.0094) per therm; an over-recovery of Optional Demand of (\$22,744), or (\$0.0029) per therm; and an over-recovery of Commodity Costs of (\$79,133), or (\$0.0012) per therm. The total over-recovery for the review period is (\$215,441). (Testimony of Thomas, p.3, 1.16 p.4, 1.9.).
- 3. Supplier Refunds During the period under review, United Cities received Supplier Refunds of \$560. Computed interest on Supplier Refunds at 8.75% was \$54, for total Supplier Refunds with Interest of \$614. United Cities requested, and the Staff concurred, that this amount should be returned to the ratepayers by increasing the over-collection for the period under review.
 (Testimony of Thomas, p. 4, ll. 10 16.).
- 4. Residual Balancing Adjustment In accordance with the currently-approved PGA for United Cities, a residual amount of \$75,183 is included in the true-up computation. This residual amount represents the amount remaining to be collected from the net balancing adjustment for the twelve months ending June 30, 1996. The amount reduces the over-collection for the period under review. The net balancing adjustment at June 30, 1997, is currently being billed and will continue through October 31, 1998. Any residual balance

remaining will be included in the next annual review period. (Testimony of Thomas, p.4, l. 17 - p.5, l.3.).

Staff Witness Thomas testified that the balance at June 30, 1998, of (\$140,872) accurately stated and fairly represented the over-collection by United Cities for the twelve months ended June 30, 1998, and that the proposed decrements, including commodity, of (\$0.0106) for Firm Customers and (\$0.0041) for Optional Customers should return the over-collection to ratepayers during the 12-month period beginning November 1, 1998. (Testimony of Thomas, p. 5, ll. 4-13.).

Therefore, based on the evidence presented, the Commission concludes that the appropriate Balancing Adjustment for United Cities is (\$0.0106) for Firm Customers and (\$0.0041) for Optional or Interruptible Customers and that these Balancing Adjustments will return the over-collection during the next twelve months.

EVIDENCE AND CONCLUSIONS FOR FINDING OF FACT NO. 5.

The evidence supporting the Commission's finding that United Cities' Gas Purchasing Policies were prudent is found in the testimony of Staff Witness Sires. According to Mr. Sires, Staff is of the opinion that changes still occurring in the natural gas industry require that United Cities continue to have the flexibility that is currently inherent in its approved PGA rider. (Testimony of Sires, p. 6, ll. 1-8.). Mr. Sires also stated that he concluded that United Cities has continued its attempts to obtain the best terms available in negotiations with suppliers and in proceedings with the Federal Energy Regulatory Commission ("FERC"). (Testimony of Sires, p. 7, l. 3-10.) Mr. Sires also

opined that United Cities is operating the PGA Rider in compliance with Commission Orders. (Testimony of Sires, p.1, l. 21 - p.2, l. 7.).

Mr. Sires further testified that United Cities has demonstrated prudent actions in maintaining adequate supplies at just and reasonable costs. Mr. Sires pointed to several areas in support of his conclusion. First, Mr. Sires stated that United Cities has not experienced loss of sales to industrial customers with alternate fuel capabilities.

Secondly, Mr. Sires stated that United Cities' forecasted firm Peak day requirements are 8,865 Dth and that United Cities' has firm demand entitlements under contract with suppliers of 9,005 Dth. Mr. Sires stated that the Utilities Department believes that United Cities has made prudent decisions in meeting its supply requirements for its firm customers' demand entitlement and in competing in the competitive alternate fuel market. (Testimony of Sires, p. 8, l. 8 – p. 10, l. 16.).

Based on the evidence presented at the hearing, the Commission concludes that United Cities' gas purchasing practices and policies are hereby found to be prudent.

Therefore, based on the Commission's Findings of Fact and Conclusion set forth above. IT IS THEREFORE ORDERED THAT:

- 1. A Balancing Adjustment of (\$0.0106) per therm applicable to Firm customers and (\$0.0041) per therm applicable to Optional or Interruptible customers is approved for United Cities for the next review period and shall be effective with the first billing cycle in November 1998.
- 2. The Company's Gas Purchasing Policies and Practices are hereby found to be prudent.

- 3. No changes are needed in the Gas Cost Recovery Procedures of United Cities, and the present procedure shall continue.
- 4. This Order shall remain in full force and effect until further Order of the Commission.

BY ORDER OF THE COMMISSION:

Chairman

ATTEST:

Executive Director

(SEAL)

Western Kentucky Gas Company Case No. 99-070 KPSC Data Request #2 Dated August 19, 1999 DR Item 52 b-d Witness: Gary Smith

Data Request:

Refer to the response to Item 51 of the Commission's July 16, 1999 Order.

- b. The special contracts Western currently has produce average margins of less than \$.13 per Mcf. Discounts from tariff rates in the form of "additional contract reformation" exceed \$1 million. How much of Western's load (in Mcf) not already served at less than tariff rates is subject to competition or possible bypass? How much net revenue was generated from these loads during fiscal year 1998?
- c. The proposed tariff rider does not include a starting point, or base amount, reflecting the margins, or net revenues, derived from the loads already served at less than tariff rates or those loads served at tariff rates that are subject to competition or possible bypass. If a base level, or starting point, from which to measure the "margin losses" is not included in the tariff, explain why such an omission will not result in an immediate loss calculation based on the proposed formula.
- d. Based on the revenues from existing contracts, discounts and rate flexes, along with the revenues from loads that could be subject to less than tariff rates in the future, provide the total dollar amount of margins, or net revenues, for the forecast period that would reflect the type of base level, or starting point, described in part (c.) of this request.

Response:

b. Western cannot accurately quantify the total load that is subject to competition or possible bypass.

As shown on Exhibit GLS-1, column (d), line 31, the volume under special contract during fiscal year 1998 was 13,230,373 Mcf. Contract volume adjustments of 101,730 Mcf were added in column (f) of Exhibit GLS-1, and in the response to this, the KPSC's second Data Request, Item 47 a, Western identified 2,781,219 Mcf served under tariff rates in fiscal year 1998, but expected to be under special contract rates in the test year of 2000.

Western Kentucky Gas Company Case No. 99-070 KPSC Data Request #2 Dated August 19, 1999 DR Item 52 c Witness: Gary Smith

Thus, the test year includes a total of 16,113,322 Mcf under special contract rates. This represents 57% of Western's total industrial sales and transportation deliveries during the test year.

One difficulty in assessing Western's test year volumes vulnerable to physical bypass is that competitive conditions can change. For example, individual customers, whose current consumption alone would not appear to warrant their investment in bypass facilities, could unexpectedly join forces with neighboring industries to economically justify shared facilities.

Regardless, however, of Western's inability to quantify this vulnerability, it is our belief that, under current market conditions and transportation rate schedules, the volumetric risk for bypass threats among tariff customers is much less than those volumes already served by Western under special contracts.

c. It is not Western's intent that the proposed Margin Loss Recovery ("MLR") Rider would result in the immediate loss described in this question. Western's intent is to define the factor NGPM, the "normally applicable distribution charge" (reference Original Sheet 29L of Western's proposed tariff) as the rate schedule applicable to a specific customer in the test year of this Case. Prior to recovery of losses through the MLR, it would be Western's responsibility to provide necessary documentation to the Commission to support the NGPM, as included in the test year for a specific customer.

Please refer to Westerns responses to the First Attorney General Data Request, dated August 19, 1999, Items 112 and 159 for various examples of the calculation of losses recoverable through the proposed MLR.

d. Please refer to the responses to sub-parts (b) and (c) of this data request Item.

Western Kentucky Gas Company Case No. 99-070 KPSC Data Request #2 Dated August 19, 1999 DR Item 52 e Witness: Smith

Data Request:

Historically, between rate cases, Western's shareholders have been at risk for 100 percent of lost margins due to competition, bypass, etc. and Western, in response to competitive circumstances, has had to make rate concessions in several instances. Explain how having shareholders at risk for only 10 percent of lost margins will provide Western an incentive to maximize the revenues from its special contract, alternative fuel, and potential bypass customers.

Response:

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Western provides service to the public - residential, commercial and industrial customers. That is, Western incurs fixed, joint and common costs to meet its public service obligation to all classes of customers. Western's shareholders have already incurred risk once by making an investment to meet that obligation. Should the realities of the market necessitate discounting in order to maintain some contribution in support of these fixed, joint and common costs, there is no reason Western's shareholders should incur further risk. The beneficiaries of the discounting are all of the customers on whose behalf all fixed, joint, and common costs are incurred. Consequently, the costs of discounting should be assigned to those receiving the benefits from discounting.

Nonetheless, Western has proposed to bear 10% of these costs in lieu of none at all. Western has made this proposal as an act of good faith that it will work to maximize negotiated margins.

Western Kentucky Gas Company Case No. 99-070 KPSC Data Request #2 Dated August 19, 1999

DR Item 53 a-c Witness: Smith

Data Request:

Refer to Item 52 of the response to the Commission's July 16, 1999 Order.

- a. Under the transition schedules for the pipelines when would Western began collecting Gas Research Institute (GRI") surcharges from its customers?
- b. How does Western intend to notify the Commission that it will begin to make such collections?
- c. GRI is involved in numerous research and development activities. Provide the most recent GRI annual report that details its activities and its levels of expenditures.

Response:

a. Western has been collecting GRI costs from its customers through the GCA for many years. The GRI R&D Rider will gradually shift the collection from the GCA to Western's proposed distribution charge. Western will make this transition according to the pipelines' schedules; that is, as billed by the respective pipeline. To begin collecting the GRI R&D surcharge as Western has proposed, the Commission must first establish a distribution charge for Western in this case. Western would then annually request an adjustment to the distribution charge coincidental with the change in the applicable pipelines' transition schedules.

It is important to note that if, as of 12/31/98, a pipeline had already discounted its GRI surcharge to Western, then there is nothing to transition for that pipeline. In Western's case, Texas Gas Transmission and Trunkline Gas Company have already discounted their price below the level of the GRI surcharge.

- b. Western will annually notify the Commission of the shift of GRI R&D cost recovery from the GCA to the distribution charge through an adjustment filing. As a GCA cost reduction associated with the GRI R&D cost shift is filed, a corresponding increase in Western's distribution charge will be filed at the same time.
- c. See GRI 1998 Annual Report as attached.

Annual Report

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About the Cover

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Corporate Profile

Gas Research Institute is entering a new era in research; development and commercialization activities in gas and related energy markets.

Over the next several years, we will undergo a major shift in our, but a business focus—breaking aways from a centrally funded; planned and managed cooperative program to also pursue a new portfolso of

The transformed business will focus on meeting the technology needs and priorities of customers who make investments in return for the same transfer GPI can delivery others.

STEPHEN D. BAN President and CEO



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- Gas Research Institute Vision

comprehensive research, development and commercialization program for the natural gas industry. The program has two components: a cooperative program to deliver technology, information and technical services that can be widely applied to benefit the gas industry and customers; and a commercial program, in which individual companies and consortia partner with GRI to develop technology, services and information that meet business goals, improve competitiveness and benefit customers.

Exploration and Production Business Unit

Pipeline Business Unit Distribution and End-Use Business Unit

"Customers" are the exclusive focus of GRI/s new three-unit business structure. Each business unit serves customers in one of three main natural gas industry segments—producers, pipelines, or investor—owned and municipal distribution companies.

FINANCIAL AND OPERATING OVERVIEW

Financial Highlights (in millions)

	December 31, 1998	December 31, 1997
Total Revenues	\$153	\$186
Total Managed Program	\$236	\$291
Number of Members	329	334
Number of Employees	169	187

Operating Highlights

- >> Adopted new performance measures that focus on customer satisfaction, earned revenues, net margins, and new business contracts.
- Received Federal Energy Regulatory Commission (FERC) approval of a settlement that provides \$689 million for natural gas industry RD&C during a seven-year transition to a voluntarily funded program.
- Introduced 30 new gas-related products, including a new process for treating mineral-laden produced water: an optical methane detector for rapid. mobile leak detection: and a low-NO_x combustor for gas turbines.
- >> Conducted, with Board participation, an extensive business review that led to implementation of a new Business Strategy and Plan.
- >> Reorganized into three business units, each fully dedicated to important customer groups.
- >> Expanded the marketing and sales staff to strengthen customer focus and establish a new presence in Houston and Toronto.
- ⇒ Generated more than \$12.5 million in new business in 1998.
- Successfully closed on nearly 40% of GRI SelectSM offerings, one of several new commercial programs introduced to expand customer choice.
- >> Formed several new strategic alliances and partnerships with complementary technical organizations.
- >> Launched several state initiatives to obtain voluntary funding for research that yields results of broad benefit to the gas industry and its customers.
- >> Established CRI CanadaSM, an affiliate that was selected to manage research programs funded by the Canadian natural gas industry.

98 Gas Research Institute Annual Report

ROBERT B. CATELL Chairman of the Board

CHAIRMAN'S/PRESIDENT'S

Nineteen ninety-eight was fast-paced, challenging, and eventful.

Early in the year, we reached a Settlement that continues traditional Federal Energy Regulatory Commission (FERC) surcharge-based funding at a declining rate from 1998-2004.

By year-end, we had moved ahead rapidly on several fronts to transform GRI into the commercially oriented, voluntarily funded company it needs to become by 2005.

Throughout the year, our primary focus was on two demanding tasks:

- Continuing to provide good stewardship of our traditional research, development and commercialization (RD&C) programs by delivering gas-based technical solutions that provide benefits to customers and heip ensure that gas retains its dominant position in the energy market.
- Implementing new business practices that will accelerate GRI's transformation into a completely different organization—capable of obtaining sustained support and new revenues to develop valued technology. This means competing, selling, and winning in the marketplace. Over the next two years, we plan to prove this can be done.

BREAKING AWAY

REAKING AWAY

In selecting this year's annual report theme, we wanted to call attention to the ways in which we are breaking away from many of our traditional business practices and adopting new approaches that will enable us to better serve customers and create sustainable; long-term growth for GRI

Some customers have already seen results from a few of these new initiatives. We are confident other customers will soon come to realize they are dealing with a different organization—one that is more customer-oriented and bottom-line focused.

GRI's most important undertaking in 1998 was to develop and implement a new Business Strategy and Plan. GRI Board members on the Strategic Planning Committee (Ted Davis, Stan Horton, Warren Mitchell, John Stinson and Bob Catell) contributed significantly to the development of a set of options that ultimately led to the Business Strategy and Plan. This document is our road map to a new era in GRI RD&C activities for gas and related energy markets. As part of our effort to begin carrying out this plan in 1998, we also

Reduced the number of business units to three, each focused on serving one of the three main industry segments; producers, pipelines investor-owned and municipal distribution companies.

Added new skills, including an expansion of the sales and market ing staff. The additions strengthen our customer focus and comple-tion of the strength of the past lew years by our regional cus-ment the activities initiated in the past lew years by our regional customer, relations managers and technology transfer agents in the field.

Son Generated more than \$12.5 million in new journess in the secon light of the year including three new contracts to public benefits work in California as well as successful closings on nearly 40 % of GRI SelectSM offerings one of a number of new program choices made available to our customers for the first time in 1998 was a value of the first time in 1998.

Launched an initiative that seeks the support of municipal and investorowned utilities for maintaining their current GRI contributions—even as collections of FERC surcharges are reduced. The early results from this initiative have been encouraging. We are especially grateful to the American Public Gas Association for its leadership in rallying the support of the nation's public gas systems for voluntary funding of programs that meet their needs.

On the pages following this letter, we will share with you more highlights of 1998 activities, including details of how we are

Transforming GRI, Expanding Customer Choice, and

Leveraging Our Resources through New Alliances and Partnerships. We also invite you to review pages 16-19, which document some of our 1998 successes in **Delivering Technical Solutions** to our customers.

CONTINUING THE TRANSFORMATION

Transforming GRI into a customer-driven, commercially viable business is our objective. GRI faces significant challenges as it repositions its business to earn new revenues, implement programs, form new alliances for technical and information services, and achieve solid returns on products and new ventures.

Meeting new financial goals is essential to our future success. For example, one of the most demanding 1998 goals is to win \$25 million in new commercial and government business, nearly double the value of new business captured in 1998.

Achieving these targets won't be easy. There are fewer resources to work with than in 1998. Progress could also be impeded by the intense competition under way in energy markets, compelling the gas industry to focus almost exclusively on near-term alternatives. Although most in the industry see the need for more R&D with broad applications, funding for such work continues to shrink. Industry time horizons are also shorter than they have ever been, and technology needs are becoming more narrowly defined in an increasingly fragmented industry. However, we are convinced GRI's mission is an important one that has the support of the industry sectors.

In this changing environment, GRI's Board-approved Business Strategy and Plan provides a direction and basis for guiding decisions and creating a new, more business-focused culture at GRI. The Plan offers GRI more flexibility in shifting its resources to meet the rapidly changing needs of the industry and its customers. For example, in the course of developing the Plan, we recognized that it is no longer realistic for GRI to pursue broadly disseminated results through programs that are voluntarily funded by only a portion of the industry. As a result, there will be fewer resources focused on broad industry issues and more on the needs explicitly stated by specific sectors in each segment of the industry.

We are confident that the GRI staff have the capabilities and resources to overcome the obstacles. As an organization, we are looking forward to being judged by new performance standards that are similar to those used by our customers—market impact, customer service, and revenue growth.

Nineteen ninety-eight was marked by rapid change and significant accomplishments at GRI. The foundation for future success is now in place. The challenges are already being confronted in 1999, a year that will be critical as GRI continues the transition to a sustained technology business that delivers targeted benefits to gas customers and participating investors.



STEPHEN D. BAN esident and CEO



(L.to R) Jose Costa, customer relations manager based at the New England Gas Association, is helping strengthen business relationships at the regional level. With Costa are Jeffrey Yundt, Bay State Gas Co. president and CEO/NIPSCO Industries, Inc. executive vice president; and

TRANSFORMING

GRI for success

GRI moved ahead rapidly in 1998, breaking away from traditional practices and setting in motion initiatives to transform GRI into an organization that is more self-reliant and competitive in attracting revenues for its commercial products and services.



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- Formed several new strategic alliances with aligned technical organizations.
- Introduced a new commercial program, called GRI SelectSM.

 Revised GRI's research investment strategy to include options for equity ownership and commercialization participation, instead of just royalties and cost recovery.
 - Completed an extensive management review of operations, structure and market potential.
 - Implemented new accounting and costing procedures.

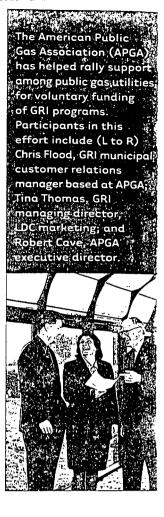
MARKETING AND SALES

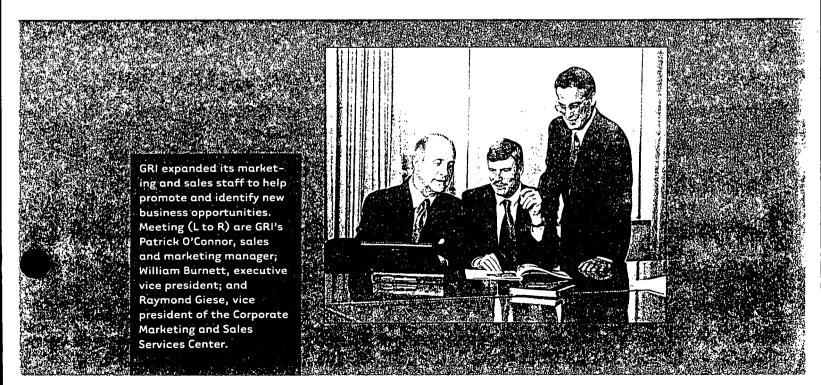
To help promote and identify new business opportunities. GRI brought in new expertise in marketing to staff its

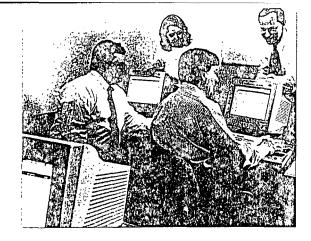
Corporate Marketing and Sales Services Center: As vice president, Raymond Giese, formerly corporate manager of customer partnerships at Waste Management Inc., will lead GRI's expanded marketing and sales effort. In addition, GRI assigned sales managers to complement the technical and project management skills in each business unit.

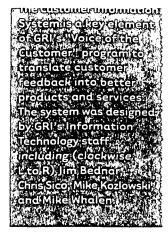
The Center will identify specific customer needs and preferences, develop new products and services that meet those needs, and oversee marketing and sales plans to ensure customer acceptance of these products and services.

One of the Center's most important accomplishments in 1998 was to create a "Voice of the Customer" program to systematically collect and interpret the "messages" customers give GRI in various ways. This feedback is being captured—along with up-to-date views of customer interactions—in a companywide automated Customer Information System that is being implemented. The database will increase GRI staff effectiveness in identifying new products and services of greatest interest to customers and developing successful marketing and sales plans.









NEW BUSINESS UNITS

CRI's three new business units—the Exploration and Production

Business Unit. the Pipeline Business Unit. and the Distribution and End-Use

Business Unit—will focus exclusively on developing and applying technologies of value to the industry segments they serve.



To support the refocused agenda of the business units. GRI also made several leadership changes, including the selection of Terry Keane (left), previously vice president of worldwide sales and operations at Smith International Inc., Houston, as vice president and general manager of the Exploration and Production Business Unit.

As restructured, each business unit now has the tools and staff required to develop programs that meet the needs of their clients. These programs include:

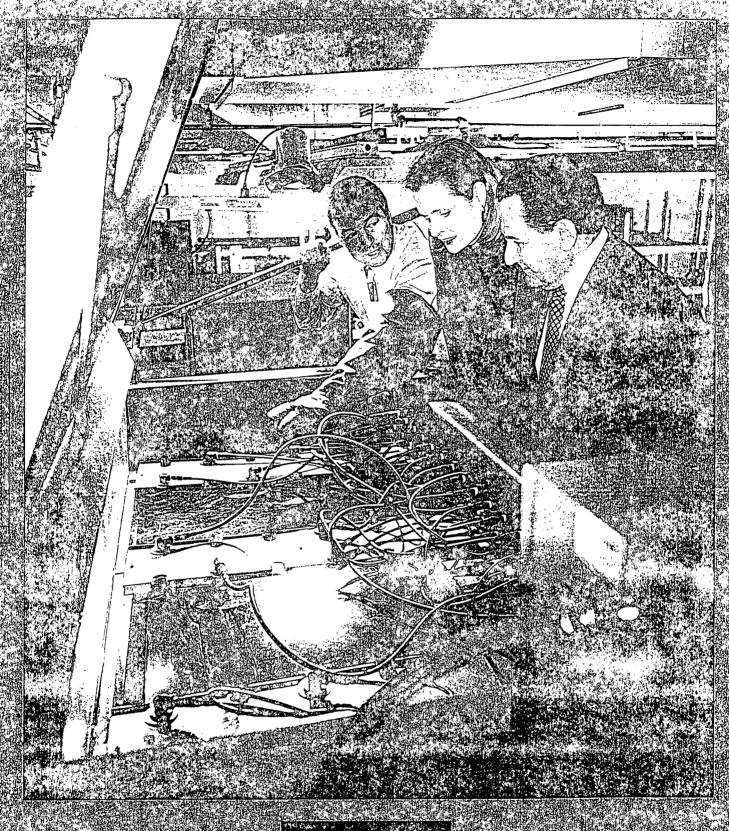
- A "core" research program (funded through FERC-approved surcharges) in which results are broadly beneficial to the industry sector and its customers.
- Commercial programs in which individual companies or groups gain proprietary and preferential benefits by voluntarily investing in projects that improve their competitiveness.

Each business unit has more flexibility to initiate business arrangements that improve channels to the market and create more effective ways of delivering technology, information and technical services to customers. The result will be new opportunities for GRI to expand its customer base and diversify its revenues.

Improved "delivery channels" are expected from three principal activities:

- Consortium-based RD&C programs and project management services aimed at reducing operating costs or adding new gas-use applications.
- Technical and information services that address short-term customer needs, such as testing and certification of operating equipment, consulting and engineering services on environmental issues, and market assessments.
- Licensing and royalties revenue from equity research investments in new alliances and partnerships, created to develop and commercialize new technologies and information products.

In 1998, GRI launched a number of activities in each area. The following pages highlight some of these activities. Featured is a discussion of the increasing number of options available that give customers more choice for participating in programs, individually or through consortia. Also detailed are several new alliances and partnerships.



The Utility Solutions:
Laboratorys, an alliance
between IGT and GRI,
provides a dedicated lab
for "one-stop" services.
(Lito R) Laboratory
Director Steve Gauthier
of IGT with Maureen
Droessler, Principal
Analyst, and Mike
Mamoun, USL Technical
Directors of GRI

EXPANDING

customer choice

A strong voice and more choice. Customers want both to ensure that GRI programs meet their needs. GRI has responded by making customer choice a principal tenet of its Business Strategy and Plan.



Gustomers can choose from a portfolio of attractive options and direct their investments into high value GRI products services and information that address their business needs after number of options will increase as

that address their business meeds. The number of options will increase as incr halfaddress the ibspecific compensive needs

> FERCR&D Program Mutual Funds (Customers can now help mold GRU score program funded throughth, such are pased more than a provided the funder of the following pased more than a provided by the Federal Energy Regulatory Commission (FERCO). Energy and the Federal Energy Regulatory Commission (FERCO). Energy and the Federal Energy Regulatory Commission (FERCO). The funder of the funder of the following and the funder of and health-reducing gas industry operational-costs increasing gas system reliability and efficiencies increasing gas system reliability and efficiencies increasing gas upply momenteging resources and improving the efficiency of gas uses.

Non-FERC R&D Program Mutual Funds With their own ments icompanies can select from a second group of the snon-R&D/mutual funds «Fachifunds eagures 22-0 projects on spic from procundfallation and space cooling to distributed powers supplyiplanning and valuables; cowing the second may not be supplying an advantage of the control of the second may not be supplyed as the second may be supplyed to the second may be s

programs on hydrocarbon dewpointing (in gas processing), gas production from shale formations, and improved practices for gas-main excavation and site restoration. Last year, nearly 40% of the offers presented through GRI Select closed successfully.

- > Custom Technical Solutions. GRI provides specialized project management and technology transfer support to individual member companies. Companies can tap into GRI to support their customers by utilizing GRI staff knowledge of new technology that meets both customer needs (i.e., efficiency, productivity) and business objectives (i.e., customer satisfaction, market development).
- Regional RD&C. GRI also facilitates cooperative RD&C approaches that address industry issues and trends, market needs, climate factors, or energy supply issues specific to a given region. To better serve the exploration and production community, three GRI regional technology transfer agents operate out of Denver, Oklahoma City and Houston to learn producers' problems first hand and bring GRI solutions to the table. These agents relay hot topics to GRI for development and deployment of technologies that meet producers' needs. GRI's regional customer

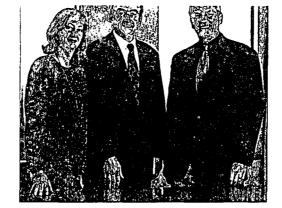


relations managers, located at the Pacific Coast Gas Association, Southern Gas Association. Midwest Energy Association, New England Gas Association, and American Public Gas Association, work closely with utilities and pipelines that are members of these associations.

GRI facilitates cooperative RD&C approaches that address industry issues, trends, and needs specific to a given region. (L to R) Regional Tech Transfer, Agent Tom Sifferman in Houston and GRI's Bob Stayton.

As partion the enforce expand customer choice, new GRI, alliances and partnerships have:
been discussed to other customers, one; stop addess to a wider angelof technical expertise;
services, products and information that can be customized to the individual client speeds.

Finrouph an alliance with the Institute of GasTechnology (IGT)). CRI purily offers contract escarcingers of electronious trail combustion systems and echnical services to local distribution companies on topics angine from pipping installation trails management and managed less complete the Institute process and the appropriate trails and the Institute process and the appropriate trails and the Institute of Institute of Institute and Institute of Institute



profitability and success while satisfying its customers' needs. (L to R) Managing Director Vicky Sharpe and President Vince Fiore of GRI CanadaSM, with Steve Ban, GRI president and CEO.

GRI/IGT alliance, provides a dedicated lab for product and materials testing, engineering services and new product development. As part of the laboratory's effort, the **Utility Partners Program**SM offers customized, proprietary technical services to solve utilities' operations problems, provides project management for process or product implementation and conducts technical and economic feasibility studies.

>> Through the **Environmental Center for Site Management Solutions**, GRI and IGT have pooled their expertise and that of selected alliance partners to give members a full range of products and services to help them make the best and most cost-effective decisions on contaminated site management.

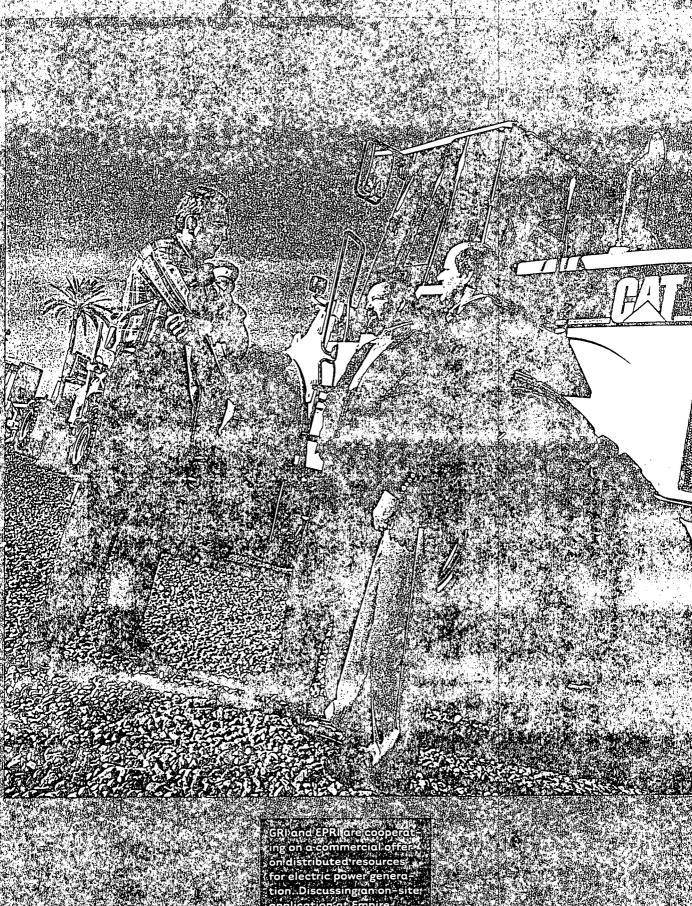
GRI also offers customers a variety of analytical tools that are valued for their usefulness.

- > Strategic planning and establishing budget priorities for the GRI program and the gas industry require an understanding of the energy future in which gas technologies must compete. To meet this need, GRI compiles an annual **Baseline Projection of U.S. Energy**Supply and Demand, which serves as (1) a planning tool for the gas industry, (2) the strategic outlook used in the GRI planning cycle, and (3) a GRI business development tool.
- >> GRI provides market intelligence on customer attitudes; energy supply/demand/price trends; regulatory issues; and technology-related policies of value to many players in today's energy market.

Over the past two decades, GRI has actively participated in the international natural gas R&D community, exchanging information, cofunding projects and transferring technology with its 28 associate members and other worldwide technology leaders. Following are some exciting new international activities:

- >> GRI created a Global Technology Transfer Alliance to provide North American company participants with first access to, and use of, advanced foreign technologies to improve gas operations. Based on licensing terms, GRI will move promising technologies to markets by conducting development, testing and commercialization activities.
- » In June 1998, GRI established **GRI Canada**^{5M} to deliver high-value technology, information, and technical services to gas and related energy markets in Canada and North America through cooperative RD&C endeavors. The objective of the affiliate is to work with the Canadian natural gas industry to enhance the industry's profitability and success while satisfying its customers' needs.
- >> In January 1999, GRI became the operating agent for the International Energy Agency Center for Gas Technology Information.

 This center, supported with funding from 13 countries, provides worldwide gas technology information.



GRI and EPRILATE COOPERATING ON a commercial offer onld stributed resources for electric power generation. Discussing an on-site application at Empire. Southwest, a Caterpillar dealership in Mesa; Ariz are (Eto'R) Dan Kincaid GRI, Rod Hite Southern California Gas Co; and

LEVERAGING

resources through new alliances, partnerships

GRI broke away from tradition in 1998. Alliances and partnerships—once created exclusively to deploy and commercialize GRI-sponsored technology—took on new forms.

Today shourcefforts only getjibe go ahead alubeylaccelerate market pene-tration to the most wal table technologies, deliverabe dighest rate of stetum. minvestments of make ase of the skills of the GRI static better leverage. esources and deliverigreater value to customers. The new relationships are more strategic and flexible, and are tundamentally changing the

 □ GRI and EPRI. have councied a number of projects

1998 marked the first ime the two organization, have learned

market and market assistate scally targeted commercial offer. ompanieshad acmmines nearly s l'million vo share access acimar kej intellience on enterprise the redesource components and stems for electrical ung technologies Amone the investors are Southern California Gas Go . New ide Gas Gorp Kansa Gity Power & Lapin City Public MeTemese Valley Authority Tokys Cas Company Ltd.; Barbadot S Power Co Ltd. and the Dany and Manny Power Cooperative.

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Riand New York State Energy Research and Development Authority

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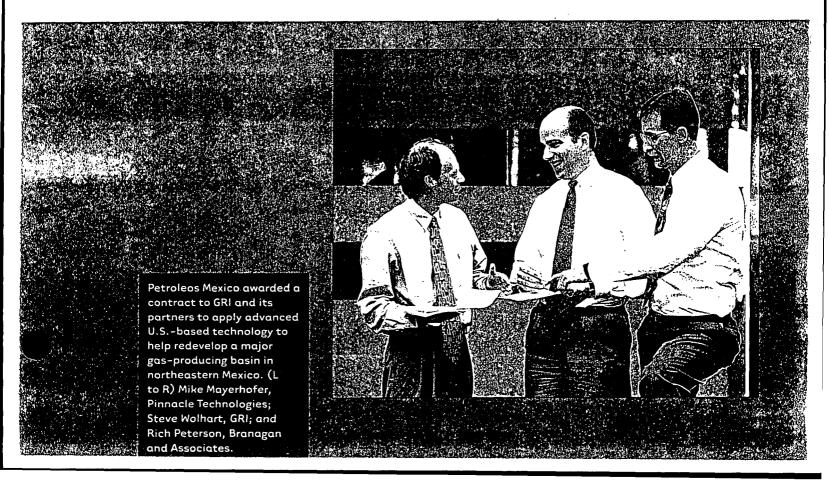


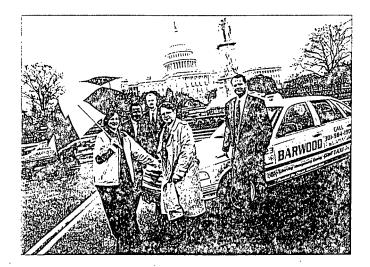




wood waste and gas in cogeneration boilers, with minimal emission of nitrogen oxides; and targeting the removal of market barriers to absorption cooling. Funding is through the Public Interest Energy Research (PIER) program, which encompasses most of the public interest electricity-related R&D responsibilities once held by the state's electric utilities.

- » In the Exploration and Production area, GRI has established six **Joint Industry Partnerships** (JIPs), in which consortia hire GRI to manage specific projects, and GRI provides cofunding to advance its core program. JIPs differ from GRI SelectSM offers, which are fully funded by investors. JIPs launched in 1998 involve drill cuttings injection, fracture imaging, produced water re-injection, and through-casing well logging.
- Doors to the important Mexican market were opened when Petroleos Mexico (PEMEX), the state-curred oil company, awarded a contract to GRI and its partners, Pinnacle Technologies, San Francisco: Branagan and Associates Inc., Las Vegas; and Geomechanics International, Palo Alto. Calif. The project involved applications of the latest U.S.-based technologies to help redevelop a major gas-producing basin in northeast-ern Mexico. The GRI program developed several of the technologies, including hydraulic fracture mapping (using downhole tiltmeters and microseismics) and FRACPRO[®], a fracture treatment modeling software.
- SRI and the National Aeronautics and Space Administration joined forces in a three-year program to develop an advanced robotics system that will repair "live" natural gas lines from inside the pipe. A robotics system would eliminate service interruptions caused by gas shut-off and reduce disruptions from major excavations. Utility savings from a robotics system could be as high as 50 percent vs. conventional repair methods. Development and testing will be at Carnegie Mellon University's National Robotics Consortium, Pittsburgh, and Maurer Engineering, Houston.





GRI and the Metropolitan
Mashington Council of the
Governments (MWCOG)
are working to replace high pollution fleet and publics, transportation vehicles. With a matural gas-powered cab, are (L to R) Rajeana Gable.
GRI team leader, NGVs;
Daivamani Sivasailam, principal transportation engineer, MWCOG; Timothy Sheperd; public health engineer. Maryland, Department of the Environment; Lee Barnes (with NGV cab) president; Barwood Cab Co. and Thomas P. Foltz, president, Clean Fuels Strategies, Inc.

SRI and ARCADIS Geraghty & Miller, Inc.]. Mountain View. Calif., formed Acurex Energy Systems, a for-profit alliance, to commercialize gas cofiring in stoker boilers. The alliance builds on the success of stoker cofiring as demonstrated by GRI in more than a dozen installations for coal and wood waste-fired boilers. Cofiring technology offers boiler operators significant improvements in operations, efficiency and environmental impact while providing the gas industry with new loads that would not otherwise be available.

SGRI. EPRI and the architect-engineering firm of Daniel, Mann,
Johnson & Mendenhall. (DMJM). Los Angeles, formed Global Energy Partners LLC, a for-profit company, to offer program management services to public agencies that fund energy efficiency projects. Primary targets are states with charges that fund public benefits programs as well as the federal government and federal facilities managers.

» In 1998, GRI moved beyond its traditional role as a cofunding partner to become the primary contractor on several projects. This new approach gives GRI another way to apply its advanced technical know-how and project management expertise.

For the first time. GRI became prime contractor on two projects with the U.S. Department of Energy (DOE). traditionally a ccfunding partner. Under one agreement, GRI is managing the DOE Clean Cities Technology Initiative projects. This includes administering grants for programs that advance natural gas transportation applications and related infrastructure technology. Projects include an evaluation of the environmental impact of converting 46 ferry vessels to compressed/liquefied natural gas in Poston and New York City harbors, and development of advanced conversion technology on a compressed natural gas shuttle bus for use at the 2002 Winter Olympics in Salt Lake City. GRI's second DOE contract is for a multiyear program with John Deere, Mack Trucks Inc. and Cummins Engine Company Inc. to develop a natural gas spark-ignited, lean-burn engine that significantly improves fuel efficiency.

>> In 1998, the Metropolitan Washington Council of Governments Advanced Vehicle Replacement Program selected GRI to manage an ambitious project to replace high-pollution fleet and public transportation vehicles, including cabs, buses and trucks, with alternative-fuel vehicles (including natural gas), and to expand the supporting infrastructure. Public and fleet vehicles serving Reagan National and Duiles International airports are prime targets.



Co. uses the van-mounted Optical Methane Detector to locate gas leaks rapidly GRI's Paul Beckendorf (Center) examines the OMD with Don Kunze (L) prace tice and procedures specialist, and George Ragula distribution technology manager, both with PSESG.

DELIVERING

technical solutions

During 1998, thirty GRI products, information and technical services entered the market, designed to help our customers break away from the competition. Here's a sample.



FINDING AND PRODUCING NATURAL GAS

GRI projections indicated annual demand for natural gas could reach 31 trillion cubic feet by 2015 (compared to about 23 Tcf in 1998) / h 1998 (several/GRI projects related to gas exploration and production achieved key milestones — 124 (1997)

> For the past five years, the Greater Green River Basin of Wyoming has drawn increased attention from producers leager to exploit the natural gas locked in tigh (low-permeability) root formations from this reason. GRI has been teaming up with producers the US. Basin Department of Energy (DOE) and several universities to define the barriers that hinder efficient gas production indito develop technology to overcome them Major field programs in 1990 continued to evaluate ways cointegrate production. Well-log and CD estimates data to better characterize complex reservoirs simultaneously the extract minerals as well as natural gas without geopardizing mine safety or harming the environment, and identify sweet spots (promising gas deposits) within the basin GRI's printed reports CD-ROMs ratiases. Workshop Web-based resources and technically presentations are helping producers learn quickly how to apply cooperative research results.

Mineral-laden produced water that sprought to the surface long.

with natural gas accounts for more than 80% of all waste generated during gas production. Gonventional approaches to water management and disposare often costly, but the Freeze-Thaw/Evaporation (FTE*) Process can help Based on research ponsored by BP Amoco Production. Gompany (DOE) and GRI, the first commercial III E planting built in 1998 The process relies on naturally occurring remperature wings around the recent grants of terrately built and metal reception of the first commercial in the process relies of the process relies on the process of the process relies on the process of the process relies on the process of the process relies of the process of the process of the process relies of the process of the process

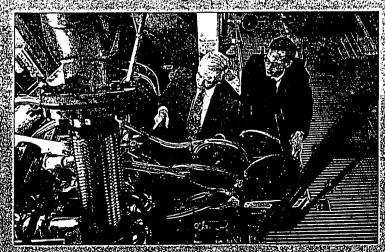
A 1898 Gas Research Institut

KEEPING THE GAS FLOWING

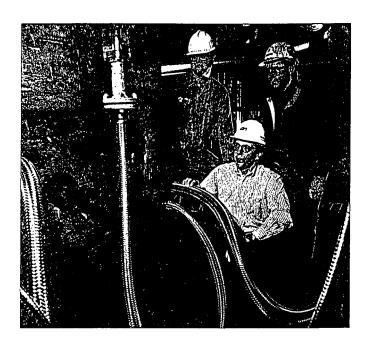
More than 1.2 million miles of pipe carry natural gas from the wellhead to energy customers. GRI progress on several fronts is helping ensure continued reliable, safe and cost-effective gas delivery.

- » Brought to market in mid-1998 by Heath Consultants Inc., the Optical Methane Detector (OMD™) sharply improves the productivity of gas utility personnel who track down leaks from buried gas mains. A utility van using the OMD can travel three to five times faster than conventional mobile leak-detection systems. An infrared beam shining across the front of the vehicle detects methane in concentrations as low as I part per million, taking 10,000 measurements per second. The system topped the list of '1998's Hottest New Products and Services' compiled by Gas Utility and Pipeline Industries magazine.
- > In early 1998, Allison Engine Company introduced a novel dry low-NO_x combustor for use with the company's 501K gas turbine. The 5,500-horsepower turbine is widely used for driving compressors that move gas through the U.S. interstate pipeline network, as well as for industrial power applications. Developed in collaboration with GRI, the "dry" combustor design suppresses formation of nitrogen oxides (NO_x) to levels that meet most U.S. emission regulations. The combustor does not use water injection or selective catalytic reduction, so costs of water treatment, catalyst replacement and ammonia use are avoided.
- The gas industry uses more than 40,000 glycol dehydration (dehy) units to remove unwanted moisture from raw natural gas. In the process, traces of organic compounds are also removed. In 1998, the U.S. Environmental Protection Agency (EPA) proposed new regulations requiring control of dehy emissions, and GRI played a major role in shaping those regulations. GRI developed software and information products that resulted in less costly, yet still scientifically sound, methods to evaluate dehy emissions and the effectiveness of dehy emission controls. A GRI software product called GRI-GLYCale™ came out of that research—a tool now referenced in the EPA standard as an acceptable method for estimating both dehy emissions and control efficiency. In addition, through consultation with industry and regulatory officials, GRI developed technical reports that impacted provisions in the standard regarding compliance monitoring and reporting.

This low-emission gas turbine powers a compressor that keeps gas flowing at the Woodstock, Ill., station of Coastal Corporation's ANR Pipeline Company. David Van de Bogert (L), station superintendent, and GRI's Mike Whelan discuss turbine performance.



Salar Salar



technology is reducing emissions at ComEd's Joliet, Ill., power plant. GRI's John Pratapas (Center) checks FLGR operation with ComEd's boiler expert Rich Meskimen (L) and Jim Herzau, senior engineer, fossil planning.

MEETING ENERGY SERVICE NEEDS WITH NATURAL GAS

Customers want efficient, convenient and flexible energy service at a competitive price. Two innovative products from GRI that meet these needs came to the market in 1998.

>> Following five years of GRI-supported research, the

True2Way™ remote gas-meter interface entered the energy market-place to capitalize on the growing need for advanced, cross-functional gas, electric power, and telecommunications services. The retrofittable electronic unit from Whisper Communications Inc., can exchange data with a utility or energy provider to help reduce operating costs and enhance customer service. More than one million of the units have been ordered by an Illinois energy services company; and in early 1999, the meter interface passed key customer compliance tests. GRI continues to support R&D on the meter interface and on similar modules for individual appliances. Obvious immediate applications are remote meter reading and evaluation of customer gas-use profiles. In the longer term, other high-value services are also likely: automated appliance turndown to aid in load management: remote gas shutoff in emergencies; and continual monitoring of the physical condition of furnaces, water heaters and other appliances.

Departors of coal-fired power plants now have two more costeffective, gas-based options for meeting increasingly stringent limits on emissions of NO_x. In a process called gas reburning—pioneered by GRI in the 1980s—15-20% of the coal heat-input is replaced by natural gas, injected above a boiler's main burners. This leads to chemical reactions in which NO_x in flue gases is chemically reduced by up to 75%. Burnout air injected downstream completes the combustion process without reforming NO_x. In 1998, two companies brought new and improved variations of the process to market: **Fuel-Lean Gas Reburning** (FLGR); and **Amine-Enhanced Fuel-Lean Gas Reburning** (AE/FLGR™). ESA Environmental Solutions LLC, and Fuel Tech, Inc., are co-licensees of GRI-patented FLGR, which reduces NO_x by 30-45%. Fuel Tech is the sole licensee of AE/FLGR, which couples urea injection with FLGR for use in

boilers that require NO_x reductions of 60-75%.

FINANCIAL

Highlights

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In 1998, GRI accomplished two major initiatives that will serve as the foundation for financial and operating strategies over the next several years. The first initiative was the April 1998 Settlement with the gas industry and the FERC, which provides long-term funding of \$689 million through 2004. This funding will enable GRI to continue key research programs as well as tackle new programs of importance to the gas industry.

After the Settlement, GRI, with the support of its Board of Directors, launched the second initiative—a comprehensive strategic assessment of its business operations and an evaluation of new opportunities and risks. The conclusion from this effort: GRI can continue to serve as a member-based industry R&D organization if it can establish a new "voluntary" revenue base to offset the decline in funding that will occur under the Settlement. GRI also concluded that meeting demanding financial targets will require organizational changes that will result in a more compelling value proposition, expanded customer choice, and an organization with a stronger entrepreneurial spirit.

For 1998, GRI recorded net revenues of \$153 million, after providing for a reserve of \$31 million for pipeline refunds. Included were new "voluntary" revenues of \$3 million. earned on \$40 million in new business contracts signed in 1998. Total expenses were \$139 million in 1998, including about \$112 million in research and development expenses.

Though the challenge is great, GRI moved in a new direction in 1998. Financial performance metrics for the coming year have been 1998, aligned to generate \$25 million in new business, double 1998 levels.

GRI's vision is clear and its staff are dedicated. The financial state ments that follow reflect GRI's performance for the past two years and indicate the level of financial resources available to meet future goals.

Robert Eady (R), vice president and chief financial officer, heads GRI's Financial and Business Operations.

Susan Jefferis, group manager, audit, directs corporate audit activities and business processes, while Michael Momot (Center) is group manager and assistant controller of the financial



Gas Research Institute

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As of December 31, 1998 and 1997

	1998	1997
ASSETS	· 中国国际发展的	
Cash and Investments:	1.計學的報告的	
Program Funding	\$ 75,441,253	\$ 65,153,617
Pipeline Refund Obligation	30,980,088	18,100,000
Cofunding Obligation	2,938,925	3,268,332
Total Cash and Investments	\$109,360,266	\$ 86,521,949
Receivables:		
FERC-Approved Funding	\$ 30,650,325	\$ 35,641,360
Intrastate Funding	1,105,244	454,539
Interest	486,628	719,790
Other	1,750,239	502,168
Total Receivables	\$ 33,992,436	\$ 37,317,857
	NAME OF COMME	
Equipment and Leasehold Improvements:		
Furniture and Equipment	\$ 10,102,260	\$ 10,140,552
Leasehold Improvements	1,012,746	1,012,746
	\$ 11,115,006	\$ 11,153,298
Less—Accumulated Depreciation		
and Amortization	(7,916,404)	(6,827,215)
Net Equipment and Leasehold		
Improvements	\$ 3,198,602	\$ 4,326,083
Other Assets	\$., 2,393,257	\$ 1,888,263
Total Assets	\$148,944,561	\$130,054,152
	ASSESSED FOR THE PARTY OF THE P	
LIABILITIES AND	- Table 1	
ACCUMULATED NET REVENUES		
• •	3.00	
Direct Project Expenses Payable	\$ 17,068,970	\$ 29,979,588
Cofunding Obligation Payable	2,938,925	3,268,332
Accounts Payable and Accrued Expenses	13,624,706	8,652,298
Pipeline Refund Payable	30,980,088	18,100,000
Accumulated Net Revenues	84,331,872	70,053,934
Total Liabilities and	A STANTON	
Accumulated Net Revenues	\$148,944,561	\$130,054,152

Gas Research Institute STATEMENTS OF REVENUES AND EXPENSES

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For the years ended December 31, 1998 and 1997

	1998	1997
REVENUES		
	CONTRACTOR STATES	
Interstate Pipeline Funding:		
Gross FERC-Approved Funding	\$172,786,885	\$194,711,630
Less: Provision for 1996 Tier I		,,.
Pipeline Refund (Note 3)	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	299,913
Less: Provision for 1997 Tier 1	A CONTRACTOR OF THE PARTY OF TH	
Pipeline Refund (Note 3)	(249,305)	(18,100,000)
Less: Provision for 1998 Tier 1	A Company of	(10,100,000)
Pipeline Refund (Note 3)	(30,980,088)	_
residual (waste a)		
Net FERC-Approved Funding	\$141,557,492	\$176,911,543
.,		, ,
Interest Income	5,772,898	5,289,695
Project Revenues	3,065,036	
Intrastate Funding	769,625	2,039,201
Other Revenues	2,221,316	1,844,029
Total Revenues	\$153,386,367	\$186,084,468
	VARIABLE SE	, , , , , , , , , , , , , , , , , , , ,
EXPENSES		
EXP CROCO		
Research and Development Expenses:		
Market Evaluation	\$ 3,556,539	\$ 3,901,216
Supply	27,984,965	31,610,902
End Use	45,756,206	50,408,270
Environment and Safety	11,750,392	9,028,236
Transmission and Operations	16,265,223	21,275,113
Basic Research	3,613,566	15,023,216
Other	2,987,329	
	\$111,914,220	\$131,246,953
General Expenses:	《中华社》	
Salaries and Related	\$ 14,708,715	\$ 13,404,172
Business Transportation and Meetings	859,252	1,055,442
Purchased Materials and Services	7,405,703	9,219,525
Analytic Contracts	1,566,203	956,863
Other FERC Approved Expenses (Note 2)	2,654,336	
	\$ 27,194,209	\$ 24,636,002
Total Expenses	\$139,108,429	\$155,882,955
ACCUMULATED NET REVENUES	[法院][[[]][[]][[]][[]][[]][[]][[]][[]][[]	
		i
Net Revenues Over Expenses	\$ 14,277,938	\$ 30,201,513
Accumulated Net Revenues,	THE PROPERTY OF	
Beginning of Year	70,053,934	39,852,421
Accumulated Net Revenues, End of Year	\$ 84,331,872	\$ 70,053,934
	CALL CARREST AND ARREST AND THE SAME OF THE	

 $[\]gg$ The accompanying notes are an integral part of these statements.

Gas Research Institute STATEMENTS OF CASH FLOWS

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For the years ended December 31, 1998 and 1997

CASH FLOWS FROM OPERATING ACTIVITIES	1998	1	1997
Net Revenues Over Expenses	\$ 14,277,938	\$ 30,20	1 513
Adjustments to Revenues Over Expenses	7 2 1,211,200	00,20	.,010
for Non-Cash Expenses—			
Depreciation and Amortization	1,089,189	1,542	2,140
Increase (Decrease) in Cash Resulting from Changes in Assets and Liabilities –			i
Receivables	3,325,421	(1,833	5,381)
Other Assets	(504,994)		,429
Direct Project Expenses Payable	(12,910,618)	4,661	,636
Cofunding Obligation Payable	(329,407)		,886)
Accounts Payable and	THE PROPERTY.		, ,
Accrued Expenses	4,972,408	3,701	,560
Provision for Estimated			
Pipeline Refunds	12,880,088	(9,900	,000)
Net Cash Provided by Operating Activities	\$ 22,800,025	\$ 27,796	,010
CASH FLOWS FROM LONG-TERM ACTIVITIES			
Net Sales (Purchases) of Equipment			
and Leasehold Improvements	\$ 2438,292	\$ (3,148	,055)
ACCUMULATED CASH AND INVESTMENTS			
Net Increase in Cash and Investments Cash and Investments, Beginning of Year	\$,22,838,317, 86,521,949	\$ 24,647 61,873	
Cash and Investments, End of Year	\$ 109,360,266	\$ 86,521	

>> The accompanying notes are an integral part of these statements.

REPORT OF INDEPENDENT PUBLIC ACCOUNTANTS

To the Board of Directors of Gas Research Institute:

We have audited the accompanying statements of financial position of GAS RESEARCH INSTITUTE (an Illinois Corporation, organized not-for-profit) as of December 31, 1998 and 1997, and the related statements of revenues and expenses and cash flows for the years then ended. These financial statements are the responsibility of Gas Research Institute's management. Our responsibility is to express an opinion on these financial statements based on our audits.

We conducted our audits in accordance with generally accepted auditing standards. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

In our opinion, the financial statements referred to above present fairly, in all material respects, the financial position of Gas Research Institute as of December 31, 1998 and 1997, and its revenues and expenses and cash flows for the years then ended, in conformity with generally accepted accounting principles.

Gas Research Institute NOTES TO FINANCIAL STATEMENTS

1

DESCRIPTION OF ORGANIZATION AND SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

Description of Organization

Gas Research Institute (GRI) was organized in 1976 and began operations in 1977 as a not-for-profit scientific research organization to plan, finance and manage applied and basic research and technological development programs for the benefit of the natural gas industry and its ratepayers. Activities are carried out independently or in cooperation with sectors of the utility, manufacturing and petroleum exploration and production industries, various scientific and educational organizations, and federal and state government agencies. GRI's research programs are in supply, operations and end use, with crosscutting research in environment and safety. In addition, GRI works with researchers, manufacturers and its member companies to develop gas technologies and to transfer new products and information to the marketplace. See Note 2 regarding GRI's gradual transition from funding comprised primarily of revenues collected by the interstate pipelines under the Federal Energy Regulatory Commission (FERC) funding mechanism, to revenues directly from various sectors of the gas industry, federal and state governments, as well as other sources.

Basis of Accounting

GRI's books and records are maintained on the accrual basis of accounting. Accordingly, GRI records revenues as earned and expenses as incurred. The preparation of financial statements in conformity with generally accepted accounting principles requires management to make estimates and assumptions that affect: (1) the reported amounts of assets and liabilities and the disclosure of contingent assets and liabilities at the date of the financial statements, and (2) the reported amounts of revenues and expenses during the reporting period. Actual results could differ from those estimates. Certain amounts reported in prior years have been reclassified to conform to the current year presentation.

Cash and Investments

Cash and investments consist of bank deposits, money market funds, demand notes, and other short-term investments.

Equipment and Leasehold Improvements

Equipment and leasehold improvements are recorded in the accounts at cost. Furniture and equipment are depreciated using the straight-line method over the estimated useful lives of the related assets, five years. Leasehold improvements are amortized over the lesser of the life of the improvement or the period of the office lease.

Classification of Expenses

Research and development expenses include expenditures under the various research and development contracts and a portion of management expenses directly associated with these contracts. The balance of the GRI expenditures, consisting of the remaining portion of the direct management expenses as well as all non-direct costs and general overheads, such as occupancy cost, are classified as general expenses in the accompanying Statements of Revenues and Expenses.

(2) RESEARCH PROGRAMS/FUNDING

Research and development projects are funded primarily by revenues from interstate pipeline companies based on a rate approved by the FERC. Funding for the 1998 program was approved by the FERC in Opinion No. 418 and further specified in the "Stipulation and Agreement Concerning GRI Funding, dated January 21, 1998 (1998 S&A)." The 1998 funding mechanism includes collection of the GRI volumetric/commodity and average demand/reservation surcharges at the same rates as in 1997. In addition, the 1998 funding mechanism provides for refunds to individual pipelines in situations where the collection from such pipelines exceed 105 percent of specific targeted funding levels (Tier 1 refunds) and/or in the event total revenues received for the year from the pipelines exceed the amount approved by the FERC (Tier 2 refunds).

The 1998 S&A provides for long-term funding of \$689,000,000 during the period 1998-2004, after which GRI will be funded solely on a voluntary basis. Funding under the 1998 S&A is defined as gross interstate pipeline revenues. less refunds plus interest income. The Tier 1 and 2 refund provisions apply only to 1998 revenues. The funding described above is intended to be collected over six years beginning in 1998, with collections in the seventh year, 2004, if required.

The FERC's approval of the 1998 S&A has been appealed to the United States Court of Appeals for the District of Columbia Circuit by a group of local distribution companies ("East Coast Distributors"). GRI is engaged in settlement negotiations with the East Coast Distributors in an attempt to resolve their concerns. However, GRI cannot predict that these settlement negotiations will be successful. While GRI anticipates that the Court of Appeals would affirm the opinion of the FERC, the potential does exist that the decision approving the S&A could be reversed and remanded back to the FERC for further consideration.

On September 9, 1998, the FERC approved GRI's application for the 1999 RD&D Program and 1999-2003 Five-Year Plan. Pursuant to the 1998 S&A, the 1999 approved program provides for \$132,000,000 of new obligations. In addition, the FERC approved a series of one-time costs to be incurred in 1998 and 1999 associated with GRI's transition to a fully voluntary funding system as well as costs associated with the resolution and remediation of Year 2000 (Y2K) problems. These costs have been classified as "Other FERC Approved Expenses" in the Statements of Revenues and Expenses.

PROVISION FOR ESTIMATED PIPELINE REFUNDS

As described in Note 2, the 1998 S&A provides that GRI make refunds to individual pipelines under certain circumstances. These refunds are intended to mitigate the potential impact of cost-shifting from

high-discounting regions of the country to low-discounting regions of the country (Tier 1 refunds). In addition, if after issuing Tier 1 refunds GRI still has net revenues in excess of the FERC-approved revenue target, GRI is required to refund additional amounts so as to not exceed the FERC-approved revenue target (Tier 2 refunds). At December 31, 1998, GRI had provided a reserve against 1998 FERC-approved funding of \$30,980,088 for the estimated refunds for the 1998 program to be made in 1999.

For 1997, the FERC approved GRI's request that it be relieved of the 50/50 balancing provisions of the funding mechanism and that the FERC limit GRI's refund exposure to amounts collected above the requirements of the proposed program. At December 31, 1997, GRI had provided an estimated reserve against 1997 interstate pipeline funding of \$18,100,000 for estimated refunds under these provisions to be made in 1998. The difference between the reserve provided as of December 31, 1997, and the actual refund required, \$249,305, has been reflected in the accompanying Statements of Revenues and Expenses as a reduction of 1998 revenues.

The table below is a pro forma presentation of revenues for 1998 and 1997, which reflects the refund activity in the year to which the related revenues apply.

REVENUES	1998	1997
Gross FERC-Approved Funding Less: Provision for 1997 Tier 1	\$172,786,885	\$194,711,630
Pipeline Refund		(18,100,000)
Less: Additional 1997 Tier 1 Refund		(249,305)
Less: Provision for 1998 Pipeline Refund	(30,980,088)	_
Net FERC-Approved Funding	\$141,806,797.	\$176,362,325

4) ACCUMULATED NET REVENUES/COMMITMENTS

Accumulated net revenues of \$84,331,872 represent the cumulative net excess of revenues over expenses under the FERC-approved program, as well as the programs related to voluntary funding received in 1998. Accumulated net revenues representing the cumulative net excess of revenues over expenses under the FERC-approved program are available for use only in accordance with the budget authorized under the FERC-approved program.

As of December 31, 1998, GRI had contractual commitments and letters of intent outstanding for direct research project expenses of approximately \$86,000,000 (\$54,000,000 for contractual commitments funded from 1997 and prior years, and \$32,000,000 for contractual commitments under the FERC-approved 1998 program). In addition, GRI expects to contractually commit up to an additional \$45,000,000 relating to the 1998 FERC-approved program.

The \$131,000,000 of contract commitments outstanding, after the remaining contracts under the 1998 program are awarded, will be funded with 1998 accumulated net revenues and revenues of subsequent years.

5 INCOME TAX STATUS

GRI qualifies for tax-exempt status under Section 501(c)(3) of the Internal Revenue Code as a scientific organization whereby only unrelated business income, as defined by the Code, is subject to Federal income tax.

LEASE COMMITMENTS

GRI leases office facilities in Chicago, Ill.; Washington, D.C.; and Arlington, Va. The office leases are subject to an escalation clause for increased real estate taxes and lessor operating expenses.

Future minimum lease payments under all noncancelable leases as of December 31, 1998, are as follows:

YEAR	
1999	\$ 2,668,000
2000	2,715,000
2001	3,141,000
2002	3,057,000
2003	3,165,000
2004 and thereafter	6,339,000
Total	\$21,085,000

Total future minimum lease payments as shown above have not been reduced by minimum sublease rentals of \$6,899,733 due in the future under noncancelable subleases.

Lease expense is recognized on a straight-line basis over the life of the lease regardless of the payment schedule. Lease expense (net of sublease rentals) amounted to \$1,888,000 and \$2,968,000 for 1998 and 1997, respectively.

RETIREMENT PLAN

GRI has a target money purchase plan whereby employees are eligible to participate after one year of service. Retirement plan costs are funded currently and amounted to \$1,631,000 and \$1,603,000 for 1998 and 1997, respectively.

POSTRETIREMENT BENEFITS

Employees retiring from GRI on or after age 55 with 10 or more consecutive years of GRI service receive postretirement medical and life insurance benefits. A retiree's spouse and eligible dependents are also eligible for coverage. Eligible retirees age 55 to 65 receive the same benefits as current active employees. These benefits include coverage under a comprehensive major medical plan, subject to deductible and coinsurance provisions, and life insurance coverage of 37.5% of final earnings up to a maximum of \$50,000. Eligible retirees age 65 and over receive medical benefits under a coordinated program where the insurance carrier computes benefits and reimburses the retired employee for covered expenses not paid by Medicare. GRI reserves the right to amend or change the plan periodically. Net periodic postretirement benefit cost includes the following components:

NET PERIODIC POSTRETIREMENT BENEFIT COST	1998	1997
Service Cost—Benefits Attributed to	7.25	
Service During the Period	334,689	\$ 360,257
Interest Cost on Accumulated		
Postretirement Benefit Obligation	404,103	408,677
Net Amortization and Deferral	(206,283)	(72,818)
Expected Return on Plan Assets	366 (651,300)	(550,418)
Net Periodic Postretirement Benefit Cost	\$ \$ (118,791)	\$ 145,698

CHANGE IN BENEFIT OBLIGATION	1998	1997
Accumulated Postretirement Benefit	12-45-14-43-14-14	
Obligation, Beginning of Year	\$6,405,778	\$6,417,153
Service Cost	334,689	360,257
Interest Cost	404,103	408,677
Plan Participants' Contributions	24,078	21,356
Amendments	(106,166)	(953,524)
Actuarial (Gain)/Loss	(414,734)	490,219
Change in Assumptions	289,446	_
Benefits Paid	(229,555)	(338,360)
Accumulated Postretirement Benefit	100000000000000000000000000000000000000	
Obligation, End of Year	\$6,707,639	\$6,405,778

CHANGE IN PLAN ASSETS	1998	1997
Fair Value of Plan Assets, Beginning of Year	\$9,416,270	\$8,000,079
Actual Return on Plan Assets	2,631,898	1,733,195
Plan Participants' Contributions	24,078	21,356
Benefits Paid	(229,555)	(338,360)
Fair Value of Plan Assets, End of Year	\$11,842,691	\$9,416,270
Plan Assets in Excess of APBO	\$5,135,052	\$3,010,492
Unrecognized Prior Service Costs	(996,873)	(1,077,064)
Unrecognized Net (Gain)	(4,322,416)	(2,236,456)
Accrued Postretirement Benefit Cost	\$(184,237)	\$(303,028)

WEIGHTED-AVERAGE ASSUMPTIONS	To the state of th	
AS OF DECEMBER 31	1998	1997
Discount Rate	6.75%	7%
Expected Return on Plan Assets	,:/*>:::::::::::::::::::::::::::::::::::	7%
Rate of Compensation Increase	5%	5%

The amount of plan assets in excess of the accumulated postretirement benefit obligation is a result of actual returns on plan assets in excess of expected returns, changes in plan design and an overall reduction in the workforce. The December 31, 1998, accumulated postretirement benefit obligation was determined using an assumed health care cost trend rate of 6% for 1998 and remaining years. The December 31, 1997, accumulated postretirement benefit obligation was determined using an assumed health care cost trend rate of 8% for 1997, decreasing by 1% each year until reaching 6%, at which point it was assumed to remain constant. The health care cost trend rate assumption has a significant effect on the amounts reported. For example, a 1% increase in the health care trend rate would increase the accumulated postretirement benefit obligation as of December 31, 1998 by approximately \$165,000, and the net periodic cost by approximately \$221,000 for the year ended December 31, 1998.

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An Energen Corporation
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AmerenUE
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Arkansas Western Gas Company
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REVISED GRI VALUE PROPOSITION

In 1998, GRI redefined its value proposition—a statement of what our customers want from us. Through an initiative called the Voice of the Customer, GRI solicited input from customers and studied information from several other sources. The new value proposition recognizes the critical needs of GRI's customer base, while leveraging the key strengths and core competencies of GRI.

Breakthrough Strategic Results with Competitive Financial Impacts

Pursuit of targeted objectives that provide key leading competitive advantages (market impact, organizational capability, and innovative capacity) for our customers and lead to competitive financial impacts (cost savings, revenue growth, or margin enhancement).

Deliverables that are Reliable and Responsive

Delivery of products and services as promised (on schedule and within budget), and which are ready and available for use by our customers.

Depth, Breadth and Objectivity of Expertise

Unrivaled depth and breadth of objective technical and market expertise available through GRI staff and through an established network of industry contacts and alliance partners.

Exceptional Customer Service

Thorough understanding of, and attention to, the needs and concerns of our customers as measured for each project, and annually (as an indicator of corporate performance) as part of the GRI Customer Satisfaction Index.

Integrity in Everything We Do

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This report is also available online at www.gri.org

Western Kentucky Gas Company Case No. 99-070 KPSC Data Request #2 Dated August 19, 1999 DR Item 54, a - b Witness: Gary Smith

Data Request:

Refer to Item 54 of the response to the Commission's July 16, 1999 Order.

- a. Explain how the amount of \$77.57 million in "Total Annual Residential Revenue, proposed margins," was reduced to \$61.66 million in "Approximate Residential Margins, 11 months."
- b. Provide an explanation for the use of 11 months and 10 percent in the derivation of the estimate of \$308,304 as the amount to be generated annually from the proposed late payment charge.

Response:

- a. I regret that in my response to the First KPSC Data Request, dated July 16, 1999, Item 54 (d), my calculations were based upon incorrect, unrelated work notes. I have attached hereto a revised copy of the response to KPSC DR # 1, Item 54 (d).
 - The "G-1 Sales Revenue, 4/00 through 12/00" was calculated at proposed rates.
- b. I will reply to the expected request for information on the use of 9 months and 10 percent in the derivation of the estimate of \$308,304 as the amount to be generated annually from the proposed late payment charge.

As stated in testimony at page 24, lines 27-29, Western proposes to implement the Late Payment Charge beginning April 1, 2000. This would afford additional time for consumer education regarding this new provision and would avoid implementation in mid-winter. Therefore Western used nine months of G-1 Sales revenues to which the proposed late payment fee would apply.

The 10 percent in the derivation of the estimate based on field arrears reports, utilizing the total 2 months arrearage as the numerator and the total current month billing as the denominator.

Sheet 1 of 1 REVISED

Western Kentucky Gas Company Case No. 99-070 KPSC Data Request Dated July 16, 1999 DR Item 54 d Witness: Smith

Data Request:

Refer to Volume 1 of 10 of the Application, Tab 6, Proposed Tariffs, at Sheet No. 51, Special Charges.

d. Provide the amount of annual revenue that Western expects the Late Payment Charge to generate. Include supporting calculations and sufficient narrative explanation to explain the calculations.

Response:

d. Please refer to the response to Data Request 57 (d), which provides a workpaper that details the components of Other Revenue for the Test Year, applying present and proposed rates. Included on that attachment is Western's forecast of \$308,304.

Western estimated the dollar value to which the Late Payment Fee would be applied in the following manner.

G-1 Sales Revenue, 4/00 through 12/00 -	\$61,660,819
---	--------------

Assume Late Payment applied to 10% of Total G-1 Revenues 6,166,082

5% Late Payment Charge \$308,304

92

Western Kentucky Gas Company Case No. 99-070 KPSC Data Request No. 2 DR Item 55 (a) Witness: Daniel M. Ives

Data Request:

- 55. Refer to the Direct Testimony of Daniel Ives and the response to Item 56 of the Commission's July 16, 1999 Order.
 - a. The specific items of plant involved in new service installations are mains, meters, services, and regulators. For which of these items does Western expect the economic life to be shorter than the physical life? Explain why.

Response:

oconomic life shorter than its physical life. But, if the Commission approves Western's proposed Premises Charge with a 15-year recovery period for the Excess Investment, that recovery period would be shorter than the 30-50 year physical lives of such assets. And, as Mr. Ives stated in response to Question Number 56 of the Commission's July 19, 1999 data request, another example of the use of economic recovery periods shorter than physical lives is seen in the IRS' allowance of the use of MACRS accelerated depreciation for tax purposes.

Western Kentucky Gas Company Case No. 99-070 KPSC Data Request No. 2 DR Item 55 (b) Witness: Donald P. Burman

Data Request:

- 55. Refer to the Direct Testimony of Daniel Ives and the response to Item 56 of the Commission's July 16, 1999 Order.
 - b. For each of these four plant items, provide the lives Western is presently using for purposes of calculating it's per book depreciation.

Response:

55(b) The following lists the average service lives for the prior study/existing and the current depreciation studies for Accounts 376 Mains, 380 Services, 381 Meters and 383 Regulators as requested.

Average Service Life

	Prior Study/		
Account	Existing	Current Study	
376 Mains	50 Years *	50 Years	
380 Services	45 Years *	45 Years	
381 Meters	30 Years	35 Years	
383 Regulators	36 Years	35 Years	

Note: The average service life for the existing depreciation rate for these accounts was not known when Deloitte & Touche performed the 1992 study and that is still the approved existing rate. However, Deloitte & Touche did make an average service life recommendation in the 1992 study as well as in this current study and that is what is shown in this table.

Western Kentucky Gas Company Case No. 99-070 KPSC Data Request No. 2 DR Item 55 (c) Witness: Daniel M. Ives

Data Request:

- 55. Refer to the Direct Testimony of Daniel Ives and the response to Item 56 of the Commission's July 16, 1999 Order.
 - c. Provide the calculation used to derive the pre-tax rate of return shown on Exhibit DMI-5, Schedule 1 of 2.

Response:

55 (c) See attached calculation.

Western Kentucky Gas Company Response to Data Request No. 2 Public Service Commission of Kentucky Question No. 55 (c)

Capital Structure and Cost Rates

	Equity		ST Debt	LT Debt	Total	
Dollars	\$ 474,844,584	\$	87,474,202	\$ 386,620,973	\$ 948,939,759	_
%s	50.04%		9.22%	40.74%	100.00%	
Costs	12.25%		5.57%	8.03%		
Weighted	6.13%		0.51%	3.27%	9.91%	
Composite Tax Rate	=	=	40.36%			
Pre Tax Rate of Return	=		er tax Weighted Veighted Cost L		rossed-up for FIT	* & SIT + Weighted Cost ST Debt

= (6.13%/(100.00-40.36))+.51%+3.27%

= 14.06%

Western Kentucky Gas Company Case No. 99-070 KPSC Data Request No. 2 DR Item 55 (d) Witness: Daniel M. Ives

Data Request:

- 55. Refer to the Direct Testimony of Daniel Ives and the response to Item 56 of the Commission's July 16, 1999 Order.
 - d. Provide schedules, in the same formats as Exhibit DMI-5, Schedules 1 and
 2, showing the carrying costs and resulting premises charges based on
 recovery periods of 240, 300, and 360 months.

Response:

55 (d) See attached schedules.

Western Kentucky Gas Company

Computation of Proposed Premises Charge

As	CH	m	n	ti	Λī	ne
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Excess Investment in Main	\$118.54	Per Customer ¹	
Excess Investment in MSR	<u>\$739.62</u>	Per Customer ¹	
Total Excess Investment	\$858.15	Per Customer ¹	
Recovery Period	240	Months	
Pre-Tax Rate of Return	14.06%	As Requested ²	
Composite Tax Rate	40.36%	State and Federal Tax	

Demand Charge Per Month

	Return of Excess Investment ³	Carrying Cost of Excess Investment ⁴	Return of Excess Investment plus Carrying Cost
Main-Only	\$0.83	\$0.70	\$1.53
MSR-Only	\$5.17	\$4.35	\$9.52
Main & MSR	\$6.00	\$5.05	\$11.05

Notes:

- 1. From Exhibit DMI-4, Schedule 2, "Excess Investment" column.
- 2. Pre-tax return calculated from Witness Murry's cost of capital exhibit.
- 3. Return of Excess Investment has been grossed up for taxes: [Excess Investment/(1-Tax Rate)]/240 months.
- 4. Carrying Costs assume equal monthly repayment of the Excess Investment over the Recovery Period. Carrying costs are computed on Exhibit DMI-5, Schedule 2.

Total cumulative carrying costs/240 months = carrying cost per month.

Computation of Proposed Premises Charge

Recovery Term 20 yrs

Year 1 2 Carrying Cost on Unpaid Excess Investment	Year 1 vaid Excess In	2 vestment	6	4	v.	9	7	∞	6	10	11	12	13	14	15
Main-Only Average Annual Balance Annual Carrying Cost Cumulative Carrying Cost	\$115.82	\$115.82 \$109.89 \$103.97	\$103.97	\$98.04	\$92.11	\$86.19	\$80.26	\$74.33	\$68.41	\$62.48	\$56.55	\$50.62	\$44.70	\$38.77	\$32.84
	\$16.29	\$16.29 \$15.45 \$14.62	\$14.62	\$13.79	\$12.95	\$12.12	\$11.29	\$10.45	\$9.62	\$8.79	\$7.95	\$7.12	\$6.29	\$5.45	\$4.62
	\$16.29	\$16.29 \$31.74 \$46.36	\$46.36	\$60.15	\$73.11	\$85.23	\$96.52	\$106.97	\$116.59	\$125.38	\$133.33	\$140.45	\$146.73	\$152.19	\$156.81
MSR-Only Average Annual Balance Annual Carrying Cost Cumulative Carrying Cost	\$722.67	\$722.67 \$685.69 \$648.71 \$611.72	\$648.71	\$611.72	\$574.74	\$537.76	\$500.78	\$463.80	\$426.82	\$389.84	\$352.86	\$315.88	\$278.90	\$241.92	\$204.94
	\$101.63	\$101.63 \$96.43 \$91.23 \$86.03	\$91.23	\$86.03	\$80.83	\$75.63	\$70.43	\$65.23	\$60.03	\$54.83	\$49.62	\$44.42	\$39.22	\$34.02	\$28.82
	\$101.63	\$101.63 \$198.07 \$289.30 \$375.33	\$289.30	\$375.33	\$456.16	\$531.79	\$602.22	\$667.44	\$727.47	\$782.29	\$831.92	\$876.34	\$915.57	\$949.59	\$978.41
Main & MSR Average Annual Balance Annual Carrying Cost Cumulative Carrying Cost	\$838.49	\$838.49 \$795.58 \$752.67 \$709.76	\$752.67	\$709.76	\$666.86	\$623.95	\$581.04	\$538.13	\$495.23	\$452.32	\$409.41	\$366.50	\$323.60	\$280.69	\$237.78
	\$117.92	\$117.92 \$111.89 \$105.85 \$99.82	\$105.85	\$99.82	\$93.78	\$87.75	\$81.72	\$75.68	\$69.65	\$63.61	\$57.58	\$51.54	\$45.51	\$39.47	\$33.44
	\$117.92	\$117.92 \$229.81 \$335.66 \$435.48	\$335.66	\$435.48	\$529.27	\$617.02	\$698.73	\$774.41	\$844.06	\$907.67	\$965.25	\$1,016.79	\$1,062.30	\$1,101.78	\$1,135.22

Notes:

^{1.} Assumes that Balance of Excess Investment is paid down with monthly Premise Charge payment.

Computation of Proposed Premises Charge

Assumptions

	A		
Excess Investment in Main	\$118.54	Per Customer ¹	
Excess Investment in MSR	<u>\$739.62</u>	Per Customer ¹	
Total Excess Investment	\$858.15	Per Customer ¹	
Recovery Period	300	Months	
Pre-Tax Rate of Return	14.06%	As Requested ²	
Composite Tax Rate	40.36%	State and Federal Tax	

Demand Charge Per Month

		Demana Charge I C	112011111
	Return of Excess Investment ³	Carrying Cost of Excess Investment ⁴	Return of Excess Investment plus Carrying Cost
Main-Only	\$0.66	\$0.70	\$1.36
MSR-Only	\$4.13	\$4.35	\$8.48
Main & MSR	\$4.80	\$5.05	\$9.85

Notes:

- 1. From Exhibit DMI-4, Schedule 2, "Excess Investment" column.
- 2. Pre-tax return calculated from Witness Murry's cost of capital exhibit.
- 3. Return of Excess Investment has been grossed up for taxes: [Excess Investment/(1-Tax Rate)]/300 months.
- 4. Carrying Costs assume equal monthly repayment of the Excess Investment over the Recovery Period. Carrying costs are computed on Exhibit DMI-5, Schedule 2.
 - Total cumulative carrying costs/300 months = carrying cost per month.

Computation of Proposed Premises Charge

yrs
25
Term
Recovery

Yea	Year 1	7	ю	4	ĸ	9	7	∞	6	10	11	12	13	14	15
Carrying Cost on Unpaid Excess Investment	Excess In	vestment													
Main-Only	,	,	,	,	:	;		!	:	;	;		!	1	
Average Annual Balance	\$116.36	•.	\$106.88	\$102.14	\$97.40	\$92.66	\$87.91	\$83.17	\$78.43	\$73.69	\$68.95	\$64.21	\$59.47	\$54.72	\$49.98
Annual Carrying Cost	\$16.36	\$15.70	\$15.03	\$14.36	\$13.70	\$13.03	\$12.36	\$11.70	\$11.03	\$10.36	\$9.70	\$9.03	\$8.36	\$7.70	\$7.03
Cumulative Carrying Cost	\$16.36	\$32.06	\$47.09	\$61.46	\$75.16	\$88.19	\$100.55	\$112.25	\$123.28	\$133.64	\$143.34	\$152.37	\$160.73	\$168.43	\$175.46
MCR-Only															
Average Annual Balance	\$726.06	\$726.06 \$696.47 \$666.89 \$637.30	\$666.89	\$637.30	\$607.72		\$548.55	\$518.96	\$489.38	\$459.79	\$430.21	\$400.63	\$371.04		\$311.87
Annual Carrying Cost	\$102.11	\$97.95	\$93.79	\$89.63	\$85.47	\$81.31	\$77.15	\$72.99	\$68.82	\$64.66	\$60.50	\$56.34	\$52.18	\$48.02	\$43.86
Cumulative Carrying Cost	\$102.11	\$200.06	\$293.85 \$383.48	\$383.48	\$468.94		\$627.40	\$700.38	\$769.21	\$833.87	\$894.37	\$950.72	\$1,002.90	\$1,050.92	\$1,094.78
Main & MSK															
Average Annual Balance	\$842.42	\$842.42 \$808.09 \$773.77 \$739.44	\$773.77	\$739.44	\$705.12	\$670.79		\$602.14	\$567.81	\$533.48	\$499.16	\$464.83	\$430.51	\$396.18	\$361.85
Annual Carrying Cost	\$118.47	\$118.47 \$113.65 \$108.82 \$103.99	\$108.82	\$103.99	\$99.16	\$94.34	\$89.51	\$84.68	\$79.85	\$75.03	\$70.20	\$65.37	\$60.54	\$55.72	\$50.89
Cumulative Carrying Cost	\$118.47	\$118.47 \$232.12 \$340.94 \$444.93	\$340.94	\$444.93	\$544.10	\$638.44	\$727.95	\$812.63	\$892.48	\$967.51	\$1,037.71	\$1,103.08	\$1,163.63	\$1,219.35 \$1,270.24	\$1,270.24

Notes:

^{1.} Assumes that Balance of Excess Investment is paid down with monthly Premise Charge payment.

Computation of Proposed Premises Charge

As	SH	m	n	Ħ	O	n	S

Excess Investment in Main	\$118.54	Per Customer ¹
Excess Investment in MSR	<u>\$739.62</u>	Per Customer ¹
Total Excess Investment	\$858.15	Per Customer ^t
Recovery Period	360	Months
Pre-Tax Rate of Return	14.06%	As Requested ²
Composite Tax Rate	40.36%	State and Federal Tax

Demand Charge Per Month

	Return of Excess Investment ³	Carrying Cost of Excess Investment ⁴	Return of Excess Investment plus Carrying Cost
Main-Only	\$0.55	\$0.70	\$1.25
MSR-Only	\$3.44	\$4.35	\$7.79
Main & MSR	\$4.00	\$5.04	\$9.04

Notes

- 1. From Exhibit DMI-4, Schedule 2, "Excess Investment" column.
- 2. Pre-tax return calculated from Witness Murry's cost of capital exhibit.
- Return of Excess Investment has been grossed up for taxes: [Excess Investment/(1-Tax Rate)]/360 months.
- 4. Carrying Costs assume equal monthly repayment of the Excess Investment over the Recovery Period. Carrying costs are computed on Exhibit DMI-5, Schedule 2.
 - Total cumulative carrying costs/360 months = carrying cost per month.

Computation of Proposed Premises Charge

yrs
30
Term
Recovery

Year 1 2 Carrying Cost on Unpaid Excess Investment	Year 1 paid Excess In	2 vestment	m	4	v.	9	7	∞	6	10	=	12	13	41	15
Main-Only Average Annual Balance Annual Carrying Cost Cumulative Carrying Cost		\$116.73 \$112.77 \$108.82 \$104.87 \$16.42 \$15.86 \$15.30 \$14.75 \$16.42 \$32.28 \$47.58 \$62.33	\$108.82 \$15.30 \$47.58	\$104.87 \$14.75 \$62.33	\$100.92 \$14.19 \$76.52	\$96.97 \$13.64 \$90.16	\$93.02 \$13.08 \$103.24	\$89.07 \$12.53 \$115.77	\$85.12 \$11.97 \$127.74	\$81.16 \$11.41 \$139.15	\$77.21 \$10.86 \$150.01	\$73.26 \$10.30 \$160.31	\$69.31 \$9.75 \$170.06	\$65.36 \$9.19 \$179.25	\$61.41 \$8.64 \$187.89
MSR-Only Average Annual Balance Annual Carrying Cost Cumulative Carrying Cost		\$728.32 \$703.66 \$679.01 \$654.36 \$102.43 \$98.96 \$95.49 \$92.03 \$102.43 \$201.39 \$296.88 \$388.91	\$679.01 \$95.49 \$296.88	\$654.36 \$92.03 \$388.91	\$629.70 \$88.56 \$477.47	\$605.05 \$85.09 \$562.56	\$580.39 \$81.62 \$644.18	\$555.74 \$78.16 \$722.34	\$531.09 \$74.69 \$797.03	\$506.43 \$71.22 \$868.25	\$481.78 \$67.76 \$936.01	\$457.12 \$64.29 \$1,000.30	\$432.47 \$60.82 \$1,061.12	\$407.82 \$57.35 \$1,118.47	\$383.16 \$53.89 \$1,172.36
Main & MSR Average Annual Balance Annual Carrying Cost Cumulative Carrying Cost	\$845.04 \$118.84 \$118.84	\$816.44	\$816.44 \$787.83 \$759.23 \$114.82 \$110.80 \$106.77 \$233.66 \$344.46 \$451.24	\$759.23 \$106.77 \$451.24	\$730.62 \$102.75 \$553.99	\$702.02 \$98.73 \$652.72	\$673.41 \$94.71 \$747.42	\$644.81 \$90.68 \$838.11	\$616.20 \$86.66 \$924.77	\$587.60 \$82.64 \$1,007.41	\$558.99 \$78.61 \$1,086.02	\$530.39 \$74.59 \$1,160.61	\$501.78 \$70.57 \$1,231.18	\$473.18 \$66.55 \$1,297.73	\$444.57 \$62.52 \$1,360.25

Notes:

Lukens Consulting Group, Inc.

^{1.} Assumes that Balance of Excess Investment is paid down with monthly Premise Charge payment.

Western Kentucky Gas Company Case No. 99-070 KPSC Data Request No. 2 DR Item 55 (e) Witness: Daniel M. Ives

Data Request:

- 55. Refer to the Direct Testimony of Daniel Ives and the response to Item 56 of the Commission's July 16, 1999 Order.
 - e. Provide the calculations, along with a narrative explanation, of the "Facilities Adjustment Charge" of \$15.44 per year for all residential customers that Mr. Ives suggests Western be allowed to implement if the Commission rejects the proposed premises charge.

Response:

55 (e) See attached schedule.

Western Kentucky Gas Company Response to Data Request No. 2 Public Service Commission of Kentucky Question No. 55 (e)

If the Commission elects to implement the alternative "Facilities Adjustment Charge," it may be computed by estimating the annual amount of Excess Investment associated with new Residential hook-ups that require main extension and a Meter, Service Line and Regulator (MSR), and the annual amount of Excess Investment associated with new Residential hook-ups that require MSR only. The combined annual Excess Investment is grossed-up for Federal and State taxes and then divided by the estimated number of Residential customers in 2001 to produce the annual cost per Residential customer of \$15.44, as illustrated below:

	Amount Excess	Budgeted Annual No. of	
Excess Investment	Investment 1/	Connections 2/	Total
Main and MSR	\$858	1450	\$1,244,100
MSR Only	\$740	<u>250</u>	\$185,000
		<u>1700</u>	\$1,429,100
Tax Gross-up Factor (.5964) 3/ Annual Excess Investment - Gros Number of Customers - 2001 4/	ssed-up for Taxes		\$2,396,211 155220
Annual Cost (incl. Tax) /All Resid	ential Customers		\$15.44
Rolled-in Monthly Cost For All Re	esidential Custome	rs	\$1.29

No carrying charges are imputed as recoveries and expenditures are assumed to occur ratably.

- 1/ Refer to Exhibit DMI-5, Schedule 1 for Excess Investment.
- 2/ Refer to Exhibit DMI-6, Schedule 1 for budgeted number of New Residential Customers.
- 3/ Refer to Exhibit DMI 5, Schedule 2 for tax factor.
- 4/ Residential Customers 9/30/98

151820 (Exhibit DMI 2, Schedule 2)

1999 Additions

1700 (Exhibit DMI-6, Schedule 1)

2000 Additions

1700 (Exhibit DMI-6, Schedule 1)

<u>155220</u>

Western Kentucky Gas Company Case No. 99-070 KPSC Data Request #2 Dated August 19, 1999 DR Item 56 a-d Witness: Doggette

Data Request:

Refer to the Direct Testimony of David H. Doggette and the response to Item 57 of the Commission's July 16, 1999 Order.

- a. The survey of banks in Exhibit DHD-2 was limited to eight local banks. Explain how these particular banks were selected for the survey.
- b. Considering how widespread Western's service territory is, why was the survey limited to eight "local banks"?
- c. The proposed returned check charge is based on the premise that Western incurs an administrative charge for processing bad checks similar to the returned check charges imposed by the banks. What attempt has Western made to determine the actual level of costs it incurs to handle and process bad checks?
- d. Has Western determined, or attempted to determine, the margin, or mark-up above their costs, that the banks include in their returned check charges?

- a. This survey was not intended to be a random survey, but was simply a survey of some of the primary banks in the Owensboro area to determine a general level of the returned check charges being applied in the market. All of the banks contacted are represented in the survey.
- b. The goal of the survey was to determine the general level of the returned check charges. It was assumed that for this purpose a random survey of banks throughout western Kentucky was not necessary.
- c. None. The goal was to identify general level of charges in the market. There are several proposals in this case, including this one, which seek to apply charges to penalize poor bill payment practices by customers and, hopefully, to modify such behavior. These proposals include the 5% Late Payment Charge and the Seasonal Turn-On Charge, neither of which is cost based.
- d. No.

Western Kentucky Gas Company Case No. 99-070 KPSC Data Request #2 Dated August 19, 1999 DR Item 56 e Witness: Smith

Data Request:

Refer to the Direct Testimony of David H. Doggette and the response to Item 57 of the Commission's July 16, 1999 Order.

e. The proposed Seasonal Turn-on Charge is not cost-based but is intended as a disincentive to customers disconnecting from the system on a seasonal basis. Explain why such a charge requires a higher "after hours" rate similar to those special charges that are cost-based.

Response:

e. Western believes that consistently applying a premium for all "After Hours" work will help to encourage customers to request any service order activity during normal business hours. Western does incur a greater cost, in overtime wages, to perform a Seasonal Turn-On "After Hours" than during normal business hours.

Western Kentucky Gas Company Case No. 99-070 KPSC Data Request #2 Dated August 19, 1999 DR Item 57 Witness: Betty Adams

Data Request:

Refer to the Direct Testimony of Betty L. Adams and the response to Item 67 of the Commission's July 16, 1999 Order. Refer to the response identified as DR 67(f), sheet 1 of 2, compared with the response identified as DR 67(g), Schedule C-2.1, sheet 4 of 10. The base period amount of "Shared Services Billing" on DR 67(f) of \$10,003,000 does not correspond with Administrative Services Transferred on DR 67(g), Schedule C-2.1, Sheet 4 of 10, Account 922, in the amount of \$9,050,095. The amounts provided for the forecasted year on DR 67(f), Sheet 2 of 2, and DR 67(g) Schedule C-2.1, sheet 9 of 10, account 922 are in agreement. Explain and reconcile the differences in amounts for the base period.

Response:

Please refer to DR 67(g) Schedule 2.1 sheet 5 of 10, line 5 which states the "Total Operation and Maintenance Expense" to which I will reconcile the difference to DR 67(f).

\$ 86,733,301
(62,724,104)
\$ 24,009,197
(14,007,015)
\$ 10,002,182

Most of the Shared Service costs are recorded in a/c 922, which is shown on the test year, in full. But due to adjustments made, part of the cost was reflected in various other O&M accounts.

Western Kentucky Gas Company Case No. 99-070 KPSC Data Request #2 Dated August 19, 1999 DR Item 58 a, b, c

Witness: Rebecca M. Buchanan

Data Request:

- 58. Refer to Volume 10 of 10 of the Application, Tabs 3 and 5, the Direct Testimony of Rebecca M. Buchanan, and FR 10(10)(c)2, Schedule C-2, and FR 10(10)(e), Schedule E.
 - a. Explain why the State and Federal Income Tax on Schedule E for the base period is mathematically correct, but does not agree to the Income Taxes for Base Year Revenue and Expenses on Schedule C-2.
 - b. If FR 10(10)(c)2, Schedule C-2 as originally filed in the application would be different if presented on the basis of FERC accounts, resubmit Schedule C-2 based on FERC accounts.
 - c. Provide calculations to support the income tax for the columns titled Base Year Revenue & Expenses, Utility Budget Adjustments, SSU Billing Adjustments, Forecasted Revenue & Expenses, and Ratemaking Adjustments on FR 10(10)(c)2, Schedule C-2.

Response:

58a.) The Base Year amount of income tax shown on Schedule C-2 is from Western's budgeted Income Statement as presented in FR 10(9)(h)1, Volume 3 of 10, under tab 7. This Income Statement contains items of "Other Income" that were included for the budgeted calculation of income tax expense. Western's operating budget did not differentiate between "above the line" and "below the line" taxable income. Compare this to the Schedule E income tax calculation. Schedule E calculates income taxes for ratemaking purposes, which only includes operating income and interest expense, and excludes the other "non-operating" income.

Schedule C-2 shows, in a series of adjustments presented in the columns from left to right, Western's Base Year "budget plus actual" in the first column, then in the next two currency columns, Western's Utility budget adjustments and Shared Service (SSU)

budget adjustments. These adjustments are for the purpose of showing the difference between the Base Year operating budget to the Forecasted Test Year operating budget. The next column to the right, titled "Ratemaking Adjustments", makes adjustments for certain items typically disallowed for ratemaking, such as promotional advertising expense, as well as a normalization of pension expense, depreciation expense and income tax expense.

The adjustment amount of (\$ 583,551), shown on Schedule C-2, line 15 "Income Taxes", within the "Ratemaking Adjustments" column, is the difference between Western's budgeted income tax expense for the Forecasted Test Year and the normalized ratemaking Income Tax calculation on Schedule E for the Test Period, Fully Adjusted. As explained above, Western's Forecasted Test Year operating budget for Income Tax expense considered non-operating income and was not adjusted for ratemaking purposes (advertisements, club dues, etc.). The final column of Schedule C-2 shows Income Tax expense of (\$ 239,551) that is fully adjusted for budgetary changes between the Base Year and Forecasted Test Year and well as normalized for ratemaking purposes.

- 58b.) There would be no change in Schedule C-2 if it were filed on the basis of FERC accounts. There is very little difference in the NARUC chart of accounts and the FERC chart of accounts. Please see the six page attachment titled "NARUC to FERC Conversion Table". Where there is a difference in the two systems, the accounts have been outlined.
- 58c.) See response to 58a.) above. Schedule C-2.2, which is found in Volume 10, tab 3 of the filing, shows the monthly income tax expense (account 4090) for the base year and the forecasted test year. The first six months of the base year is the per book income tax expense, totaling \$3,347,114. Thereafter, the income tax expense budgeted is a simple calculation of the monthly budgeted "Net Income Before Taxes" multiplied by the composite tax rate of 40.363%. For the second half of the base year, the income tax budgeted is (\$1,680,000). The total for the base year is the actual plus the budget: \$3,347,114 + (\$1,680,000) = \$1,667,114. This is the amount of income taxes shown on Schedule C-2, in the column titled "Base Year Revenue & Expenses". The test year income tax expense calculation is: NI before Tax \$852,000 X 40.363% = \$344,000 (see Schedule C-2 in the column titled "Forecasted Revenues & Expenses").

		NARUC TO FERC CONVERSION TABLE
Manna	Fore	Ferc Description
Naruc	Ferc	Description
1010	1010	Gas plant in service
1020	1020	Gas plant purchased or sold
1060	1060	Completed construction not classified
1070	1070	Construction work in progress
1080	1080	Accumulated provision for depreciation of gas utility plant
1081	1081	Accumulated provision for depreciation of gas utility plant
1112	1110	Accumulated provision for amortization and depletion of gas utility plant
1140	1140	Gas plant acquisition adjustments
1150	1150	Accumulated provision for amortization of gas plant acquisition adjustments
1170	1170	Gas stored underground-Noncurrent
1210	1210	Nonutility property
1220	1220	Accumulated provision for amortization of nonutility property
1230	1230	Investment in associated companies
1231	1231	Investment in subsidiary companies
1240	1240	Other investments
1280	1280	Other special funds
1310	1310	Cash
1340	1340	Other special deposits
1341	1341	Other special deposits
1350	1350	Working funds
1360	1360	Temporary cash investments
1410	1410	Notes receivable
1420	1420	Customer accounts receivable
1430	1430	Other accounts receivable
1440	1440	Accumulated provision for uncollectible accounts
1450	1450	Notes receivable from associated companies
1460	1460	Accounts receivable from associated companies
1510	1510	Fuel stock
1540	1540	Plant materials and operating supplies
1550	1550	Merchandise
1630	1630	Stores expense undistributed
1640	1641	Gas stored underground-Current
1660	1650	Prepayments
1740	1740	Miscellaneous current and accrued assets
1810	1810	Unamortized debt expense
1840	1840	Clearing accounts
1860	1860	Miscellaneous deferred debits
2010	2010	Common stock issued
2020	2020	Common stock subscribed
2070	2070	Premium on capital stock
2110	2110	Miscellaneous paid-In capital
2160	2160	Unappropriated retained earnings
2210	2210	Bonds
2240	2240	Other long-Term
2310	2310	Notes payable
2320	2320	Accounts payable
2340	2340	Accounts payable to associated companies
2350	2350	Customer deposits
2000	2000	- · · · · · · · · · · · · · · · · · · ·

		Ferc
Naruc	Ferc	Description
2360	2360	Taxes accrued
2370	2370	Interest accrued
2380	2380	Dividends declared
2410	2410	Ta xcollections
2420	2420	Miscellaneous current and accrued liabilities
2520	2520	Customer advances for construction
2530	2530	Other deferred credits
2550	2550	Accumulated deferred investment ta xcredits
2620	2282	Accumulated provision for injuries and damages
2710	2710	Contributions in aid of contruction
2820	2820	Accumulated deferred income taxes-Other property
2830	2830	Accumulated deferred income taxes-Other
3010	3010	Organization
3020	3020	Franchises and consents
3030	3030	Miscellaneous intangible plant
3254	3254	Plant rights-Of-Way
3280	3280	Field measuring and regulating station structures
3290	3290	Other structures
3320	3320	Field lines
3330	3330	Field compressor station equipment
3340	3340	Field measuring and regulating station equipment
3400	3400	Land and land rights
3420	3420	Extraction and refining equipment
3440	3440	Extracted product storage equipment
3450	3450	Compressor equipment
3520	3520	Wells
3651	3651	Transmission plant-Land and land rights
3660	3660	Structures and improvements
3662	3662	Transmission Plant
3670	3670	Mains
3680	3680	Compressor station equipment
3690	3690	Measuring and regulating station equipment
3710	3710	Other equipment
3740	3740	Distribution plant-Land and land rights
3750	3750	Distribution plant-Structures and improvements
3753	3753	Improvements
3760	3760	Distribution plant-Mains
3761	3761	Mains - Steel
3762	3762	Mains - Plastic
3770	3770	Distribution plant-Compressor station equipment
3780	3780	Distribution plant-Measuring and regulating station equipment-General
3790	3790	Distribution plant-Measuring and regulating station equipment-City gate check stations
3795	3795	Mea&Reg St Eq Cty Ck Sta
3798	3798	Meas&Reg Stat Equip
3800	3800	Distribution plant-Services
3810	3810	Distribution plant-Meters
3820	3820	Distribution plant-Meter installations
3830	3830	Distribution plant-House regulators
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4270 4270 Interest on long-Term debt 4280 4280 Amortization of debt discount and expense		4261	Dues & donations
4280 4280 Amortization of debt discount and expense			Interest on long-Term debt
4310 4310 Other interest expense		4310	Other interest expense

•••		Ferc
Naruc	Ferc	Description
4380	4380	Dividends declared-Common stock
4800	4800	Residential sales
4830	4830	Sales for resale
4870	4870	Forfeited discounts
4880	4880	Miscellaneous service revenues
4890	4890	Revenues from transporation of gas of others
4900	4900	Sales of products extracted from natural gas
4930	4930	Rent from gas property
4950	4950	Other gas revenues
7230	7230	Fuel for liquefied petroleum gas process
7280	7280	Liquified petroleum gas
7330	7330	Gas mixing expenses
7350	7350	Miscellaneous production expenses
7410	7410	Production-Maintenance of structures and improvements
7420	7420	Maintenance of production equipment
7500	7500	Production and gathering-Operation supervision and engineering
7510	7510	Production maps and records
7520	7520	Gas wells expenses
7530	7530	Field lines expenses
7540	7540	Field compressor station expenses
7550	7550	Field compressor station fuel and power
7560	7560	Field measuring and regulating station expenses
7570	7570	Production and gathering-Purification expenses
7580	7580	Gas well royalties
7590	7590	Production and gathering-Other expenses
7610	7610	Production and gathering-Maintenance supervision and engineering
7620	7620	Production and gathering-Maintenance of structures and improvements
7640	7640	Maintenance of field lines
7650	7650	Maintenance of field compressor station equipment
7660	7660	Maintenance of field measuring and regulating station equipment
7670	7670	Production-Maintenance of purification equipment
7690	7690	Maintenance of other equipment
7700	7700	Products extraction-Operation supervision and engineering
7710	7710	Products extraction-Operation labor
7720	7720	Gas shrinkage
7730	7730	Production-Fuel
7740	7740	Power
7770	7770	Gas processed by others
7840	7840	Products extraction-Maintenance supervision and engineering
7860	7860	Maintenance of extraction and refining equipment
7980	7980	Other exploration
8000	8000	Natural gas well head purchases
8010	8010	Natural gas field line purchases
8030	8030	Natural gas transmission line purchases
8040	8040	Natural gas city gate purchases
8060	8060	Exchange gas
8070	8070	Purchased gas expenses
8080	8081	Gas withdrawn from storage-Debit

		Ferc
Naruc	Ferc	Description
8090	8082	Gas delivered to storage-Credit
8110	8110	Gas used for products extaction-Credit
8120	8120	Gas used for other utility operations-Credit
8130	8130	Other gas supply expenses
8140	8140	Storage-Operation supervision and engineering
8160	8160	Wells expenses
8170	8170	Lines expenses
8180	8180	Compressor station expenses
8190	8190	Compressor station fuel and power
8200	8200	Storage-Measuring and regulating station expenses
8210	8210	Storage-Purification expenses
8230	8230	Gas losses
8240	8240	Storage-Other expenses
8250	8250	Storage well royalties
8260	8260	Storage-Rents
8310	8310	Storage-Maintenance of structures and improvements
8320	8320	Maintenance of reservoirs and wells
8330	8330	Maintenance of lines
8340	8340	Maintenance of compressor station equipment
8350	8350	Maintenance of measuring and regulating station equipment
8360	8360	Processing-Maintenance of purification equipment
8400	8400	Other storage-Operation supervision and engineering
8410	8410	Other storage expenses-Operation labor and expenses
8420	8420	Other storage-Rents
8430	8431	Other storage-Maintenance supervision and engineering
8440	8432	Other storage-Maintenance of structures and improvements
8450	8433	Maintnenance of gas holders
8470	8435	Maintenance of liquefaction equipment
8480	8436	Maintenance of vaporizing equipment
8500	8500	Transmission-Operation supervision and engineering
8510	8510	System control and load dispatching
8530	8530	Transmission-Compressor station labor and expenses
8540	8540	Gas for compressor station fuel
8560	8560	Mains expenses
8570	8570	Transmission-Measuring and regulating station expenses
8580	8580	Transmission and compression of gas by others
8590	8590	Transmission-Other expenses
8600	8600	Transmission-Rents
8610	8610 ₃₅	Transmission-Maintenance supervision and engineering
8620	8620	Transmission-Maintenance of structures and improvements
8630	8630	Transmission-Maintenance of mains
8640	8640	Transmission-Maintenance of compressor station equipment
8650	8650	Transmission-Maintenance of measuring and regulating station equipment
8660	8660	Transmission-Maintenance of communication equipment
8670	8670	Transmisison-Maintenance of other equipment
8700	8700	Distribution-Operation supervision and engineering
8710	8710	Distribution load dispatching
8720	8720	Distribution-Compressor station labor and expenses

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Narue	Ferc	Description
8740	8740	Mains and services expenses
8750	8750	Distribution-Measuring and regulating station expenses
8760	8760	Distribution-Measuring and regulating station expenses-Industrial
8770	8770	Distribution-Measuring and regulating station expenses-City gate check stations
8780	8780	Meter and house regulator expenses
8790	8790	Customer installations expenses
8800	8800	Distribution-Other expenses
8810	8810	Distribution-Rents
8850	8850	Distribution-Maintenance supervision and engineering
8860	8860	Distribution-Maintenance of structures and improvements
8870	8870	Distribution-Maint of mains
8890	8890	Maintenance of measuring and regulating station equipment-General
8900	8900	Maintenance of measuring and regulating station equipment-Industrial
8910	8910	Maintenance of measuring and regulating station equipment-City gate check stations
8920	8920	Maintenance of services
8930	8930	Maintenance of meters and house regulators
8940	8940	Distribution-Maintenance of other equipment
8950	8950	Distribution-Maintenance of other plant
9010	9010	Customer accounts-Operation supervision
9020	9020	Customer accounts-Meter reading expenses
9030	9030	Customer accounts-Customer records and collections expenses
9040	9040	Customer accounts-Uncollectible accounts
9050	9050	Customer accounts-Miscellaneous customer accounts
9090	9070	Customer service-Supervision
9100	9080	Customer service-Operating assistance expense
9110	9090	Customer service-Operating informational and instructional advertising expense
9120	9100	Customer service-Miscellaneous customer service
9150	9110	Sales-Supervision
9160	9120	Sales-Demonstrating and selling expenses
9170	9130	Sales-Advertising expenses
9180	9160	Sales-Miscellaneous sales expenses
9200	9200	A&G-Administrative & general salaries
9210	9210	A&G-Office supplies & expense
9220	9220	A&G-Administrative expense transferred-Credit
9230	9230	A&G-Outside services employed
9240	9240	A&G-Property insurance
9250	9250	A&G-Injuries & damages
9260	9260	A&G-Employee pensions and benefits
9270	9270	A&G-Franchise requirements
9280	9280	A&G-Regulatory commission expenses
9290	9290	A&G-Duplicate charges-Cr
9301	9301	A&G-General advertising expense
9302	9302	Miscellaneous general expenses
9310	9310	A&G-Rents
9320	9350	A&G-Maintenance of general plant

Western Kentucky Gas Company Case No. 99-070 KPSC Data Request #2 Dated August 19, 1999 DR Item 59

Witness: Betty Adams

Data Request:

Refer to the Direct Testimony of Betty L. Adams and the response to Item 68 of the Commission's July 16, 1999 Order. Included with this response are comparisons of budget to actual year-to-date reports for FY 1998, 1997, 1996, 1995 and 1994 referenced as "RESP-10". These reports contain data for only 11 costs or "element groups."

- a. Are the costs or "element group" on these budget reports broken down further on other budget to actual comparison reports?
- b. If yes, provide these reports for FY 1998 and for the months-to-date since then with a cumulative total beginning October 1998 through the most recently completed month of accounting records. Also, provide a brief explanation of all variances, both favorable and unfavorable, for the lesser of \$5,000 or 5 percent.
- c. If yes, provide a schedule combining the year-to-date actual per the RESP-10, the Shared Services Billing, depreciation, and any other costs to determine operating and maintenance expense for FY 1998 and for the months-to-date with a cumulative total beginning October 1998 through the most recently completed month of accounting records.
- d. If no, explain in detail how Western monitors the underlying account element data for accuracy in budgeting. Also, what form of variance analysis does Western use for management reporting? Provide this variance analysis for FY 1998, 1997, 1996, 1995 and 1994 or such periods as are referenced in subpart "b".

- a. No
- b. N/A
- c. N/A
- d. WKG's upper management group monitors only the elements groups. Please reference my testimony, volume 2, tab 4, page 6 starting at line 7 and AG Data request 174.

Western Kentucky Gas Company Case No. 99-070 KPSC Data Request #2 Dated August 19, 1999 DR Item 60 a. b. c. Witness: Gruber

Data Request:

- 60. Refer to the Direct Testimony of Betty L. Adams and the response to Item 68 of the Commission's July 16, 1999 Order.
 - a. Since authorized employees have exceeded actual employees every year from 1994 through 1998, explain the basis for including 100 percent of authorized employees for rate-making purposes in the forecasted period.
 - b. What measures does Western propose to use in filling the 15 open positions that are shown when comparing the Testimony of Conrad E. Gruber and the response to Item 62 or the Commission July 16, 1999 Order, which reflects a total of 267 employees compared to the forecasted level of 282?
 - c. What are the expected benefits from the addition of the planned operating and maintenance employees that Western's customers will receive that they have not been receiving?

- a. Authorized employees have exceeded actual employees four of the past five years. The ratio of actual employees to authorized complement has averaged 99.13% for those five years as shown in KPSC DR 1 item 70. The basis for including the authorized employees for rate-making purposes is that those employees are needed for the organization to accomplish it's work load in an expeditious and efficient fashion for the forecasted period.
- b. Our original intent was to begin hiring at the beginning of FY2000; however, Western's current earnings situation and the uncertainty of the outcome of this

- case makes the filling of these positions and the filling of these needs difficult given these circumstances.
- c. The vacant positions are primarily distributed between service(7) and construction(5) jobs. These vacancies being held have resulted in less responsive service and more limited construction capacity in the areas that have fewer employees than necessary, we have not sacrificed safety! Additionally positions in engineering, supervision and sales are vacant, degrading our ability to perform in those areas as well. These vacancies are detailed in KPSC DR 1 item 70.

Western Kentucky Gas Company Case No. 99-070 KPSC Data Request #2 Dated August 19, 1999 DR Item 61 Witness: Betty Adams

Data Request:

Refer to Volume 4 of 10 of the Application, Tab 4, FR 10(9)(m), and the Direct Testimony of Donald P. Burman. In the NARUC accounts individual elements of functional expense are shown in the chart of accounts at FR 10(9)(m) as follows: directors retirement benefits, service awards; employee incentives; meals and entertainment; membership fees; community relations & trade shows; and sports activities:

- a. Are any amounts for the above individual elements of functional expenses included in the base period or forecasted period?
- b. If yes, provide amounts for both the base period and forecasted period as applicable, and explain why these types of expenses should be recoverable for rate-making purposes.
- c. If no, explain why these types of expenses are included as "above the line accounts" in the chart of accounts.

- a. Yes, they are included in the base and forecasted periods for schedules that contain total O&M expense.
- b. Refer to FR 10(10)(c)2, Volume 10 of 10, Tab 3, for how the rate making adjustments were made.
- c. N/A

Western Kentucky Gas Company Case No. 99-070 KPSC Data Request #2 Dated August 19, 1999 DR Item 62 Witness: Betty Adams

Data Request:

Does Western's bottom-up budget process for the annual operating and maintenance budget include providing budgeting personnel with any reports comparing, for instance, the most recently completed fiscal year budgeted amounts and actual results, as well as the present operating budget, for a reference point in establishing a new budget?

- a. If yes, provide such completed documentation from the "element group" account level for FY 1999, 1998, 1997, 1996 and 1995.
- b. If no, explain in detail what reports management uses to evaluate the budget for accuracy of inputs, and provide documentation in the way of comparative reports from the "element group" account level for FY 1999, 1998, 1997, 1996 and 1995.
- c. If no comparative reports are available from the budgetary input process, explain in detail how Western's budget process can be relied upon for accuracy, evaluation of trends and other analysis for periods past the immediate budget period.

Response:

Yes, please refer to AG Data Request #172b and my testimony in Volume 2, tab 4, page 4, starting at line 27 for explanation of budgeting process.

- a. These documents are not retained as permanent records.
- b. N/A
- c. N/A

3

Western Kentucky Gas Company Case No. 99-070 KPSC Data Request #2 Dated August 19, 1999 DR Item 63

Witness: Betty Adams

Data Request:

Does Shared Service's bottom-up process for the annual operating budget include providing budgeting personnel any reports comparing, for instance, the most recently completed fiscal year budgeted amounts and actual results, as well as the present operating budget, for a reference point in establishing a new budget?

- a. If yes, provide such completed documentation from the most detailed account level for FY 1999, 1998, 1997, 1996 and 1995.
- b. If no, explain in detail what reports management uses to evaluate the budget for accuracy of inputs, and provide documentation in the way of comparative reports from the most detailed account level for FY 1999, 1998, 1997, 1996 and 1995.
- c. If no comparative reports are available from the budgetary input process, explain in detail how Shared Service's budget process can be relied upon for accuracy, evaluation of trends and other analysis for periods past the immediate budget period.

Response:

No, overall accuracy of budget input at the detailed account level is the responsibility of the officers and other managers directly responsible for the individual shared service units, and is not typically reviewed by budget personnel or senior officers.

a. N/A

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- b. Prior to 1999, summarized budget levels were compared to prior period statistics by corporate function for purposes of budget department and senior officer review.
- c. Starting with the FY 1999 budget, the budget department and Shared Services Board began reviewing shared services budgets at a more detailed cost center level with comparisons to prior periods. Additionally, all individual units are now required to make presentations to the Shared Services Board and to the budget department in which more detailed comparisons, by cost type, were presented. The budget department, as well as senior management, reviews overall the reasonableness of the budgets, considering prior year amounts, known changes, complement levels, special projects, etc. However, responsibility for account-by-account budget accuracy remains with individual unit managers.

Western Kentucky Gas Company Case No. 99-070 KPSC Data Request #2 Dated August 19, 1999 DR Item 64 Witness: Betty Adams

Data Request:

Refer to the Direct Testimony of Betty L. Adams and the response to Item 72(a) of the Commission's July 16, 1999 Order.

- a. Does Western's response that its billing system prior to June 1, 1999 did not provide accounts receivable aging mean that management did not otherwise have an aging schedule created for periodic evaluation of revenue collectibility?
 - (1) If yes, provide a detailed explanation of how Western determined the uncollectible accounts to write off?
 - (2) If no, provide any aging schedules created for the FY 1998 and 1997, with an explanation of any coding identifying customer classes.
 - (3) Provide a detailed explanation of Western's uncollectible account determination policy, with procedures on how accounts 60, 90 or 120 days and older are pursued for recovery.
- b. Provide monthly accounts receivable aging schedules since June 1, 1999 and monthly uncollectibles written off for those months' activity.
- c. Provide the calculation supporting the derivation of the 0.4 percent of revenue factor used in the gross revenue conversion factor at Volume 10 of 10 of the Application, Tab 8, FR 10(10)(h), Schedule H. Include support for the combination of uncollectibles and revenue from different customer classes in determining a composite factor.

- a. Yes, we did not have an aging schedule for all of the WKG's customers in total. Each supervised location received a report of the customers in their area listing all accounts by name and amount that were not current.
 - No accounts could be written off as uncollectible until the customer had been disconnected either by non-payment (according to KPSC Rules & Regulations) or voluntary. The accounts were and will continue to be written-off systematically.
 - 2. N/A

- 3. See response a and 1 above concerning the policy and collection report.
- b. The monthly accounts receivable aging schedule currently lists each account, by name, amount etc. which is for all 179,000 plus customers. Attached you will find a sample of our new reports which are in development. No accounts have been written-off since June 1, 1999 due to our conversion to the new billing system.
- c. Refer to KPSC-1, DR 40.



Atmos Energy Corporation Aged A/C Receivable Report Atmos Energy Corporation

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Western Kentucky Gas Company Case No. 99-070 KPSC Data Request #2 Dated August 19, 1999 DR Item 65

Witness: Betty Adams

Data Request:

Refer to the Direct Testimony of Betty L. Adams and the response to Item 83(a) of the Commission's July 16, 1999 Order.

- a. Provide a summary of Shared Services "Combined Direct & Billed" total monthly expenses as allocated by division on the exhibit in the response to Item 83(a), "April's Financial Statements," bottom of the page marked "(32)." Prepare this summary for fiscal year 1998 and for the months since then with a cumulative total beginning October 1998 through the most recently completed month of accounting records.
- b. Are any non-regulatory expenses allocated to regulated divisions or any regulatory expenses allocated to non-regulated divisions? If so, explain the reasons for the allocations and the allocation processes.

Response:

a.

Shared Services Combined Direct & Billed Expense – Western portion (000's)

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Financial Item	FY 98	Oct 98	Nov 98	Dec 98	Jan 99	Feb 99	Mar 99	Apr 99	May 99	YTD 99
SSU O&M	6,107	765	710	1,062	705	980	467	761	646	6,096
Depreciation	570	128	128	134	134	134	134	134	(473)	453
Taxes Other than Income	150	11	15	10	15	8	53	17	16	145
Total SS Charges	6,827	904	853	1,206	854	1,122	654	912	189	6,694

b. The response to both questions is no.

Western Kentucky Gas Company Case No. 99-070 KPSC Data Request #2 Dated August 19, 1999 DR Item 66 Witness: Betty Adams

Data Request:

Refer to Volume 10 of the Application, Tab 3, FR 10(10)(c)2.1., and the Direct Testimony of Rebecca M. Buchanan.

- a. For NARUC account 923, outside services employed, provide a schedule of actual and projected expenses by vendor that exceed \$7,500 directly paid or billed to Western, or allocated by Shared Services. Give a brief explanation of the service to be provided.
- b. For NARUC account 925, injuries and damages, provide a schedule of actual and projected expenses beginning with total workers compensation, then by vendor, that exceeds \$10,000 directly paid or billed to Western, or allocated by Shared Services. Give a brief explanation of the expenditure, other than the amount of workers compensation.

Response:

a. Listed below are the vendors that have received payment for services above \$7,500 from October through March 1999.

\$24,457
8,916
22,863
\$15,399

b. Listed below are the vendors that have received payments for services above \$10,000 that have been expensed from October through March 1999.

Workers Comp.	\$ 50,298
3 rd Party Damages	12,000
Lawsuit settlement amortization	164,110
Excess Property Damage	23,323
Prepaid Liaibility Amortization	64.392

Western Kentucky Gas Company Case No. 99-070 KPSC Data Request #2 Dated August 19, 1999 DR Item 67

Witness: Betty Adams & Rebecca M. Buchanan

Data Request:

67. Refer to Volume 10 of the Application, Tab 4, FR 10(10)(d)2.2, Schedule D-2.2 and the Direct Testimony of Betty L. Adams. The explanation for "ADJ 1," budgeting adjustment, includes "an adjustment of the credit for pension due to FASB 87 in the base year." Is this a result of an accounting method change? If yes, explain the change. If no, is it similar to the "Ratemaking Adjustment" on FR 10(10)(c)2, Schedule C-2, in Volume 10 of the Application, in the amount of \$771,992 referenced to Schedule F-2.3? Are these adjustments duplicated in both the base period and forecasted period?

Response:

67. "ADJ 1," of FR 10(10)(d)2.2, Schedule D-2.2, in Volume 10, Tab 4, is not the result of an accounting method change. Nor is it similar to the "Ratemaking Adjustment" on FR 10(10)(c)2, Schedule C-2. "ADJ 1" is a budgetary adjustment that reflects the difference between the base year actuarial estimate for pension and the test year actuarial estimate for pension.

Western wishes to clarify that the Ratemaking Adjustment for pension expense, that is included in FR 10(10)(c)2, Schedule C-2, in Volume 10, Tab 3, is in the amount of \$853,000, not \$771,992. Adjustments for both employee gifts and pension expense appear in the same cell on Schedule C-2. \$771,992 is the net effect of these two adjustments. The detail in this cell is (\$81,008) for removal of employee gifts & awards, and \$853,000 for normalization of pension expense. The column titled "Sched. Ref." indicates Schedule F-2.3 should be referenced (for the employee gifts & awards). Also appearing in the "Sched. Ref" column on this line is the double asterisk " * * " symbol. A note at the bottom of Schedule C-2, preceded by the double asterisk " * * " symbol, refers to the testimony of Mr. Donald P. Burman for a discussion of the Pension Expense adjustment.

Western Kentucky Gas Company Case No. 99-070 KPSC Data Request #2 Dated August 19, 1999 DR Item 68 Witness: Burman

Data Request:

Refer to the Direct Testimony of Donald P. Berman. Provide Atmos's or Western's most recent actuarial report for its pension plan.

Response:

Please see attached copy of the Actuarial Valuation Report as of January 1, 1998 for the Plan Year ending December 31, 1998 and Taxable Year ending September 30, 1998, as prepared by Ernst & Young LLP.

Actuarial Valuation Report as of January 1, 1998 for the Plan Year ending December 31, 1998 and Taxable Year ending September 30, 1998

> Prepared for Western Kentucky Gas Retirement Plan

> > Prepared by:

■ ERNST & YOUNG LLP

2121 San Jacinto Street, Suite 1500 Dallas, Texas 75201 October 1998 This report has been prepared by Ernst & Young LLP to:

- Present the results of a valuation of the Western Kentucky Gas Retirement Plan as of January 1, 1998,
- Review Plan experience for the year ended December 31, 1997;
- Provide to the plan sponsor the permissable range of contributions under the Plan for the year ending December 31, 1998, and
- Provide reporting and disclosure information for financial statements, governmental agencies and other interested parties.

The following table summarizes important contribution information.

	Plan Yea	r Ending
Contribution	12/31/98	12/31/97
Minimum Required	\$ -	\$ -
Maximum Tax Deductible	-	-

Due to the current funded status of the Plan, the minimum required contribution and maximum tax deductible contribution are both zero. Under current regulations, the Plan is not required to make any quarterly contributions for the 1998 or 1999 Plan years.

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, actuarial cost methods, and plan provisions between the two valuations are described on the following page.

	Ac	tuarial Va	luati	on as of
Summary of Costs	1	nuary 1, 1998	Ja	nuary 1, 1997
Normal Cost	\$ 5	35,437	\$6	38,527
Range of Contributions (Payable at year-end)				
Minimum Required	\$	_	\$	-
(Percentage of compensation)		(0.0%)		(0.0%)
Maximum deductible	\$	-	\$	_
(Percentage of compensation)		(0.0%)		(0.0%)

Assets and Actuarial Present Values		
Market Value of Assets	\$56,016,878	\$49,414,504
Actuarial Value of Assets	\$49,871,082	\$44,067,411
Actuarial Accrued Liability	\$32,970,076	\$31,248,766
Unfunded Actuarial Accrued Liability	\$ -	\$ -
Actuarial Present Value of Accumulated Plan		
Benefits	\$29,996,322	\$28,032,200
Vested Present Value of Accumulated Plan		
Benefits	\$29,217,924	\$27,108,431

Summary of Data		
Number of Participants in Valuation		
Active Participants	331	370
Participants Transferred out of Plan	16	17
Participants with Deferred Benefits	124	108
Participants Receiving Benefits	243	220
Total	714	715

Active Participant Statistics		
Total Compensation*	\$11,814,714	\$12,981,450
Average Compensation*	\$ 35,694	\$ 35,085
Average Age	45.1	45.3

^{*} Annualized for new participants.

During 1997, certain displaced employees were eligible for enhanced benefits if they attained age 53 with at least eight years of service or if they attained age 58 with at least three years of service at a certain date. The enhancement was an additional two years of benefit service used to calculate their retirement benefit. Early retirement was "extended" to participants younger than age 55 to allow immediate commencement of reduced benefits. This enhancement increased the actuarial accrued liability by \$653,097.

There have been no other changes in actuarial cost methods, actuarial assumptions, or plan provisions since the January 1, 1997 valuation.

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Effects of Cl	nanges	3
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1.2	Actuarial Gain (Loss)	7
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Normal Cost	\$5	35,437	\$6	38,527
Range of Contributions (Payable at year-end)			<u>.</u>	
Minimum Required	\$	_	\$	-
(Percentage of compensation)		(0.0%)		(0.0%)
Maximum deductible	\$	_	\$	-
(Percentage of compensation)		(0.0%)	l I	(0.0%)

Assets and Actuarial Present Values		
Market Value of Assets	\$56,016,878	\$49,414,504
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^{*} Annualized for new participants.

During 1997, certain displaced employees were eligible for enhanced benefits if they attained age 53 with at least three years of service at a certain date. The enhancement was an additional two years of benefit service used to calculate their retirement benefit. Early retirement was "extended" to participants younger than age 55 to allow immediate commencement of reduced benefits. This enhancement increased the actuarial accrued liability by \$653,097.

There have been no other changes in actuarial cost methods, actuarial assumptions, or plan provisions since the January 1, 1997 valuation.

- Section 1.1 Unfunded actuarial accrued liability as of valuation date.
- Section 1.2 Development of actuarial gain or loss during the year.
- Section 1.3 Normal cost as of valuation date.
- Section 1.4 Breakdown of current liability for contribution purposes as well as certain disclosure data required for Schedule B of Form 5500 reporting.
- Section 1.5 Determination of tax contribution requirements including the minimum required and maximum deductible contributions.

UNFUNDED ACTUARIAL ACCRUED LIABILITY

The actuarial accrued liability is the present value of projected plan benefits allocated to past service in accordance with the actuarial funding method being used.

			January 1, 1998	January 1, 1997
1.	Acti	uarial Accrued Liability		
	(a)	Active Participants		
		Retirement Benefits	\$10,202,262	\$12,861,614
		Withdrawal Benefits	955,434	895,120
		Disability Benefits	428,496	425,675
		Death Benefits	460,707	562,868
		Total	\$12,046,899	\$14,745,277
	(b)	Participants with Deferred Benefits	2,157,378	1,863,883
	(c)	Participants Receiving Benefits	18,765,799	14,639,607
	(d)	Actuarial Accrued Liability		
		(a) + (b) + (c)	\$32,970,076	\$31,248,767
2.	Acti	uarial Value of Assets	\$49,871,082	\$44,067,411
3.	Unf	unded Actuarial Accrued Liability	·	
	(1)(d) - (2), not less than zero	\$ -	\$ -

ACTUARIAL GAIN (LOSS)

The actuarial gain (loss) is comprised of both the liability gain (loss) and the actuarial asset gain (loss). Each of these represents the difference between the expected and actual values as of January 1, 1998.

1.	Exp	ected Actuarial Accrued Liability	
	(a)	Actuarial Accrued Liability at January 1, 1997	\$31,248,767
	(b)	Normal Cost at January 1, 1997	638,527
	(c)	Interest on (a) + (b) to end of year	2,710,420
	(d)	Benefit payments for the plan year ending December 31, 1997, with interest to end of year	2,365,011
	(e)	Expected Actuarial Accrued Liability at January 1, 1998 (a) + (b) + (c) - (d)	\$32,232,703
2.	Act	uarial Accrued Liability at January 1, 1998*	\$32,316,979
3.	Lial	bility Gain (Loss) (1)(e) – (2)	\$ (84,276)
4.	Exp	ected Actuarial Value of Assets	
	(a)	Actuarial Value of Assets at January 1, 1997	\$44,067,411
	(b)	Interest on (a) to end of year	3,745,730
	(c)	Contributions made for the plan year ending December 31, 1997	_
	(d)	Interest on (c) to end of year	_
	(e)	Benefit payments for the plan year ending December 31, 1997, with interest to end of year	2,365,011
	(f)	Expected Actuarial Value of Assets at January 1, 1998 (a) + (b) + (c) + (d) - (e)	\$45,448,130
5.	Acti	uarial Value of Assets as of January 1, 1998	\$49,871,082
6.	Acti	uarial Asset Gain (Loss) (5) - (4)(f)	\$ 4,422,952
7.	Acti	uarial Gain (Loss) (3) + (6)	\$ 4,338,676

^{*} Prior to enhanced retirement plan amendment.

NORMAL COST

The components of normal cost under the Plan's funding method are as follows:

Components	January 1, 1998	January 1, 1997
Retirement Benefits	\$438,820	\$533,779
Withdrawal Benefits	56,993	58,748
Disability Benefits	18,613	17,498
Death Benefits	21,011	28,502
Expenses	_	, _
Total Normal Cost	\$535,437	\$638,527

CURRENT LIABILITY AND FORM 5500 SCHEDULE B REPORTING

The current liability is determined in accordance with IRC Section 412(1). The current liability under RPA '94 is valued using an interest rate, for 1998, not less than 90% nor more than 106% of the four-year average of thirty-year Treasury Bond rates.

Current liability is used in the calculation of the minimum required and maximum tax deductible contributions.

The actuarial present value of accrued benefits for plan participants under RPA '94 disclosed on the 1998 Form 5500 Schedule B is summarized as follows:

	Number	RPA '94 Current Liability as of January 1, 1998
Vested Benefits		
Active Participants*	306	\$10,420,195
Participants with Deferred Benefits	124	3,032,884
Participants Receiving Benefits	243	20,532,338
Total Vested Benefits	673	\$33,985,417
Nonvested Benefits	41	993,059
Total	714	\$34,978,476

Value of benefits accruing during the year	\$ 951,040
Expected benefit payments during the year	\$ 2,459,017
Assumed rate of interest	7.17%
Estimated investment return on actuarial value of plan assets for the year ending December 31, 1997, as required on the	
1998 Schedule B	18.81%

^{*} Includes all liabilities for transfers out of the plan.

CONTRIBUTIONS

Section 412 of the Internal Revenue Code sets forth minimum funding standards. Section 404(a)(1) of the Internal Revenue Code describes the limitations on tax-deductible contributions to a pension trust. Since deductibility can be affected by factors not considered here, we recommend that the Company reviews the tax consequence of any contribution to be made.

On the basis of the valuation as of January 1, 1998, and relying upon final and proposed IRS regulations (where appropriate), this section shows a determination of the minimum contribution required for the plan year ending December 31, 1998, and the maximum tax deductible contribution for the tax year ending September 30, 1998.

A summary of results is as follows:

	Minimum Required (End of Year)	Maximum Tax Deductible
Contribution	\$ -	\$ -

Section 416 of the Internal Revenue Code specifies additional requirements for plan qualification. This could affect benefit accruals and funding if the present value of benefits for key employees equals or exceeds 60% of the present value of benefits for all employees. Such a plan is said to be Top-Heavy. We performed no special test regarding the portion of accumulated benefits attributable to key employees. However, we expect that the Western Kentucky Gas Retirement Plan is not Top-Heavy due to the large number of rank and file participants.

A. MINIMUM REQUIRED CONTRIBUTION AND FUNDING STANDARD ACCOUNT

The Funding Standard Account is used to determine whether the Plan meets the minimum funding requirements under ERISA. The Funding Standard Account for the plan year ending December 31, 1997, and the determination of the minimum required contribution for the plan year ending December 31, 1998, are as follows:

		Plan Year Ending			
	Funding Standard Account	December 31, 1998	December 31, 1997		
Charge	es				
(a)	Prior Year Funding Deficiency	\$ -	\$ -		
(b)	Normal Cost for Plan Year	535,437	638,527		
(c)	Amortization Charges	_	_		
(d)	Interest on (a), (b), and (c)	45,512	54,275		
(e)	Additional Funding Charge	_			
(f)	Additional Interest Charge due to Late Quarterly Contributions	-	_		
(g)	Total Charges	\$ 580,949	\$ 692,802		
Credits	•				
(h)	Prior Year Credit Balance	\$ 812,839	\$ 749,160		
(i)	Employer Contributions		N/A		
(j)	Amortization Credits	_	-		
(k)	Interest on (h), (i), and (j)	69,091	63,679		
(1)	Miscellaneous Credits				
	(1) Full Funding Credit before Current Liability	580,949	692,802		
	(2) Additional Credit due to Current Liability	-	-		
	(3) Waived Funding Deficiency	_	_		
(m)	Total Credits	\$1,462,879	\$1,505,641		
Credit	Balance (Funding Deficiency) (m) – (g)	N/A	\$ 812,839		
Minim than \$-0	um Required Contribution (g) – (m), not less	\$ 0	s o		

B. QUARTERLY CONTRIBUTIONS

The quarterly contribution requirement for the current year is based on the lesser of:

- 90% of the minimum required contribution for the current plan year (as of the beginning of the year) or
- 100% of the minimum required contribution for the prior plan year (as of the end of the prior year).

These contribution requirements are determined before any reduction of the minimum funding credit balance. A credit balance may be used to offset the quarterly payments but only if the credit balance is based on actual contributions received by the trust.

Since the required contributions for the prior plan year and current plan year were \$0 before considering the credit balance, quarterly contributions are not required for the current plan year or for the following plan year.

C. ADDITIONAL FUNDING CHARGE FOR UNDERFUNDED PLANS

Certain underfunded plans are required to make additional contributions to reduce the underfunding. There is no unfunded current liability; therefore, this requirement does not apply to this plan.

1. RPA '94 Current Liability at January 1, 1998

\$34,978,476

2. Adjusted Assets at January 1, 1998
(Actuarial Value of Assets minus Credit Balance)

49,058,243

3. Funded Current Liability Percentages (2) ÷ (1)

140.25%

4. Unfunded Current Liability

(1) – (2), not less than zero

\$

D. FULL FUNDING LIMIT AND FULL FUNDING CREDIT

Development of Estimated Assets for Full Funding Limitation Purposes				
	For Purposes of:	Minimum Required Contribution	Maximum Tax-Deductible Contribution	Maximum Tax- Deductible Contribution Unfunded Current Liability
1.	Value of Plan Assets as of January 1, 1998, based on (a) Lesser of actuarial value and market value (b) Actuarial value	\$49,871,082 N/A	\$49,871,082 N/A	N/A \$49,871,082
2.	Credit Balance in Funding Standard Account as of January 1, 1998	812,839	N/A	N/A
3. 4.	Estimated Benefit Disbursements Investment Return at 8.5%	2,458,122	2,458,122	2,459,017
	 (a) Item (1) less item (2) for one year (b) Item (3) for one-half year (c) Total: (a) - (b) 	4,169,951 102,340 4,067,611	4,239,042 102,340 4,136,702	4,239,042 102,377 4,136,665
5.	Contribution Adjustments (a) Contributions included in (1) that have not been deducted (b) Contributions not included in (1) that have been deducted			
6.	(c) Total contribution adjustment: (a) – (b) Estimated Assets as of December 31, 1998: (1) – (2) – (3) + (4)(c) - (5)(c)	\$50,667,732	\$51,549,662	\$51,548,730

D. FULL FUNDING LIMIT AND FULL FUNDING CREDIT (CONTINUED)

	Full Funding Limitation - Minimum Required Contributi	on Basis
1.	RPA '94 Current Liability	
	(a) RPA '94 Current Liability, 1/1/98	\$ 34,978,476
	(b) RPA '94 Normal Cost to end of Plan Year	951,040
	(c) Expected Benefit Payments During Year	2,459,017
	(d) Interest (7.17%) to 12/31/98 on	0.556.146
	(i) Items (a) and (b)	2,576,146
	(ii) Item (c) for 1/2 Year	86,630
	(e) RPA '94 Current Liability $12/31/98$, (a) + (b) - (c) + (d)(i) - (d)(ii)	\$35,960,015
2.	OBRA '87 Current Liability	
	(a) OBRA '87 Current Liability, 1/1/98	\$33,318,310
	(b) OBRA '87 Normal Cost to end of Plan Year	884,164
1	(c) Expected Benefit Payments During Year	2,458,122
l	(d) Interest (7.44%) to 12/31/98 on	
	(i) Items (a) and (b)	2,544,664
1	(ii) Item (c) for 1/2 Year	89,802
	(e) OBRA '87 Current Liability, $12/31/98$, (a) + (b) - (c) + (d)(i) - (d)(ii)	\$34,199,214
3.	100% Actuarial Accrued Liability Full Funding Limit (PUC)	•
	(a) Actuarial Accrued Liability, 1/1/98	\$32,970,076
	(b) Value of assets, 1/1/98	,-··,-··
	(i) Lesser of actuarial and market value	49,871,082
}	(ii) Credit Balance	812,839
	(iii) Plan Assets, (i) – (ii)	49,058,243
	(c) Normal Cost, 1/1/98	535,437
	(d) Subtotal, (a) – (b) (iii) + (c), minimum 0	-
	(e) Interest (8.5%) to 12/31/98	
	(f) Full Funding Limit based on Actuarial Accrued Liability, (d) + (e)	_
4.	150% OBRA '87 Current Liability Full Funding Limit	
	(a) 150% OBRA '87 Current Liability, 12/31/98	\$51,298,821
	(b) Estimated Assets, 12/31/98	50,667,732
	(c) Full Funding Limit based on 150% OBRA '87 Current Liability,	
	(a) - (b), minimum 0	\$ 631,089
5.	90% RPA '94 Current Liability Full Funding Limit	
· ·	(a) 90% RPA '94 Current Liability, 12/31/98	\$32,364,014
	(b) Estimated Assets, 12/31/98	51,548,730
	(c) Full Funding Limit based on 90% RPA '94 Current Liability,	J1,J70,/JV
	(a) – (b), minimum 0	_
4		
6.	Full Funding Limit for Minimum Required Contribution,	•
	lesser of (3)(f) and (4)(c), but not less than (5)(c)	\$ 0

D. FULL FUNDING LIMIT AND FULL FUNDING CREDIT (CONTINUED)

Full Funding Limitation – Maximum Deductible Contribution Basis		
1.	RPA '94 Current Liability (a) RPA '94 Current Liability, 1/1/98 (b) RPA '94 Normal Cost to end of Plan Year (c) Expected Benefit Payments During Year (d) Interest (7.17%) to 12/31/98 on (i) Items (a) and (b) (ii) Item (c) for 1/2 Year (e) RPA '94 Current Liability 12/31/98, (a) + (b) - (c) + (d)(i) - (d)(ii)	\$34,978,476 951,040 2,459,017 2,576,146 86,630 \$35,960,015
2.	OBRA '87 Current Liability (a) OBRA '87 Current Liability, 1/1/98 (b) OBRA '87 Normal Cost to end of Plan Year (c) Expected Benefit Payments During Year (d) Interest (7.44%) to 12/31/98 on (i) Items (a) and (b) (ii) Item (c) for 1/2 Year (e) OBRA '87 Current Liability, 12/31/98, (a) + (b) - (c) + (d)(i) - (d)(ii)	\$33,318,310 884,164 2,458,122 2,544,664 89,802 \$34,199,214
3.	 100% Actuarial Accrued Liability Full Funding Limit (PUC) (a) Actuarial Accrued Liability, 1/1/98 (b) Lesser of Actuarial and Market Value of Assets (c) Contributions included in (b), but not yet deducted (d) Normal Cost, 1/1/98 (e) Subtotal, (a) - (b) + (c) + (d), minimum 0 (f) Interest (8.5%) to 12/31/98 (g) Full Funding Limit based on Actuarial Accrued Liability, (e) + (f) 	\$32,970,076 49,871,082 - \$ 535,437 - -
4.	 150% OBRA '87 Current Liability Full Funding Limit (a) 150% OBRA '87 Current Liability, 12/31/98 (b) Estimated Assets, 12/31/98 (c) Full Funding Limit based on 150% OBRA '87 Current Liability, (a) - (b), minimum 0 	\$51,298,821 51,549,662
5.	 90% RPA '94 Current Liability Full Funding Limit (a) 90% RPA '94 Current Liability, 12/31/98 (b) Estimated Assets, 12/31/98 (c) Full Funding Limit based on 90% RPA '94 Current Liability, (a) – (b), minimum 0 	\$32,364,014 51,548,730
6.	Full Funding Limit for Maximum Tax Deductible Contribution, maximum of (5)(c) and lesser of (3)(g) and (4)(c)	\$ 0

E. AMORTIZATION SCHEDULE FOR MINIMUM FUNDING STANDARD

All bases were eliminated due to the existence of a credit under IRC section 412(c)(6) in the prior year. Since the assets (minus the credit balance) exceeded the actuarial liability plus normal cost for the year, no gain (loss) base was established nor were bases established due to changes in the plan provisions, which would be offset by the full funding credit in the current year.

As a result of the full funding limitation, the basic funding formula of CFR section 1.412(c)(3)-1(b)(1) cannot be met.

F. MAXIMUM TAX DEDUCTIBLE CONTRIBUTION

The maximum tax deductible contribution is the sum of the normal cost plus amortization of various bases over 10 years. Each base represents a change in the actuarial accrued liability established when the plan was initially adopted or subsequently amended, or when actuarial gains and losses were recognized, or when actuarial assumptions were changed. The maximum is limited to the full funding limitation for the year, but not less than the level of the unfunded current liability.

1.	Normal Cost as of January 1, 1998	\$	535,437
2.	Limit Adjustments as of January 1, 1998		
3.	Interest to September 30, 1998		33,784
4.	(1) + (2) + (3)	\$	569,221
5.	Minimum Required Contribution		_
6.	Larger of (4) or (5)	\$	569,221
7.	Full Funding Limitation		
	(a) ERISA	\$	_
	(b) OBRA '87	\$	_
	(c) RPA '94	\$	_
	(d) Lesser of (a) or (b), but not less than (c)	\$	-
8.	Alternate IRC Section 404 Maximum		
	(a) Projected RPA '94 Current Liability	\$35	5,960,015
•	(b) Projected Assets	51	,548,730
	(c) Unfunded Current Liability as of December 31, 1998		
	(a) – (b), but not less than zero	\$	_
9.	Maximum Tax Deductible Contribution for taxable year ending September 30, 1998, lesser of (6) or (7)(d),		
	but not less than (8)(c)	\$	

Any contribution in excess of this amount may be subject to a nondeductible excise tax.

G. AMORTIZATION SCHEDULE FOR MAXIMUM CONTRIBUTION

No 10-year amortization bases currently exist.

Section 2.1 Information pertaining to the actuarial present value of accumulated plan benefits as required under FAS #35.

FAS #35 INFORMATION

A. ACTUARIAL PRESENT VALUE OF ACCUMULATED PLAN BENEFITS

The actuarial present value of vested and nonvested accumulated plan benefits was computed on an ongoing plan basis in order to provide required information under Financial Accounting Standards Board Statement No. 35. In this calculation, a determination is made of all benefits earned by current participants as of the valuation date, and the actuarial present value is then computed using demographic assumptions and an assumed interest rate. Assumptions with respect to future salary and Social Security increases and accrual of future benefit service are not necessary for this purpose.

Accumulated Plan Benefits	January 1, 1998	January 1, 1997
Vested Benefits		
Active Participants*	\$ 8,294,747	\$10,604,941
Participants with Deferred Benefits	2,157,378	1,863,883
Participants Receiving Benefits	18,765,799	14,639,607
Total Vested Benefits	\$29,217,924	\$27,108,431
Nonvested Benefits	778,398	923,769
Total Accumulated Plan Benefits	\$29,996,322	\$28,032,200
Assumed Rate of Interest	8.50%	8.50%
Market Value of Assets Available for Benefits	\$56,016,878	\$49,414,504

^{*}Includes transfers out of plan

B. STATEMENT OF CHANGES IN ACCUMULATED PLAN BENEFITS

A statement of changes in the actuarial present value of accumulated plan benefits follows. This statement shows the effect of certain events on the actuarial present value shown on the previous page.

Actuarial Present Value of Accumulated Plan Benefits as of January 1, 1997	\$28,032,200
Increase (decrease) during the year attributable to:	
Benefits accumulated	\$ 1,293,299
Increase for interest due to the decrease in the discount period	2,288,209
Benefits paid	(2,270,483)
Plan amendment*	653,097
Change in actuarial assumptions	_
Net increase (decrease)	\$ 1,964,122
Actuarial Present Value of Accumulated Plan Benefits as of January 1, 1998	\$29,996,322

^{*}Enhanced retirement program

The benefits valued include all benefits—retirement, preretirement death, disability, and vested termination—payable from the Plan for employee service as of the valuation date. Benefits are assumed to accrue (accumulate) in accordance with the plan provisions.

The actuarial present value of accumulated plan benefits shown in this report is calculated using the same actuarial assumptions used for funding purposes. The values shown may not correspond to those determined for reporting and disclosure purposes under the requirements of SFAS #87 or to those used for disclosure on the Schedule B of Form 5500.

In this section we present information regarding plan assets as reported by the plan administrator or trustee. The plan assets represent the portion of total plan liabilities which have been funded as of the valuation date.

- Section 3.1 Value of assets at December 31, 1997.
- Section 3.2 Record of contributions.

VALUE OF ASSETS AT DECEMBER 31, 1997

Based upon the information furnished by the trustee, the change in assets over the valuation year ending December 31, 1997, is summarized as follows:

			Actuarial Value	Market Value
1.	Assets at January 1, 1997	,	\$44,067,411	\$49,414,504
2.	Contributions and Disbur	sements		
	a. Contributions		\$ -	\$ -
	b. Benefit Payments		(2,270,483)	(2,270,483)
	c. Expenses		(327,541)	(327,541)
	d. Total		\$ (2,598,024)	\$ (2,598,024)
3.	Investment Income			
	a. Interest and Dividend	S	\$ 2,100,019	\$ 2,100,019
	b. Change in Appreciation unrealized)	on (realized and	6,301,676*	7,100,379
	c. Total		\$ 8,401,695	\$ 9,200,398
4.	Assets at December 31, 1	997	\$49,871,082	\$56,016,878
5 .	Approximate Rate of Retu	ırn	18.81%**	18.38%
* '	Developed as follows:			
	1997 Appreciation	\$ 7,100,379		
	1996 Appreciation	3,997,392		
	1995 Appreciation	7,807,258		
		\$ 18,905,029		
		÷ 3		
		\$ 6,301,676		

^{**} Amount to be reported on Schedule B of Form 5500.

RECORD OF CONTRIBUTIONS

There were no contributions made for the 1997 plan year.

In this section, the basis of the valuation is presented and described. The census of participants, actuarial basis, and provisions of the Plan are the foundation of the valuation, since these, along with plan assets, are the present facts upon which benefit payments will depend. The valuation is based on the premise that the Plan will continue in existence.

- Section 4.1 Participant data used for the actuarial valuation.
- Section 4.2 Actuarial basis for the valuation.
- Section 4.3 Summary of plan provisions.

A. COUNT OF ACTIVE PARTICIPANTS

WESTERN KENTUCKY GAS COMPANY EMPLOYEE AGE AND SERVICE DISTRIBUTION AS OF JANUARY 1, 1998

·	Years of Service									
Age	Under 5	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40+	Total
Under 25	2	1								3
25-29	5	1								6
30-34	10	7	8							25
35-39	8	9	20	28	2					67
40-44	10	8	10	25	25	2				80
45-49	5	4	6	7	19	7	1			49
50-54			9	4	9	16	7			45
55-59	1	3	2	9	4	10	5	9		43
60-64					2	3	2	5	1	13
65-69										
70-74										
75+										
Total	41	33	55	73	61	38	15	14	1	331

B. AVERAGE COMPENSATION

WESTERN KENTUCKY GAS COMPANY AVERAGE SALARY DISTRIBUTION AS OF JANUARY 1, 1998

Years of Service										
Age	Under 5	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40+	Total
Under 25	23,682	21,648								23,004
25-29	27,931	27,996								27,941
30-34	28,591	36,773	33,140							32,337
35-39	25,054	28,033	35,925	34,098	37,146					32,840
40-44	24,948	28,620	28,804	39,551	39,958	33,054				35,254
45-49	30,245	49,464	30,102	46,274	37,549	35,397	39,408			37,841
50-54			36,296	30,459	30,123	37,027	45,933			36,301
55-59	59,280	37,532	26,244	29,337	29,679	36,238	62,791	55,062		41,372
60-64					36,240	34,696	41,022	39,809	24,588	37,096
65-69										
70-74										_
75+										_
Total	27,642	33,296	33,298	36,347	36,869	36,126	50,463	49,615	24,588	35,694

^{*}Information for single participant cells is undisclosed.

C. PARTICIPANT STATISTICS

Summary of Inactive Participants as of January 1, 1998	Number	Amount of Monthly Benefit
Participants Receiving Benefits	243	\$198,338
Participants with Deferred Benefits	124	\$ 35,780

Statistics for		As of Januar	ry 1, 1997	
Active			Average	
Participants	Number	Age	Service	Earnings
Continuing	359	45.6	18.6	\$35,168
New	11	34.4	1.6	32,351
Total	370	45.3	18.2	\$35,085

Statistics for		As of Janua	ary 1, 1998			
Active		Average				
Participants	Number	Age	Service	Earnings		
Continuing	324	45.3	18.0	\$35,963		
New	7	35.0	1.5	23,260		
Total	331	45.1	17.7	\$35,694		

ACTUARIAL BASIS

VALUATION OF LIABILITIES

1. FUNDING METHODS

Liabilities and contributions shown in the report are computed using the Projected Unit Credit method.

The objective under this method is to fund each participant's benefits under the plan as they would accrue, taking into consideration future salary increases. Thus, the total pension to which each participant is expected to become entitled at the assumed retirement age is broken down into units on a service-to-service ratio basis, each associated with a year of past or future credited service. Changes are made for changes in the rate of accrual. When this method is introduced, there will be an Initial Liability for benefits credited for service prior to that date, and to the extent that the liability is not covered by Assets of the plan, there is an Unfunded Liability to be funded over a chosen period in accordance with an amortization schedule.

A detailed description of the calculation follows:

An individual's accrued benefit for valuation purposes on any date (i.e., a valuation date) related to a particular separation date is the accrued benefit described under the plan but determined:

- (1) With the compensation (as projected with the salary scale) that would be used in the calculation of the benefit on that separation date, and
- (2) With the covered compensation (taking into account expected future increases) that would be used under the terms of the plan in the calculation of the benefit on that separation date.

The benefit deemed to accrue for an individual during a plan year is the excess of the accrued benefit for valuation purposes at the end of the plan year over the accrued benefit for valuation purposes at the beginning of the plan year. Both accrued benefits are calculated from the same projections of final average compensation and Covered Compensation to the various anticipated separation dates.

An individual's accrued liability is the present value of the accrued benefit for valuation purposes at the beginning of the plan year, and the normal cost is the present value of the benefit deemed to accrue in the plan year. Since probabilities of mortality, disability, termination, and possible retirement are used at each age, the accrued liability and the normal cost for an individual are the sum of the component accrued liabilities and normal costs associated with the various anticipated separation dates and events. These accrued liabilities and normal cost reflect the accrued benefits as modified to obtain the benefits payable on those dates, and the probability of the individual separating on those dates.

The plan's normal cost is the sum of the individual normal costs, and the plan's accrued liability is the sum of the accrued liabilities for all participants under the plan.

No benefits are projected to be greater than the limitation currently imposed by

2. VALUATION PROCEDURES

	Section 415(b)(1) of the Internal Revenue Code, in accordance with the requirements of Section 404(j) of the Code.
0	No earnings are projected to be greater than the limitation currently imposed by Section 401(a)(17) of the Internal Revenue Code (\$160,000).
0	No actuarial accrued liability is held for nonvested, inactive participants who have a break-in-service, or for nonvested participants who have quit or been terminated even if a break-in-service had not occurred as of the valuation date.

The wages used in the projection of benefits and liabilities were the greater of considered earnings for the preceding plan year (increased at the assumed rate of 4.0%) and rates of pay as of the valuation date. Benefits were calculated based on actual earnings to the extent available, with the valuation salary scale used to develop earnings for other years.

3. METHOD FOR ACCUMULATED PLAN BENEFIT VALUES

The Unit Credit Cost method was used for valuing accumulated plan benefits. The Accrued Liability is calculated at the valuation date as the present value of benefits credited with respect to service to date.

4. ACTUARIAL ASSUMPTIONS

Economic Assumptions

Investment Return

- Funding Calculations 8.5% per annum, compounded annually. We

have assumed that the trust's investment income (and appreciation) will cover expenses and, in addition, will yield the rate

indicated above.

- Current Liability OBRA '87: 7.44% RPA '94: 7.17%

.....

Earnings Progression 4.0% per annum, compounded annually.

Social Security Increases

Wage Base Increases 4.0% per annum, compounded annually.

Cost-of-Living Increases 4.0% per annum, compounded annually.

Demographic Assumptions

Retirement Age

Age 55 with five years of service.

Retirement Rates

Attained Age	Annual Rates of Retirement Per 100 Eligible Participants
55	5
56	5
57	5
58	5
59	10
60	10
61	15
62	40
63	30
64	30
65	100

Mortality Rates

Active participants and nondisabled pensioners	1983 Group Annuity Mortality Table. See table below for sample values.
Disabled pensioners	See table below for sample values.
Disability Rates	Graduated rates. See table below for sample values.
Separation Rates	Graduated rates. See table below for sample values.

	Sample						
		Mor	tality				
Attained	He	althy	Dis	Disabled		ability	
Age	Males	Females	Males	Females	Males	Females	Separation
20	.04	.02	_	_	.05	.05	16.72
25	.05	.03	.75	.80	.06	.07	12.07
30	.06	.03	1.11	1.15	.06	.09	8.60
35	.09	.05	1.49	1.45	.07	.16	6.35
40	.12	.07	2.11	1.65	.10	.26	4.73
45	.22	.10	2.86	1.83	.20	.40	3.49
50	.39	.16	3.78	2.27	.41	.58	2.76
55	.61	.25	5.03	2.84	.69	.78	2.19
60	.92	.42	6.32	3.33	1.18	1.15	1.43

Marital Status at Benefit Eligibility

Percentage married	Males: 85%; Females: 85%
i ci contago marriod	141dics. 05/0, 1 ciliales. 05/0

Age difference A husband is assumed to be three years older

than his spouse.

Provision for Expenses None.

Assumed Age of Commencement of Deferred Vested Benefits

Age 62.

5. ACTUARIAL VALUE OF ASSETS

Three-year moving market average. Asset value is increased each year by contributions, dividends, interest, and average annual market change in the three years ending on the valuation date. It is decreased by benefit payments and expenses. The resulting value will not be less than 80% nor more than 120% of the market value of assets.

6. CHANGES IN ACTUARIAL ASSUMPTIONS

Other than changes to the current liability interest rates, there have been no changes in the actuarial assumptions since prior valuation.

SUMMARY OF PLAN PROVISIONS

EFFECTIVE DATE OF PLAN AND PLAN YEAR

January 1, 1947. The plan was restated as Western Kentucky Gas Retirement Plan on January 1, 1988. The plan year is January 1 through December 31.

ADMINISTRATION

The plan is administered by a Retirement Committee appointed by the employer. Trustee for the funds is Bankers Trust.

EMPLOYEES INCLUDED

All regular, full-time employees are included on the first day of the month following completion of one year of service.

EMPLOYEE CONTRIBUTIONS

Employee contributions are not required or permitted.

BENEFIT SERVICE

Prior to January 1, 1988, each plan year in which the employee completed 1,000 hours. After January 1, 1988, service is based on continuous employment.

COMPENSATION CONSIDERED

Prior to 1988 and as a Minimum for the 1988 Year

Regular basic earnings at January 1 of each plan year. Full-time sales personnel will have their commissions included in their regular basic earnings.

Beginning in 1988

Regular wages or salary, including overtime, premium pay, and amounts specifically elected by the employee to be reduced from salary under Section 401(k) of the Internal Revenue Code, but excluding living and automobile allowances, reimbursement for expenses, bonuses or any other special payments.

The benefit accrued to December 31, 1988, is not affected by earnings limitations. For the benefit accrued between 1988 and December 31, 1993, compensation is limited to \$200,000 annually for 1989, \$209,200 for 1990, \$222,220 for 1991, \$228,860 for 1992, and \$235,840 for 1993. For benefits accruing after 1993, compensation for all years is limited to \$150,000, increasing for years after 1993 in accordance with Section 401(a)(17) of the Internal Revenue Code.

NORMAL RETIREMENT BENEFIT

At age 65, provided he has five years of vesting service, a member may retire and receive an immediate monthly benefit payable for life. The benefit is the greater of the Old Plan Formula determined as of December 31, 1992, or the New Plan Formula.

Old Plan Formula: Greater of I or II determined as of December 31, 1992.

- I. The greater of A or B, determined at December 31, 1988, plus C based upon benefit service after December 31, 1988.
 - A. (1. + 2.)
 - 1. a. 1 2/3% of average monthly compensation, multiplied by years of benefit service earned prior to January 1, 1988, minus
 - b. 1 2/3% of monthly primary Social Security multiplied by benefit service (not to exceed 30 years) at normal retirement date, multiplied by the ratio of benefit service prior to January 1, 1988, to benefit service at normal retirement date.
 - 2. a. 1.2% of average monthly compensation, multiplied by benefit service after January 1, 1988, plus
 - b. 0.45% of average monthly compensation in excess of 1/12 of covered compensation, multiplied by years of benefit service on or after January 1, 1988.

B. (1.-2.)

- 1. 1 2/3% of average monthly compensation as of January 1, 1988, multiplied by total years of benefit service as of January 1, 1988.
- 2. 1 2/3% of monthly primary Social Security under the January 1, 1988, law, multiplied by benefit service (not to exceed 30 years) at normal retirement date, multiplied by the ratio of benefit service at date of termination to benefit service at normal retirement date.

C. (1. + 2.)

- 1. 1.2% of average monthly compensation, multiplied by benefit service after December 31, 1988, plus
- 2. 0.45% of average monthly compensation in excess of 1/12 of covered compensation, multiplied by years of benefit service after December 31, 1988.

II. (D. + E.)

- D. 1. 1.55% of average monthly compensation, multiplied by years of benefit service accrued prior to January 1, 1988, *minus*
 - 2. 0.65% x 1/12 of final average compensation (up to 1/12 of covered compensation) multiplied by benefit service accrued prior to January 1, 1988.
- E. 1. 1.2% of average monthly compensation, multiplied by years of benefit service after December 31, 1987, *plus*
 - 2. 0.45% of average monthly compensation in excess of 1/12 of covered compensation multiplied by years of benefit service after December 31, 1987.

New Plan Formula

III. (F. + G.)

- F. 1. Benefit determined as of December 31, 1987, under formula A.1., times
 - 2. Average monthly compensation as of date of termination divided by average monthly compensation as of December 31, 1987.
- G. 1. 1.2% of average monthly compensation, multiplied by benefit service on or after January 1, 1988, plus
 - 2. 0.45% of average monthly compensation in excess of 1/12 of covered compensation, multiplied by benefit service on or after January 1, 1988.

Final average compensation is an annual average of compensation over three years, as defined in the Internal Revenue Code. Covered compensation is the average of the maximum limit in each year which any person could have paid Social Security taxes during the 35-year period ending before the year of Social Security retirement age, as defined in Treasury regulations.

Average monthly compensation is 1/12 of the average of the highest five consecutive years of compensation during the last 10 years prior to retirement.

LATE RETIREMENT BENEFIT

With the consent of the employer, an employee may continue in employment beyond age 65. The benefit, commencing at actual retirement, is equal to the greater of:

- The normal retirement benefit based on compensation and credited service to actual retirement date, or
- The actuarial equivalent of the benefit payable at normal retirement date.

EARLY RETIREMENT BENEFIT

When an employee reaches age 55 and has completed ten years of service or age 60 and has completed five years of vesting service, he may retire early and receive a benefit payable at normal retirement.

The benefit is computed as for normal retirement. Payments may commence at any time prior to normal retirement date, but reduced as follows based upon the number of months by which the retirement date for benefit precedes Normal Retirement Date:

- A. Parts A1, B, and F as described under Normal Retirement, are reduced 1/180 for each of the first 60 months and 1/360 for each of the next 60 months.
- B. Part A2.a, C1, E1, and G1 as described under Normal Retirement, are reduced 2% per year for ages 60 and 61 and 4% per year for ages 55 to 60.
- C. Part D1 is reduced by 1/180 for each of the first 60 months and 1/400 for each of the next 60 months.

D. Part D2 is reduced as follows:

Age	at	Ben	efit
-----	----	-----	------

Commencement	Factor
64	.923
63	.862
62	.800
61	.738
60	.677
59	.615
58	.569
57	.523
56	.477
55	.431

E. Part A2.b, C2, E2, and G2 are reduced by 2% per year for ages 60 and 61 and 7% per year for ages 55 to 60.

SEVERANCE BENEFIT UPON RETIREMENT

If a participant retires under the Normal, Late, or Early provisions of the plan, in addition to the benefits indicated above, he will be entitled to a lump-sum severance benefit as indicated below:

Vesting Service	Lump-Sum Severance Benefit
5 but less than 10 years	3 times rate of weekly Compensation
10 but less than 20 years	4 times rate of weekly Compensation
20 or more years	5 times rate of weekly Compensation

DEFERRED VESTED BENEFIT

If an employee terminates after completing five years of vesting service, he will be entitled to a monthly benefit equal to the accrued benefit at termination, payable for life at his normal retirement date.

The benefit is computed as for early retirement and may be commenced on or after age 55.

DISABILITY BENEFIT

If terminated by reason of disability, the participant will receive a Disability Pension commencing at Normal Retirement Date equal to the Normal Retirement Benefit considering Average Monthly Compensation at date of disability and assuming service continued to Normal Retirement Date without interruption.

DEATH BENEFIT

Before Retirement

Upon death after the completion of five years of service, the spouse of a deceased employee receives a benefit for life which can be provided by the actuarial value of the benefit determined as for normal retirement, considering compensation and service to date of death. The actuarial value of the accrued benefit is determined using an interest-only discount prior to age 65.

After Termination of Employment - Prior to Early Retirement Eligibility

If an employee dies after terminating with a vested benefit but before his payments have been commenced, the spouse or dependent will receive a benefit equal to one-half of the pension the employee had accrued, reduced for early commencement as of the date of death or age 55, if later The benefit will be commenced at the earliest date the employee would have been eligible for an immediate pension.

If an employee dies after terminating with a vested benefit, after payments have been commenced, payments will be continued under the form elected by the employee at the date of his retirement (see *After Benefits Commence*). In addition, the spouse or beneficiary will receive a lump-sum death benefit of \$1,500.

After Retirement - After Early Benefit Eligibility, But Prior to Benefit Commencement

If an employee dies after terminating with a deferred early benefit, but prior to commencement of benefits, the spouse will receive a benefit for life (or period of dependency) equal to 50% of the employee's accrued benefit. In addition, the spouse or beneficiary of the employee will receive a lump-sum death benefit of \$6,500.

After Benefits Commence

If an employee dies after payments commenced, unless he elected alternate payment options, a death benefit of 50% of the participant's benefit is payable to his surviving spouse for the period of the spouse's life. In addition, the spouse or beneficiary will receive a lump-sum death benefit of \$6,500.

COST-OF-LIVING ADJUSTMENT

Effective January 1, 1997, an ad hoc cost-of-living adjustment was granted to participants who had been retired at least one full calendar year. The increase was equal to 3% for each full calendar year of retirement since January 1, 1990.

OPTIONAL FORMS OF BENEFIT

If the value of a benefit is less than \$3,500, it is paid in a lump sum. No other provision is made for lump-sum payment.

For married employees, the normal form of benefit is joint and 50% survivor; for single employees, the normal form is life only. Optional forms of payment include life only, joint and 50% or 100% survivor, 5 or 10 years certain and life, and level income option in conjunction with life only or joint and survivor form.

Optional conversions for the portion of the benefit based upon service prior to January 1, 1988, are based upon optional factors contained in the prior plan. Optional conversions for benefit based upon service after January 1, 1988, are based upon the UP84 mortality table and 4% interest.

ENHANCED ARLY RETIREMENT PROVISION

Eligibility:

During 1997 and 1998, certain displaced employees who attained age 53

with at least eight years of service or attained age 58 with at least three

years of service at a certain date.

Enhanced benefit:

Two years of additional benefit service in determining retirement benefit.

Early retirement was extended to participants younger than age 55 to allow

immediate commencement of retirement benefit.

Western Kentucky Gas Company Case No. 99-070 KPSC Data Request Dated August 19, 1999 DR Item Question 69

Witness: Thomas H. Petersen

Data Request:

The response to Item 47(f) of the Commission's July 16, 1999 Order indicated that Western would require more time to prepare an adequate response. The supplemental response filed August 13, 1999 indicated that progress was being made, but that additional time would be required, and that substantial time and analyses had been required to develop the cost-of-service study based upon the future test period. The Commission renews the original request and further requests that all underlying worksheets for the development of the forecasted inputs and other analyses discussed in the supplemental response be supplied no later than the date of this request.

Response:

Please see attached. Note, that the capital budgets for the future test period did not contain budgeted additions and retirements for meters and mains by size category at the detail level required for the mains study on sheet 7 of the study and the meter study on sheets 8 and 9 of the study. Therefore, the allocation percentages developed on these sheets use the detailed mains and meter investment data from the previous study. Also, an adjustment was made in column (b)of sheet 4 to move \$2,777,185 of call center and credit and collections expenses from account 922 administrative expenses transferred to customer accounts and services.

The worksheets for the design day information used on page 16 and the industrial volume adjustments on page 18, are attached. Other source documents used to prepare this study include Gary Smith's testimony and exhibits, filing requirements FR 10(10)(b) and (c), and responses to KPSC data requests dated July 16, 1999 items No. 46.

WESTERN KENTUCKY GAS COMPANY CLASS COST OF SERVICE STUDY RATE OF RETURN AT PRESENT RATES TWELVE MONTHS ENDED DECEMBER 31, 2000

Line No.	Cost Item	Total	Firm Residential	Firm Commercial	Firm Industrial	Interr. & Carriage	Large Int. & Carr.
		(a)	(b)	(c)	(d)	(e)	(f)
1 Total	Operating Margins	42,981,173	24,126,628	10,085,014	972,788	4,174,173	3,622,571
	1 Expense	26,583,268	14,392,265	6,299,328	575,506	1,951,206	3,364,965
5 Depre	ec. & Amortization	10,054,906	6,010,230	2,502,924	201,496	550,939	789,317
7 Prope 8	erty & Other Taxes	1,952,000	1,146,615	484,035	41,819	113,351	166,180
9 Inter	rest	4,984,495	2,895,897	1,226,083	107,251	298,859	456,405
10 11 Pre-T 12	Tax Expenses	43,574,669	24,445,006	10,512,369	926,072	2,914,355	4,776,866
	ole Income	(593,496)	(318, 378)	(427,355)	46,716	1,259,818	(1,154,295)
15 Incom	ne Taxes	(239,550)	(128,505)	(172,491)	18,856	508,494	(465,902)
16 17 Retur	n	4,630,549	2,706,024	971,219	135,111	1,050,183	(231,988)
18 19 Rate	Rase	130,484,160	75,808,824	32,096,409	2,807,611	7,823,539	11,947,777
20		, // / / / / / / / / / / / / / / / / /		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	·	1,023,333	11,547,777
21 Rate	Of Return	3.55%	3.57%	3.03%	4.81%	13.42%	-1.94%

Page 1A of 19

WESTERN KENTUCKY GAS COMPANY CLASS COST OF SERVICE STUDY RATE OF RETURN AT PROPOSED RATES TWELVE MONTHS ENDED DECEMBER 31, 2000

Line			Firm	Firm	Firm	Interr. &	Large
No.	Cost Item	Total	Residential	Commercial	Industrial	Carriage	Int. & Carr.
		(a)	(b)	(c)	(d)	(e)	(f)
	Total Operating Margins	57,108,821	33,347,891	13,415,036	1,178,065	4,873,571	3,799,795
3	O & M Expense	26,661,524	14,437,961	6,317,710	577,120	1,957,884	3,370,171
5	Deprec. & Amortization	10,054,906	6,010,230	2,502,924	201,496	550,939	789,317
7 8	Property & Other Taxes	1,952,000	1,146,615	484,035	41,819	113,351	166,180
9	Interest	4,984,495	2,895,897	1,226,083	107,251	298,859	456,405
	Pre-Tax Expenses	43,652,925	24,490,702	10,530,752	927,686	2,921,034	4,782,073
12 13	Taxable Income	13,455,896	8,857,189	2,884,284	250,379	1,952,537	(982,278)
14 15	Income Taxes	5,431,136	3,574,983	1,164,169	101,059	788,093	(396,472)
	Return	13,009,255	8,178,103	2,946,198	256,571	1,463,303	(129,401)
18 19	Rate Base	130,484,160	75,808,824	32,096,409	2,807,611	7,823,539	11,947,777
20 21	Rate Of Return	9.97%	10.79%	9.18%	9.14%	18.70%	-1.08%

WESTERN KENTUCKY GAS COMPANY CLASS COST OF SERVICE STUDY RATE CLASS COMPARISONS

Line No.Description	Firm Residential	Firm Commercial	Firm Industrial	Interr. & Carriage	Large Int. & Carr.
	(a)	(b)	(c)	(d)	(e)
1 Average Annual Use Per Customer	82.2	354.5	5,174.6	55,844.2	983,297.4
2 Winter Season as a % of Annual Use	73.8%	70.2%	56.9%	48.8%	45.6%
3 Class Load Factor Average Day / Design Day	19.5%	20.1%	22.2%	33.6%	57.8%

WESTERN KENTUCKY GAS COMPANY CLASS COST OF SERVICE STUDY RATE BASE - DECEMBER 31, 2000

Line								
No.	Item	Total	Gas Cost	Storage	Distribution	Transmission		Notes
		(a)	(b)	(c)	(d)	(e)	(f)	(g)
1 Gas Pi	lant	\$247,244,679	\$125,601	\$6,347,326	\$206,737,468	\$32,989,106	\$1,045,178	[1]
2 In Pro	ogress	0	0	0	0	0	0	[2]
3 Stora	ge Cushion	1,694,833		1,694,833				[3]
4 Acqui	sition Adjustment	0	0	0	0	0	0	[1]
5 Mater:	ial & Supplies	1,356,796		0	1,288,956	67,840	•	[7]
6 Gas S	tored Underground	6,964,955		6,964,955				[4]
7 Prepay	vments	433,767	217	11,148	362,716	57,865	1,821	[1]
	id Gas Purchases	26,886	26,886					[4]
	Requirements	3,322,909	43,530	71,110	3,091,634	116,302	333	[5]
10	-							_
11		261,044,825	196,234	15,089,372	211,480,774	33,231,113	1,047,332	_
12	•	<u> </u>						-
13 Deduc	t:							
14 Reser	ves:							
15 Depre	c. & Amort.	111,910,843	8,984	4,225,539	88,873,307	17,929,895	873,118	[2]
16 Defer	red Income Taxes	12,529,393	6,265	322,005	10,477,078	1,671,421	52,624	[1]
17 Custo	mer Advances Const.	6,120,429			5,814,408	306,021		[6]
18	•			arms arm				
19		130,560,665	15,249	4,547,544	105,164,793	19,907,337	925,742	_
20	•							_
21								
22 Rate	Base	130,484,160	180,985	10,541,828	106,315,981	13,323,776	121,590	_

Notes

- Allocated By Gross Plant Percentage, See Sheet 1
 Identified Where Possible, Residual Allocated By Gross Plant Percentage, See Sheet 1

- [3] Per Books
 [4] Working Gas, test year average
 [5] One Eighth O & M, Spread By O & M Percentage, Not Including Cost Of Gas, See Sheet 1
- [6] 95% Distribution, 5% Transmission [7] Fuel Stock To Storage Function; Balance, 95% Distribution, 5% Transmission

WESTERN KENTUCKY GAS COMPANY CLASS COST OF SERVICE STUDY RATE BASE - CLASSIFICATION

Line							
No.	Item	Total	Customer	Demand	Commodity	Direct	Notes
		(a)	(b)	(c)	(d)	(e)	(f)
	as Cost	\$180,985		\$154,099	\$26,886		[1]
2 3 S 4	torage	10,541,828		5,270,914	5,270,914		[2]
_	istribution	106,315,981	65,820,224	38,337,543	0	2,158,214	[3]
7 I 8	ransmission	13,323,776		13,323,776			[4]
9 F 10	Production	121,590		121,590			_ [4]

Notes [1] Prepaid Gas Purchases Are All Commodity, Remainder All Demand

[2] 50% Demand, 50% Commodity

[3] Based On Distribution Plant Accounts, See Sheet 2

12 Total Rate Base 130,484,160 65,820,224 57,207,922 5,297,800 2,158,214

[4] 100 % Demand

11

WESTERN KENTUCKY GAS COMPANY CLASS COST OF SERVICE STUDY Allocation of RATE BASE to Classes of Service

Line		Alloc.		Firm	Firm	Firm	Interr. &	Large
No.	Item	Factor [2]	Total	Residential	Commercial	Industrial	Carriage	Int. & Carr.
		(a)	(b)	(c)	(d)	(e)	(f)	(ā)
1 Gas Co	st	A&P/Gas	\$154,099	\$93,369	\$48,664	\$8,275	\$2,050	\$1,741
2		Sales	26,886	15,847	8,448	1,328	1,086	177_
3		_	180,985	109,216	57,112	9,603	3,136	1,918
4.			5 000 014	2 202 505	1 500 004	202 040	0.605	1 500
5 Storag	е	Design-B	5,270,914	3,282,725	1,700,924	283,048	2,635	1,582
6		Winter _	5,270,914		925,045	138,098	682,056	1,701,979
7			10,541,828	5,106,461	2,625,969	421,146	684,691	1,703,561
8 Distri	bution [1]			•				
9	Mains	Cust-A	10,550,982	9,369,272	1,158,498	14,771	7,386	1,055
10		Design-A	36,052,625	14,759,945	7,646,762	1,272,658	4,852,683	7,520,578
11								
12	Services	Cust-D	29,737,577	21,122,601	8,614,976	0	0	0
13								
14	Meters	Cust-M	12,578,245	8,619,871	3,516,877	288,042	153,455	0
15								
16	Other	Cust-C	12,953,420	8,466,355	4,186,545	53,109	141,192	106,218
17		Design-A	2,284,918	935,445	484,631	80,658	307,550	476,634
18								
19 Dir	ect - Other	Cust-E	2,158,214	0	0	27,625	1,212,269	918,320
20		•						
21 Total	Distribution		106,315,981	63,273,489	25,608,289	1,736,863	6,674,536	9,022,805
22								
23 Transm	ission	A&P	13,323,776	7,253,464	3,770,629	634,212	457,006	1,208,466
24					• •	•	•	
25 Produc	tion	A&P	121,590	66,194	34,410	5,788	4,171	11,027
26								
	Rate Base		130,484,160	75,808,824	32,096,409	2,807,611	7,823,539	11,947,777

Note [1] Distribution Rate Base Divided Among Mains, Services Etc. By Applying The Percent Of Total Classification In Distribution Accounts From Sheet 2
To The Classified Amounts From Page 4

^[2] Allocation Factors Derived On Pages 16 And 17

WESTERN KENTUCKY GAS COMPANY CLASS COST OF SERVICE STUDY GAS COST - CLASSIFICATION

Line	•					
No. Item	Total	Customer	Demand	Commodity	Direct	Notes
	(a)	(b)	(c)	(d)	(e)	(f)
1 Purchased Exp.	17,659			17,659		[1]
3 Admin. & General .	330,496		330,496			[2]
5 Depre. & Amortization	1,788	0	1,522	266	0	[3] [2]
7 Property & Other Taxes	976	0	831	145	0	[3] [5]
9 Return 10	18,044	0	15,363	2,681	0	[3] [6]
11 Income Taxes	7,251	0	6,174	1,077	0	[3][4]
12 13						
14 Revenue Requirement	376,214	0	354,386	21,828	0	_

Notes

- Total From Sheet 4
 Allocated To Functions On Sheet 1
 Classified Based On Rate Base Classification Percentage Table, Sheet 2
- [4] Total From Sheet 4; Allocated To Functions By Rate Base Pct., Sheet 1
- [5] Total From Sheet 4; Allocated To Functions By Gross Plant Pct., Sheet 1
- [6] Rate Of Return From Sheet 4; Applied To Functional Rate Base, Page 3

WESTERN KENTUCKY GAS COMPANY CLASS COST OF SERVICE STUDY Allocation of GAS COSTS to Classes of Service

Line	Alloc.		Firm	Firm	Firm	Interr. &	Large
No. Item	Factor	Total	Residential	Commercial	Industrial	Carriage	Int. & Carr.
	(a)	(p)	(c)	(D)	(e)	(f)	(g)
1 Purchased Exp.	Vol-A	17,659	4,764	2,539	468	2,695	7,193
2 3 Admin. & General 4	A&P/Gas	330,496	200,248	104,371	17,748	4,396	3,735
5							
6 Depre. & Amortization	Rb-Dem	1,522	702	364	61	150	245
7	Rb-Com	266	92	47	7	34	86
8							
9 Property & Other Taxes	Rb-Dem	831	383	199	33	82	134
10	Rb-Com	145	50	26	4	19	46
11							
12 Return	Rb-Dem	15,363	7,087	3,675	614	1,511	2,476
13	Rb-Com	2,681	931	472	71	346	861
14							
15 Income Taxes	Rb-Dem	6,174	2,848	1,477	247	607	995
16	Rb-Com	1,077	374	190	28	139	346
17	_						
18							
19 Revenue Requirement	_	376,214	217,479	113,360	19,280	9,979	16,117

WESTERN KENTUCKY GAS COMPANY CLASS COST OF SERVICE STUDY STORAGE - CLASSIFICATION

Line						
No. Item	Total	Customer	Demand	Commodity	Direct	Notes
	(a)	(b)	(c)	(d)	(e)	(f)
1 Accts. 818 & 819	\$68,307			\$68,307		[1][3]
3 All Other Accounts	301,385		150,693	150,692		[2][3]
5 Lp Expenses 6	0		0			[3]
7 Admin. & General 8	200,433		100,217	100,216		[2] [5]
9 Depre. & Amortization	191,695	0	95,848	95,847	0	[4] [5]
11 Property & Other Taxes 12	50,166	0	25,083	25,083	0	[4] [6]
13 Return 14	1,051,020	0	525,510	525,510	0	[4] [7]
15 Income Taxes 16 17	418,511	0	209,256	209,255	0	[4][8]
18 Revenue Requirement	2,281,517	0	1,106,607	1,174,910	0	

Notes

- [1] Compressor Station Expense Fuel Accounts, 100 % Commodity
- [2] 50 % Demand, 50% Commodity
- [3] Total From Sheet 4
- [4] Classified Based On Rate Base Classification Percentage Table, Sheet 2
- [5] Allocated To Functions On Sheet 1
- [6] Total From Sheet 4; Allocated To Functions By Gross Plant Pct., Sheet 1
- [7] Rate Of Return From Sheet 4; Applied To Functional Rate Base, Page 3
- [8] Total From Sheet 4; Allocated To Functions By Rate Base Pct., Sheet 1

WESTERN KENTUCKY GAS COMPANY CLASS COST OF SERVICE STUDY Allocation of STORAGE COSTS to Classes of Service

Line		Alloc.		Firm	Firm	Firm	Interr. &	Large
No.	Item	Factor	Total	Residential	Commercial	Industrial	Carriage	Int. & Carr.
		(a)	(b)	(c)	(b)	(e)	(f)	(g)
1 Accts	s. 818 & 819	Winter	\$68,307	\$23,634	\$11,988	\$1,790	\$8,839	\$22,056
2								
3 All 0	ther Accounts	Design-B	150,693	93,852	48,629	8,092	75	45
4		Winter	150,692	52,139	26,446	3,948	19,500	48,659
5								
6 Lp Ex	penses	Design-B	0	0	0	0	0	0
7								
8 Admir	n. & General	Design-B	100,217	62,415	32,340	5,382	50	30
9		Winter	100,216	34,675	17,588	2,626	12,968	32,359
10								
11 Depr.	& Amortization	Rb-Dem	95,848	44,217	22,930	3,828	9,426	15,447
12		Rb-Com	95,847	33,281	16,889	2,522	12,359	30,796
13								
14 Prope	erty & Other Taxe	Rb-Dem	25,083	11,571	6,001	1,002	2,467	4,042
15	•	Rb-Com	25,083	8,710	4,420	660	3,234	8,059
16								
17 Retu	n	Rb-Dem	525,510	242,428	125,719	20,987	51,681	84,695
18		Rb-Com	525,510	182,476	92,597	13,830	67,764	168,843
19								
20 Incor	ne Taxes	Rb-Dem	209,256	96,534	50,061	8,357	20,579	33,725
21		Rb-Com	209,255	72,661	36,872	5,507	26,983	67,232
22		•						
23								
	nue Requirement		2,281,517	958,593	492,480	78,531	235,925	515,988

WESTERN KENTUCKY GAS COMPANY CLASS COST OF SERVICE STUDY DISTRIBUTION - CLASSIFICATION

Lin		Total	Customer	Demand	Commodity	Direct	Notes
No.	Item	(a)	(b)	(c)	(d)	(e)	(f)
1	Accts. 876 & 890	\$331,727				\$331,727	[1] [5]
2	98% Of Accts. 901 - 910	5,170,470	5,170,470				[2] [5]
3	64% of Accts. 911 - 916	22,102			22,102		[3] [5]
4	Admin. & General	8,694,584	2,898,195	2,898,195	2,898,194		[4] [8]
5	98% Of Accts. 878,879, 880,892,893,894	2,867,098	2,867,098				[5]
6	Other Accts. 870 Through 894	7,645,446	1,730,929	5,914,517			[6] [5]
7	Depre. & Amortization	9,063,817	5,611,410	3,268,412	0	183,995	[7] [8]
8	Property & Other Taxes	1,632,262	1,010,533	588,594	0	33,135	[7] [9]
9	Return	10,599,703	6,562,276	3,822,253	0	215,174	[7] [10
10	Income Taxes	4,220,329	2,612,805	1,521,851	0	85,673	[7] [11
11	Revenue Requirement	50,247,538	28,463,716	18,013,822	2,920,296	849,704	_

Notes

- [1] O/M Meas. And Reg. Station Accounts Industrial, Direct Assigned
- [2] Customer Accounts Expenses, 100 % Customer
- [3] Sales Expenses Accounts, 100 % Commodity
- [4] 1/3 To Each: Customer, Demand, Commodity
- [5] Total From Sheet 4[6] Used Plant Allocator, Sheet 4
- [7] Classified Based On Rate Base Classification Percentage Table, Sheet 2
- [8] Allocated To Functions On Sheet 1
- [9] Total From Sheet 4; Allocated To Functions By Gross Plant Pct., Sheet 1
- [10] Rate Of Return From Sheet 4; Applied To Functional Rate Base, Page 3
- [11] Total From Sheet 4; Allocated To Functions By Rate Base Pct., Sheet 1

WESTERN KENTUCKY GAS COMPANY CLASS COST OF SERVICE STUDY Allocation of DISTRIBUTION COSTS to Classes of Service

Line		Alloc.		Firm	Firm	Firm	Interr. &	Large
No.	Item	Factor	Total	Residential	Commercial	Industrial	Carriage	Int. & Carr
	-	(a)	(p)	(c)	(d)	(e)	(f)	(g)
1 Accts.	876 & 890 Direct	Cust-E	\$331,727	\$0	\$0	\$4,246	\$186,331	\$141,150
_	Accts. 901 - 910	Cust-B	5,170,470	3,402,169	1,682,471	53,256	28,438	4,136
5 64% Of	Accts. 911 - 916	Vol-A	22,102	5,963	3,178	586	3,373	9,002
7 Admin.	& General	Cust-A	2,898,195	2,573,597	318,222	4,057	2,029	290
8		Vol-A	2,898,194	781,933	416,760	76,802	442,264	1,180,435
9		Design-A	2,898,195	1,186,521	614,707	102,306	390,097	604,564
10								
11 98% Of	Accts 878,879,							
12 880,89 13	92,893,894	Cust-B	2,867,098	1,886,550	932,954	29,531	15,769	2,294
14 Other A	Accts 870 Through	Cust-B	1,730,929	1,138,951	563,244	17,829	9,520	1,385
15 894 16		Design-A	5,914,517	2,421,403	1,254,469	208,782	796,094	1,233,769
17 Depre.	& Amortization	Rb-Cus	5,611,410	4,056,203	1,489,968	30,344	25,749	9,146
18		Rb-Dem	3,268,412	1,507,783	781,912	130,526	321,431	526,760
19 20		Rb-Dir	183,995	0	0	2,355	103,350	78,290
21 Propert	y & Other Taxes	Rb-Cus	1,010,533	730,463	268,321	5,464	4,637	1,648
22		Rb-Dem	588,594	271,530	140,811	23,506	57,885	94,862
23		Rb-Dir	33,135	0	0	424	18,612	14,099
24								
25 Return		Rb-Cus	6,562,276	4,743,536	1,742,446	35,485	30,113	10,696
26		Rb-Dem	3,822,253	1,763,281	914,409	152,644	375,898	616,021
27		Rb-Dir	215,174	0	0	2,754	120,863	91,557
28 29 Income	Пажая	Rb-Cus	2,612,805	1 000 654	603 764	14 120	11,990	4 250
30	Taxes	Rb-Cus Rb-Dem	1,521,851	1,888,664 702,060	693,764 364,077	14,129 60,776	149,666	4,258 245,272
31		Rb-Dem Rb-Dir	85,673	702,060	364,077	1,097	48,123	36,454
32		KD-DIL	65,673			1,097	40,123	30,434
34 Povenue	Requirement		50,247,538	29,060,607	12,181,713	956,899	3,142,232	4,906,088
24 veveune	vedurrement		20,247,330	47,000,007	14,101,/13	730,079	3,142,232	4,500,080

WESTERN KENTUCKY GAS COMPANY CLASS COST OF SERVICE STUDY TRANSMISSION - CLASSIFICATION

Line		_					
No.	Item	Total	Customer	Demand	Commodity	Direct	Notes
		(a)	(b)	(c)	(d)	(e)	(f)
1 Acc	ts. 850 - 867	\$426,339		\$426,339			[1]
3 2%	Of Accts. 878,879,						
4 88 5	0,892,893,894	58,512	58,512				[1]
6 Adm 7	in. & General	326,817		326,817			[4]
	Of Accts. 911 - 916	12,432			12,432		[1]
_	Of Accts. 901 - 910	105,520	105,520				[1]
	re. & Amortization	782,589	0	782,589	0	0	[2] [3]
	perty & Other Taxes	260,397	0	260,397	0	0	[2] [4]
16 Ret	urn	1,328,380	0	1,328,380	0	0	[2] [5]
18 Inc	ome Taxes	528,836	0	528,836	0	0	[2][6]
19 20							
21 Rev	enue Requirement	3,829,822	164,032	3,653,358	12,432	0	_

Notes

- [1] Total From Sheet 4
- [2] Classified Based On Rate Base Classification Percentage Table, Sheet 2
- [3] Allocated To Functions On Sheet 1
- [4] Total From Sheet 4; Allocated To Functions By Gross Plant Pct., Sheet 1
- [5] Rate Of Return From Sheet 4; Applied To Functional Rate Base, Page 3
- [6] Total From Sheet 4; Allocated To Functions By Rate Base Pct., Sheet 1

WESTERN KENTUCKY GAS COMPANY CLASS COST OF SERVICE STUDY Allocation of TRANSMISSION COSTS to Classes of Service

Line	Alloc.		Firm	Firm	Firm	Interr. &	Large
No. Item	Factor	Total	Residential	Commercial	Industrial	Carriage	Int. & Carr.
	(a)	(b)	(c)	(d)	(e)	(f)	(g)
1 Accts 850-865	A&P	\$426,339	\$232,099	\$120,654	\$20,294	\$14,623	\$38,669
3 2% Of Accts 878,879, 4 880,892,893,894 5	Cust-B	58,512	38,501	19,040	603	322	46
6 Admin. & General	A&P	326,817	177,919	92,489	15,556	11,210	29,643
8 36% Of Accts. 911 - 916	Vol-A	12,432	3,354	1,788	329	1,897	5,064
10 2% Of Accts. 901 - 910	Cust-B	105,520	69,432	34,336	1,087	580	85
12 Depre. & Amortization 13	Rb-Dem	782,589	361,024	187,221	31,253	76,963	126,128
14 Property & Other Taxes 15	Rb-Dem	260,397	120,126	62,296	10,399	25,609	41,967
16 Return 17	Rb-Dem	1,328,380	612,808	317,792	53,050	130,639	214,091
18 Income Taxes 19	Rb-Dem	528,836	243,962	126,515	21,119	52,008	85,232
20 21 Revenue Requirement		3,829,822	1,859,225	962,131	153,690	313,852	540,924

Line						
No. Item	Total	Customer	Demand	Commodity	Direct	Notes
	(a)	(b)	(c)	(d)	(e)	(f)
1 Accts 750-798 2	\$2,555		\$2,555			[1]
3 Admin. & General	1,386		\$1,386			[3]
5 Depre. & Amortization 6	15,017	0	15,017	0	0	[2][3]
7 Property & Other Taxes 8	8,199	0	8,199	0	0	[2][4]
9 Return 10	12,124	0	12,124	0	0	[2] [5]
11 Income Taxes 12 13	4,662	0	4,662	0	0	_ [2][6]
14 Revenue Requirement	43,943	0	43,943	0	0	=

NOTES

- [1] Total From Sheet 4
- [2] Classified Based On Rate Base Classification Percentage Table, Sheet 2
- [3] Allocated To Functions On Sheet 1
- [4] Total From Sheet 4; Allocated To Functions By Gross Plant Pct., Sheet 1
- [5] Rate Of Return From Sheet 4; Applied To Functional Rate Base, Page 3
- [6] Total From Sheet 4; Allocated To Functions By Rate Base Pct., Sheet 1

WESTERN KENTUCKY GAS COMPANY CLASS COST OF SERVICE STUDY Allocation of PRODUCTION COSTS to Classes of Service

Line	Alloc.		Firm	Firm	Firm	Interr. &	Large
No. Item	Factor	Total	Residential	Commercial	Industrial	Carriage	Int. & Carr.
	(a)	(b)	(c)	(d)	(e)	(f)	(g)
1 Accts 750-798	A&P	\$2,555	\$1,391	\$723	\$122	\$88	\$231
3 Admin. & General 4	A&P	1,386	755	392	66	48	125
5 Depre. & Amortization 6	Rb-Dem	15,017	6,928	3,593	600	1,477	2,419
7 Property & Other Taxes 8	Rb-Dem	8,199	3,782	1,961	327	806	1,323
9 Return 10	Rb-Dem	12,124	5,593	2,900	484	1,192	1,954
11 Income Taxes 12	Rb-Dem	4,662	2,151	1,115	186	458	752
13 14 Revenue Requirement	_	43,943	20,600	10,684	1,785	4,069	6,804

WESTERN KENTUCKY GAS COMPANY CLASS COST OF SERVICE STUDY Derivation of COST ALLOCATORS at Normalized Volumes

Line			Firm	Firm	Firm	Interr. &	Large	Cost
No.	Item	Total	Residential	Commercial	Industrial	Carriage	Int. & Carr.	
		(a)	(b)	(c)	(d)	(e)	(£)	(g)
1	Annual Volume-Mcf							
2	Total	48,286,139	13,026,240	6,944,385	1,278,131	7,371,435	19,665,948	
3		1.0000	0.2698	0.1438	0.0265	0.1526	0.4073	Vol-A
4	Regular Sales	22,101,060	13,026,240	6,944,385	1,090,710	893,067	146,658	
5		1.0000	0.5894	0.3142	0.0494	0.0404	0.0066	Sales
6	LVS Sales	483,647	0	0	0	185,411	298,236	
7		1.0000	0.0000	0.0000	0.0000	0.3834	0.6166	LVS
8	Total Sales	22,584,707	13,026,240	6,944,385	1,090,710	1,078,478	444,894	
9		1.0000	0.5768	0.3075	0.0483	0.0477	0.0197	TotSales
10	Sales & Stand-by [1]	23,817,225	13,026,240	6,944,385	1,278,131	1,385,039	1,183,430	_
11		1.0000	0.5469	0.2915	0.0537	0.0582	0.0497	W/Gas
12								
13	Winter Period-Mcf [2]							
14	Total	27,775,658	9,610,841	4,873,905	726,665	3,596,084	8,968,162	
15		1.0000	0.3460	0.1755	0.0262	0.1294	0.3229	Winter
16								
17	Design Day-Mcf [3]							
18	G-1	293,843	182,998	94,820	15,792	138	95	
19	G-2/T-3/T-4	153,201				60,031	93,170	
20	Total	447,044	182,998	94,820	15,792	60,169	93,265	
21	Not Curtailed	1.0000	0.4094	0.2121	0.0353	0.1346	0.2086	Design-A
22	Curtailed	1.0000	0.6228	0.3227	0.0537	0.0005	0.0003	Design-B
23								
24	No. Of Customers							
25	12 Month Average	178,477	158,486	19,592	247	132	20	
26	Percent	1.0000	0.8880	0.1098	0.0014	0.0007	0.0001	Cust-A
27	Wt., R/C/I=1:4:10 [4]	1.0000	0.6580	0.3254	0.0103	0.0055	0.0008	Cust-B
28	Wt., 1:4:4:20:100	1.0000	0.6536	0.3232	0.0041	0.0109	0.0082	Cust-C
29								
30	Excl. Industrial	178,078	158,486	19,592				
31	Wt., 1:3.3	1.0000	0.7103	0.2897				Cust-D
32								
33	Large Customers [5]	155		0	3	132	20	
34	Weighted, 1:1:5	1.0000		0.0000	0.0128	0.5617	0.4255	Cust-E
35								
36	Meter Investment		158,486	19,592	247	132		
37 38	Wt., 1:3.3:21.4	1.0000	0.6853	0.2796	0.0229	0.0122		Cust-M
39	Average & Peak [6]	1.0000	0.5444	0.2830	0.0476	0.0343	0.0907	A&P
40	Avg & Peak for Gas [7]	1.0000	0.6059	0.3158	0.0537	0.0133	0.0113	A&P/Gas
41	Load Factor [8]	0.2221	0.005	1.5250	,			, -

- Notes [1] Total sales volumes plus transportation volumes with sales stand-by rights
 - [2] November Through March
 - [3] Daily Contract Demands For Rate 1 Industrial, G-2 And Large G-2 Customers And Estimated Design Day Use For Other Customers
 - [4] Number of Customers are weighted: Residential/Commercial/Industrial = 1/4/10
 - [5] G-1 Customers With 240 Mcf Daily Contract Demand Plus G-2 & Large G-2 Customers
 - [6] Vol-A Times Load Factor Plus Design-B Times One Minus Load Factor
 - [7] W/Gas Times Load Factor Plus Design-B Times One Minus Load Factor
 - [8] Normalized Annual Sales & Standby Volumes Divided By Annualized Design Day System Requirements

WESTERN KENTUCKY GAS COMPANY CLASS COST OF SERVICE STUDY Derivation of COST ALLOCATORS from Rate Base

Line	e	Cost		Firm	Firm	Firm	Interr. &	Large
No.	Cost Component	Allocator	Total	Residential	Commercial	Industrial	Carriage	Int. & Carr.
		(a)	(b)	(c)	(d)	(e)	(f)	(g)
1	Customer		\$65,820,224	\$47,578,099	\$17,476,896	\$355,922	\$302,033	\$107,273
2		Rb-Cus	1.00000	C:72285	0.26552	0.00541	0.00459	0.00163
4	Demand		57,207,922	26,391,142	13,686,019	2,284,638	5,626,095	9,220,028
5 6		Rb-Dem	1.00000	0.46132	0.23923	0.03994	0.09834	0.16117
7	Commodity		5,297,800	1,839,583	933,493	139,426	683,142	1,702,156
8 9		Rb-Com	1.00000	0.34724	0.17620	0.02632	0.12895	0.32129
10	Direct		2,158,214	0	0	27,625	1,212,269	918,320
11 12		Rb-Dir	1.00000	0.00000	0.00000	0.01280	0.56170	0.42550
	TOTAL		130,484,160	75,808,824	32,096,409	2,807,611	7,823,539	11,947,777
15 16		Rb-Total	1.00000	0.58098	0.24598	0.02152	0.05996	0.09156

WESTERN KENTUCKY GAS COMPANY BILL FREQUENCY ANALYSIS - PRESENT RATES TWELVE MONTHS ENDED DECEMBER 31, 2000

(1)	Total	\$40,256 4,320 178	422,845 386,685	22,314	000		\$969,532		Total	A2E DEO	\$10,215	301.47	5,163	0	4,777	133,386	31,990	4, 140 7, 716	0	30,571	466,961	87,395	5,133	161,475	30,841	79,494	41,050	862,825	116,206	o c	0	1,620,452		\$3,604,758	\$42,226,173
(k)	Rate	\$13.60 45.00	1.0615	1.0615	1.0615	0.5585	1 1	CUSTOMERS	E 1	Na Le	\$45.00		1.0615	0.4085	1.0615	0.5585	0.4085	1.0615		1.0615	0.5585	0.4085	0.4936	0.4936	0.3436	0.4936	0.3436	0.4936	0.0400	1.16//	0.5430	various	•	u	•
(j) FIRM INDUSTRIAL	Mcf		398,347	21,021	004,001	0	1,278,131	LARGE INTERRUPTIBLE (4	MCI	-	6	3,000	0	4,500	238,829	78,311	3,900	610,61	28,800	836,098	213,941	116,691	327.138	89,758	161,050	119,471	1,748,025	2,626,634	5	o c	13.029.020		19,665,948	48,286,139
	Number Of Bills	2,960 96						LARGE	Number Of	Bills	239																								
(h)	Total Revenue	\$3,197,401	6,193,823	0	Þ		\$10,010,831		Total	Revenue	\$236,700 \$68,040		32,339	861	5,505	40,039	0	1,669	3,748	259.630	1,405,558	2,891	360,338	3,416	7	32,290	ú	1,435,650	2,217		9 0	71 97	_	\$4,114,375	
(g)	Rate	\$13.60 45.00	1.0615	1.0615	0.5585	0.5585	. •	CUSTOMERS		Rate	\$150.00 \$45.00		1.0615		1.0615	0.5585	0.4085	1.0615	0.5585	0.4085	0.5585	0.4085	0.4936	0.3436	0.4936	0.4936	0.3436	0.4936	0.3436	1.1677	0.6144	0.5430	Vatious		
(f) FIRM COMMERCIAL	Mcf		5,834,972	0	0		6,944,385	INTERRUPTIBLE CO		Mcf			30,465	120,531	5,186	71,691	0	1,572	6,711	6,711	2.516.666		730,020	6	229,684	65.417	105,000	2,908,530	6,453	0	0	0 .00	303,083	7,371,435	
(e)	Number Of	235,103 0						Ħ	17	Bills	1,578																				•				
(a)	Total	\$9,699,323	13,827,354	Þ			\$23,526,677		•																										
(0)	ρ 1	\$5.10	1.0615	0.5585			, ,																												
(b) RESTDENTIAL	NAF	100	13,026,240	0			13,026,240																			000								ions	
(a)	Number of	1,901,828 0												000	2000		000	2000	0	00			-15000	Sales: Over 15000	Transport: 1-15000	Transport: Over 15000	.5000	15000 100	15000	00061	0009	00		t Reformat L	
Line	NO.	1 FIRM BILLS 2 Transport. Bills	ParkingFees 3 sales: 1-300	4 Sales: 301-15000	6 Trans: 301-15000	7 LVS: 1-300 8 LVS: 301-15000	9 10 Total	11	12	77	15 Bills	12 Figuration 5000	17 Parking rees 18 Firm Sales: 1-300	19 Firm Sales: 301-15000	Sales:	Firm Trans:		23 Firm Trans: Over 15000			T-4:	28 T-4: 301-15000	29 T-4: OVEL 15000				34 Interrupt LVS: 1-15000	35 Interrupt LVS: Over 15000	So T.3 Carriage:1-13000	3/T-3 Carriage:Over 15000	39 T-4 Overrun 301-15000	40 T-3 Overrun 0-15000	41 Special Contracts	42 Additional Contract Reformations 43 CLASS TOTAL	GRAND T

Page 18A of 19

WESTERN KENTUCKY GAS COMPANY BILL FREQUENCY ANALYSIS - PROPOSED RATES TWELVE MONTHS ENDED DECEMBER 31, 2000

(1)	Total Revenue	\$71,040 4,800 178	478,016	25,225	115,581	0 0	\$1,175,755	- 1	Total	\$59.750	\$11,350	52,474	3,600	8,333	5,400	165,891	33,666	4,680	9,596	34 560	580.754	91,973	61,846	4,931	173,383	85,357	39,437	926,453	867,052	0	0		1,620,452	(1,100,884)	\$3,79,705	\$55,932,682
(k)	Rate	\$24.00 50.00	1.2000	1.2000	0.6946	1.2000 0.6946	, -	E CUSTOMERS	0 1	4250 00	\$50.00		1.2000	0.6946	1.2000	0.6946	0.4299	1.2000	0.6946	0.4299	0.6946	0.4299	0.5300	0.3301	0.5300	0.330I	0.3301	0.5300	0.3301	1.3200	0.7641	0.5830	various			
(j) FIRM INDUSTRIAL	Mcf		398,347	592,363 21,021	166,400	00	1,278,131	LARGE INTERRUPTIBLE	3.00	MCI			3,000	12,028	4.500	238,829	78,311	3,900	13,815	0 00	28,800	213,941	116,691	14,939	327,138	89,78	119 471	1.748.025	2,626,634	0	0	0	13,029,020		19, 665, 948	48,286,139
(i)	Number Of Bills	2,960 96						LARGE	Number Of	81118	227																							1	ā	
(h)	Total	\$5,642,472	7,001,966	770,598	0		\$13,415,036	ERS	Total	Revenue	\$394,500 \$75.600	•	36,558	83,721	906	•	•	1,886	4,661	2,885	293,506	3,042	386,911	3,282	121,733	0	34,671	1 541 521	2, 341, 321		0	0	71,976	(84,000)	\$4,814,246	
(g) IAL	α + α	\$24.00	1.2000	0.6946	0.6946	1.2000 0.6946	18	LE CUSTOME		Rate	\$250.00	•	1.2000	0.6946	0.4299	0.6946	0.4299	1.2000	0.6946	0.4299	1.2000	0.6946	0.5300	0.3301	0.5300	0.3301	0.5300	0.5301	3301	1,3200	0.7641	0.5830	various	•	•	
(f) (c) (d) FIRM COMMERCIAL	400	400	5,834,972	1,109,413	0		6,944,385	INTERRUPTIBLE CUSTOMERS		Mcf			30,465	120,531	2,108	71 691	0	1,572	6,711	6,711		2,516,666	730,020	9,943	89	0	65,417	105,000	6.453	ָרְיָּיִי מיי	0	0	303,083		7,371,435	
(e)	Number Of	235, 103 0							Number Of	Bills	1,578	71017																								
(q)		\$17,116,452	15,631,488	0			\$32,747,940																													
(o)		\$9.00	1.2000	0.6946																																
(b)	NEST DENT TEN	MCI	13,026,240	0			13,026,240																		. 00	00051								ations		
(a)	Number Of	Bills 1,901,828 0											_	301-15000	Over 15000	0	15000	15000	000	7000)))		1	Sales: 1-15000	Transport: 1-15000	Transport: Over 15000	-15000	ver 15000		000	0	15000	000	Receipt Point	act netotim	
Line	No.	1 FIRM BILLS 2 Transport. Bills	ParkingFees	4 Sales: 301-15000	5 Trans: 1-300 6 Trans: 301-15000	7 LVS: 1-300 8 LVS: 301-15000	9 10 Total	11	12 13	4 -	15 Bills	16 Transport. Bills	17 Parking Fees	19 Firm Sales: 1-300	Firm Sales:	21 Firm Trans: 1-300		Firm	24 Firm LVS: 1-300	25 Film LVS: Joi 13000	27 T-4: 1-300	28 T-4: 301-15000			31 Interrupt Sales:	Interrupt	Interrupt	35 Interrupt LVS: Over 15000	36 Carriage:1-15000	37 Carriage:Over 15000	38 T-4 Overrun 0-300	39 T-4 Overrun 301-15000	40 T-3 Overrun 0-15000	42 Alternate Receipt Point	43 Additional Concr 44 CLASS TOTAL	45 46 GRAND TOTAL

WESTERN KENTUCKY GAS COMPANY CLASS COST OF SERVICE STUDY Monthly Customer Cost

Line		Firm	Firm	Firm	Interr. &	Large
No. Customer Cost	Total	Residential	Commercial	Industrial	Carriage	Int. & Carr.
	(a)	(d)	(c)	(d)	(e)	(f)
10 &M Expense 2	\$13,162,451	\$9,109,200	\$3,550,267	\$110,609	\$242,989	\$149,386
3 Depreciation & Amortization 4	5,795,405	4,056,203	1,489,968	32,699	129,099	87,436
5 Property & Other Taxes 6	1,043,668	730,463	268,321	5,888	23,249	15,747
7 Income Taxes	2,698,478	1,888,664	693,764	15,226	60,113	40,712
9 Return 10	6,777,450	4,743,536	1,742,446	38,239	150,976	102,253
11 12 Total	29,477,452	20,528,066	7,744,766	202,661	606,426	395,534
13 14					400	
15 Number Of Customers 16	178,477	158,486	19,592	247	132	20
17 Customer Cost Per Customer 18 Per Month	\$13.76	\$10.79	\$32.94	\$68.37	\$382.84	\$1,648.06

WESTERN KENTUCKY GAS COMPANY FUNCTIONAL ALLOCATIONS

Line	Total	Gas Cost	Storage	Distribution	Distribution Transmission Production	Production	Sub Total	Intangible	General Plant	Div 02 Gross Plant
RATE BASE ITEMS	(a)	(p)	(0)	(9)	(e)	(£)	(b)	(प)	(ī)	(;)
1 Gas Plant [1] 2 Gross Plant Pct. (Grsplt%) 3 Other Alloc By Grsplt%	247,244,679	100,000 0.05% 25,601	5,031,452 2.57% 1,315,874	5,031,452 163,922,924 2.57% 83.62% 1,315,874 42,814,544	26,158,850 13.34% 6,830,256	830,133 0.42% 215,045	830,133 196,043,359 0.42% 100.00% 215,045 51,201,320	128,182	51,073,138	
4 With Alloc By Graplt%	247,244,679	125,601	6,347,326	206,737,468	32,989,106	1,045,178	1,045,178 247,244,679			
5 In Progress 6 With Alloc By Grsplt%	0 0	00	00	00	0 0	0 0	0 0			0
7 Reserve For Depreciation 8 With Alloc By Grsplt%	111,910,843 111,910,843	0 8,984	3,763,778 4,225,539	73,849,009 88,873,307	15,533,051 17,929,895	797,655 873,118	93,943,493 111,910,843	119,853	17,847,497	0
0,										
10 Net Rate Base 11 Rate Base Percentage	130,484,160 100.00%	180,985 0.14%	10,541,828 8.08%	10,541,828 106,315,981 8.08% 81.48%	13,323,776 10.21%	121,590 0.09%				
11 EXPENSES										
12 Deprec. & Amort. Expense 13 With Alloc By Grsplt%	10,054,906 10,054,906	1,788	99,810 191,695	6,074,149 9,063,817	305,644 782,589	0 15,017	6,479,603 10,054,906	0	3,575,303	
14 Admin. & General Expense [2]	9,553,716	330,496	200,433	8,694,584	326,817	1,386				
15 Other Non-Gas O&M	17,029,552	17,659	369,692	16,036,843	602,803	2,555				
<pre>16 Operation & Maintenance 17 O&M Percentage</pre>	26,583,268 100.00%	348,155 1.31%	570,125 2.14%	24,731,427 93.04%	929,620 3.50%	3,941 0.01%				

[1]

Excluding Acquisition Adjustment, moved \$3,189,471 of additions to 6 and 8 inch mains from distribution to transmission Administrative And General Expenses Allocated To Functions In Proportion To Other Non-Gas O&M Except That Gas Supply Department Expenses Are Allocated Directly To Gas Cost [7]

WESTERN KENTUCKY GAS COMPANY SUPPORT FOR CLASSIFICATIONS

Line			—-·.				
No.	Cat	egory	Total	Customer	Demand	Commodity	Direct
			(a)	(b)	(c)	(d)	(e)
	ACCT.	DISTRIBUTION PLANT ACCOUNT	<u>VT</u>				
1	374.10	Land- T.B.	61,710	13,971	47,739		
2	374.20	Land- Other	44,872	10,159	34,713		
3	374.30	Rights-Of-Way	2,784	630	2,154		
4	375.10	Structures & Impr.	106,376	24,084	82,292		
		Improvements	7,518	1,702	5,816		
6	375.20	Land Rights	46,591	10,548	36,043		
7	376.00	Mains (adj. Per sheet 1)	71,857,628	16,268,567	55,589,061		
		Meas. & Reg General	2,363,549	535,107	1,828,442		
		Meas & Reg Other	1,917,181	434,050	1,483,131		
		Services	45,854,769	45,854,769	•		
11	381.00	Meters	19,396,585	19,396,585			
	381.20		109,524	, ,			109,524
		Meter Installations	14,560,567	14,560,567			•
		House Regulators Service		3,733,713			
		House Regulators Relief		481,545			
		House Reg. Installations		166,402			
		Meas & Reg Indust.	3,211,613				3,211,613
18 19			0,222,020				0
	TOTAL D	DISTRIBUTION PLANT	163,922,927	101,492,399	59,109,391	0	3,321,137
21		Percent Of Total	100.00%	•			2.039
22				•			
23 24		OF TOTAL CLASSIFICATION	IN ACCOUNTS:				
25	376.00	Mains		16.03%	94.04%	i	
26	380.00	Services		45.18%	0.00%	5	
27	381.00	Meters		19.11%	0.00%	i	
28		All Others		19.68%	5.96%	i	100.009
29							
30		Total		100.00%	100.00%	s	100.00%
31							
32							
33	RATE BA	ASE - CLASSIFICATION PER	CENTAGE				
34							
35		Gas Cost	100.00%	0.00%	85.14%	14.86%	0.009
36		Storage	100.00%	0.00%	50.00%	50.00%	0.009
37		Distribution	100.00%	61.91%	36.06%	0.00%	2.03%
38		Transmission	100.00%	0.00%	100.00%	0.00%	0.009
39		Production	100.00%	0.00%	100.00%	0.00%	0.009
40							
41		Total Rate Base	100.00%	50.45%	43.84%	4.06%	1.659

Sheet 3 of 9

Western Kentucky Gas Company Prepaid Gas within account 166 12 month average balance

	Alliance	Gas	\$ 18,040
Tenn	Alliance	Gas	8,846
			26,886

WESTERN KENTUCKY GAS COMPANY MISCELLANEOUS INPUTS

0035	Mo Bunghions Dobbil	Dow Books	Addugtmonta	Moto?
no. U&M	To Functions - Detail	Per Books (a)	Adjustments (b)	Total (c)
		(a)	(D)	(0)
1 Gas	Cost: 807	17,659		17,659
	717 Through 742	0		(
	duction: 750 Through 798	2,555		2,555
	rage: 818 & 819	68,307		68,307
5 Sto	rage: Other Accounts	301,385		301,385
6 Tra	nsmission	426,339		426,339
7 Dis	tribution: 878,879,880,892,893,894	2,925,610		2,925,610
8 Dis	tribution: 876 & 890	331,727		331,727
9 Dis	tribution: Other Accounts	7,649,126	(3,680)	7,645,446
10 Cus	tomer Accts & Services: 901 - 910	2,532,952	2,743,038	5,275,990
11 Sal	es Expenses: 911 - 916	58,692	(24,158)	34,534
12 A&G	Expenses	11,558,909	(2,005,193)	9,553,716
13				
14 Tot	al Non-Gas O&M And A&G	25,873,261	710,007	26,583,268
15				
16				
17				
	nt Allocator (From Sheet 7)			
19	Demand	0.7736		
20	Customer	0.2264		
21				
22	Interest Expense	4,984,495		
23	literatura menambata	0 402625		
	bined Income Tax Rate	0.403625		
25	Income Taxes	5,179,589		
26	and a Other Massa	1 050 000		
	perty & Other Taxes	1,952,000		
28				
29	noded after the return on Date Page			
	posed after tax return on Rate Base	£ 15%		
31	Equity return	6.15% 3.82%		
32 33 Pma	Debt return	9.97%		
33 PTO	posed Rate Of Return On Rate Base	7.7/6		
34 35				
	tax return on Rate Base			
36 PIE	Equity return	10.31%		
38		3.82%		
	Debt return	14.13%		
39 40	Total return	72.772		
4 U				

WESTERN KENTUCKY GAS COMPANY TOTALS FROM PAGES 6 THROUGH 15 OF STUDY

		(a)	(b)	(c)	(d)	(e)	_ (f)
Line	3		·	Monthly			
No	Classification	Total	Customer	Demand	Commodity	Direct	_
1	0 & M	26,583,268	12,830,724	10,151,215	3,269,602	331,727	
	Depreciation & Amort	10,054,906	5,611,410	4,163,388	96,113	183,995	
	Property & Other Taxes	1,952,000	1,010,533	883,104	25,228	33,135	
	Return	13,009,271	6,562,276	5,703,630	528,191	215,174	
	Income Taxes	5,179,589	2,612,805	2,270,779	210,332	85,673	
-	Revenue Requirement	56,779,034	28,627,748	23,172,116	4,129,466	849,704	
7	November Negationers	3011,731002	20/02///20				
8							
9							
10							
11							
12			Firm	Firm	Firm	Interr. &	Large
	Allocation To Classes	Total	Residential	Commercial	Industrial	Carriage	Int. & Carr.
14							
15	0 & M	26,583,268	14,392,265	6,299,328	575,506	1,951,206	3,364,965
16	Depreciation & Amort	10,054,906	6,010,230	2,502,924	201,496	550,939	789,317
17	Property & Other Taxes	1,952,000	1,146,615	484,035	41,819	113,351	166,180
18	Return	13,009,271	7,558,140	3,200,011	279,919	780,007	1,191,194
19	Income Taxes	5,179,589	3,009,254	1,274,071	111,445	310,553	474,266
20	Revenue Requirement	56,779,034	32,116,503	13,760,368	1,210,185	3,706,057	5,985,921

WESTERN KENTUCKY GAS COMPANY REVENUE AT PRESENT AND PROPOSED RATES

Interr. & Large al Carriage Int. & Carr.			532 \$4,114,375 \$3,604,758	2,310 59,325 17,745	946 473	788 4,174,173 3,622,571
Firm Industrial	(g)		\$969,532	2,3		972,788
Firm Commercial	(C)		\$10,010,831	0	74,183	10,085,014
Firm Residential	(q)		\$23,526,677	0	599,951	24,126,628
Total	(a)		\$42,226,173	79,380	675,620	42,981,173
Cost Item		2 Revenue at Present Rates:	s 4 Gas Operating Margins	5 6 EFM Revenue	7 8 Other Revenue	9 10 Total Operating Margins 11 12

WESTERN KENTUCKY GAS COMPANY DISTRIBUTION MAINS STUDY Test Year Ended September 30, 1998

(12)	(8) * (1)	(1)	17,093,726	141,554,028	3,068,523	9,371,525	2,673	73,504	525,950	230,309	241	171,920,479														•							
(11)	(6) * (8)	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	6,328,592	31,202,879	2,262,611	(13,942,047)	11,524	645,922	929,601	131,046	845	27,570,972																u	21.68%	78.32%		11 368	22.64%
(10)	W(Y-avgY)		(1,356,127)	(8,509,876)	(848,479)	8,365,228	(17,286)	1,937,765	398,400	30,241	133	0																Minimum System	\$13,569,133	\$49,014,175		Regression Minimum	\$14,171,506
(6)	Y-avaY	5	(1.73)	(0.81)	(1.97)	2.48	(2.87)	2.93	4.12	2.47	22.23	26.85								(12) - (8) ^2]										Customer		[er
(8)	W(X-avgX)	(476.47.47)	(3,662,941)	(38,605,644)	(1,150,696)	(5,622,915)	(4,010)	220.512	225,407	53,148	38	(48,547,101)				From	1.5 1.5			$= [(3)*(11)-(9)*(8)]/[(3)*(12)-(8)^2]$	(4)/(3)]	= 1 - [(16)/(17) * [9 - 1]/[9 - 2]											
(7)	X-avgX		(4.67)	(3.67)	(2.67)	(1.67)	(0.67)	0.33	2.33	4.33	6.33	0.00			1017	(18) Calculated From	Column Totals		= A + B*X	[(3)*(11)-(= (5)/(3)-B*[(4)/(3)]	1-[(16)/(17		1.1658	7100	0.0	0.7972						
(9)	Y & Per Foot	1	2.2095	3.1289	1.9709	6.4167	1.0633	6.8664	8.0613	6.4029	26.1667			3.9372					Υ	B		RA2 = 1		II M	ا «		RA2 =						
(5)	X * M)	1,734,239	32,944,091	850,463	21,648,330	96,396	4,542,356		78,531	157	62,583,308			(2.7)	(/T)	W* (9) A2		2,343,028	6,878,078	1,668,363	20,741,628	49,678	5,676,091	1,643,042	2,965	2001	39,077,438		9060.9	3.1289	2.9616	0.8915
(4)	W*X		784,916	21,057,624	1,294,533	13,494,996	30,075	3.969,210	772.824	122,650	72	41,526,900			(3.4)	(4T)	W* (15) ^2		18, 163	93,405	2,522,995	2,506,706	192,502	688, 155	449,295	463,363	F	6,935,370		\$27,904,978	\$14,335,845	\$13,569,133	\$14,171,506
(3)	ta o o t	777	784,916	10,528,812	431,511	3,373,749	6,015	661,535	96,603	12,265	9	15.895,412			Ĺ	(47)	Y-Yealc		0.15	(0.0)	(2.42)	0.86	(2.66)	(1.02)	(2.16)	11 29	67.11	(5.19)		4,581,684	4,581,684	4,581,684	15,895,412
(2)	×		H	2	3	7	2	9	000	10	12	51.00		5.67		(14)	ICAIC A+B*X		2.06	3.22	4.39	5.55	6.72	7.89	10.22	14.88	74.00	67.48		>2"	@ 2" PRICE	Difference	0-Intercept
(1)	, C	2770	<2"	7,	3.	4"	ູ້		. &	10"	12"	Total		Average	ć	(13)	92,5		<2°	7.	3"	4"	5.	9	- 5 - 5	10.	77	Total		TOT. >2"	9	Diffe	0-Int
	Line		Н	7	ო	4	Ŋ	·	7	- α	6	10 1	12			16	18	19	20	21	22	23	24	25	26	7 C	1 60	30 T	31	32	33	34	36

WESTERN KENTUCKY GAS COMPANY METER ANALYSIS September 1998

Line					
No.	Meters	Туре	Number	Investment	Invest/Meter
	(a)	(b)	(c)	(d)	(e)
1	Group A	Meters with Capacity of 250			
2		CFH or Less (Class 1)	178,703	\$12,771,575.58	\$71.47
3					
4	Group B	Meters with Capacity of Greater			
5		Than 250 CFH and Less Than or	- 440	4502 FC4 00	A144 70
6 7		Equal to 450 CFH (Class 2)	5,412	\$783,564.00	\$144.78
8	Group C	Meters with Capacity of			
9	Cloup C	Greater Than 450 CFH			
10		(Class 3)	1,335	\$972,082.36	\$728.15
11		(Class 4)	682	\$627,292.63	\$919.78
12		(Class 5)	483	\$284,647.21	\$589.33
13		(Class 6)	356	\$389,827.03	\$1,095.02
14		(Class 7)	287	\$163,227.72	\$568.74
15		(Class 8)	195	\$264,219.70	\$1,354.97
16		(Class 9)	<u>733</u>	\$1,119,758.42	\$1,527.64
17					
18		(Classes 3 - 9)	4,071	\$3,821,055.07	\$938.60
19 20	Total		188 186	\$17.376.194.65	\$92.34
21	IOCAL		<u> </u>	<u></u>	4
22					
23					
24					
25	Number of	Customers:			
26	number of				
27		Residential			158,486
28		Commercial			19,592
29		Industrial & Interr. < 1,000 Co	ntract Deman	đ	372
30		Sub-total			178,450
31		Industrial & Interr. > 1,000 Co	ntract Deman	đ	27
32		·			
33		Total			178.477
34					
35					
36					
37					
38	Assumption	ons			
39	•				
40	1. All I	Residential Meters are in Group A			
41	2. All	Industrial Meters are in Group C			
42	3. The a	average value for Industrial Mete	rs is based (on Class 9 Meter	s
43		ercial Meters fall into all three			
44	5. Custo	omers with Daily Contract Demands	in excess of	E 1,000 do not h	ave
45	mete	r investment in Account 381			
46	6. Mete	rs in Inventory are in proportion	to Meters in	n use	

AWESTERN KENTUCKY GAS COMPANY Sheet 9 of 9 METER ANALYSIS September 1994

An	alysis:	(a)	(b)	(c)	(d)
1 2 3 4	Meters Net Customers Ratio of Meters to	Customers	188,186 <u>178,450</u> 105.46%		
5	Meter Allocation:				
6 7		Total	Residential	Commercial	Indus/Inter.
8					
9 10	Net Customers	178,450	158,486	19,592	372
11	Meters				
12	Group A	178,703	167,139	11,564	
13	Group B	5,412		5,412	
14	Group C	4,071		3,679	392
15	maka 1	100 106	167,139	20,655	392
16 17	Total	188,186	107,139	20,000	392
18					
19					
20					
21	Meters - Gross Plant Va	alue:			
22				-	
23		Total		Invest.	
24		Meters	Investment	Per Meter	
25 26	Group A	178,703	\$12,771,575.58	\$71.47	
27	Group B	5,412	\$783,564.00	\$144.78	
28	Group C -Comm.	3,679	\$3,222,220.19	\$875.84	
29	Group C -Ind./Inter.	392	\$598,834.88	\$1,527.64	
30	-				
31	Total	188,186	\$17,376,194.65	\$92.34	
32					
33					
34 35					
36	Gross Plant Value Allo	ration:			
37	Gloss Hane value Allo.	oution.			
38		Total	Residential	Commercial	Industrial
39					
40	Group A	\$12,771,903.41	\$11,945,424.33	\$826,479.08	
41	Group B	\$783,549.36		\$783,549.36	
42	Group C -Comm.	\$3,222,215.36		\$3,222,215.36	AE00 004 00
43	Group C -Ind./Inter.	\$598,834.88			\$598,834.88
44 45	Total	¢17 376 503 01	\$11,945,424.33	\$4,832,243.80	\$598,834.88
46	IOCAL	\$17,370,303.01	W11,545,424.55	ψ1,002,210.00	4030,002.00
47	Meters	188,186	167,139	20,655	392
48		•			
49	Investment/Meter		\$71.47	\$233.95	\$1,527.64
50 51	Relative Investmen	nt	1.0	3.3	21.4

Design Day Estimates 1999 - 2000

@ 14.73 psia			_	Com	nbo	Big co	mbo	_		
- ,	Residential	Commercial	Industrial	Firm	Inter.	Firm	Inter.	Sub-Total	L&U	Total
Zone 2	31,838	16,884	757	84	13,951	43	25,509	89,066	1,795	90,861
Zone 3	111,274	55,744	8,219					175,237		
Bowling Green	•	•	590	25	6,915	50	2,030	9,610		
Franklin					1,050		1,200	2,250		
Glascow			0	-	3,240		2,600 9,660	5,840 11,985		
Russellville Hopkinsville			200	10 3	2,315 5,555		3,750	9,508		
Owensboro			250	10	11,858	-	32,175	44,293		
Greenville				•	1,200		•	1,200		
Madisonville				•	1,650	-	5,600	7,250		
<u>Princeton</u>	-	-			1,250			1,250		
Total	111,274	55,744	9,259	48	35,033	50	57,015	268,423	6,398	274,821
Zone 4	9,944	4,725	2,635	•	4,082	-	4,200	25,586	724	26,310
Danville	7,900	4,786	550	-	2,425	-	4,350	20,011	480	20,491
Harrodsburg	4,017	2,565	256	3	1,310	-	-	8,151	249	8,400
Lebanon	3,652	2,981	1,166	-	1,845	•	-	9,644	286	9,930
Campbellsville	4,931	2,473	481	-	-	-	-	7,885	286	8,171
Greensburg et al	5,084	2,401	293	-	•	•	-	7,778	282	8,060
Total	178,640	92,559	15,397	135	58,646	93	91,074	436,544	10,500	447,044
Zone 2	32,480	17,224	772	86	14,232	44	26,023	90,861	included	90,861
Zone 3	113,926	57,073	9,480	49	35,868	51	58,374	274,821	included	274,821
Zone 4	10,225	4,859	2,710	-	4,198	-	4,319	26,311	included	26,311
Danville	8,089	4,901	563	-	2,483	-	4,454	20,490	included	20,490
Harrodsburg	4,140	2,643	264	3	1,350	-	-	8,400	included	8,400
Lebanon	3,760	3,069	1,201	-	1,900	-	-	9,930	included	9,930
Campbellsville	5,110	2,563	498	-	-	-	-	8,171	included	8,171
Greensburg et al	5,268	2,488	304	-	-	-	-	8,060	included	8,060
Total	182,998	94,820	15,792	138	60,031	95	93,170	447,044	included	447,044

Western Kentucky Gas Company Case No. 99-070

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Line	# secretary	G-1	G-1 Rlock 2	G-1 Rlock 3	G-2 Block 1	G-2 Block 2	LVS-1 Block 1	LVS-1 Block 2	LVS-1 Block 3	LVS-2 Block 1	LVS-2 Block 2		TOTAL
20	(a)	(d)	(2)	(p)	(9)	(j)	(g)	(h)	(j)	()	(k)		(I)
	Firm Only - Commercial	(28,891)	(162,847)										(191,738)
	Firm Only - Industrial	(44,949)	(390,790)				(1,500)	(64,563)					(501,802)
	Other - Int Customers	(5,723)	(20,141)		(252,974)	(119,603)				(80,276)			(478,717)
	Large Int Customers	•				(8,000)	-		-		1		(8,000)
	Sub-total	(79,563)	(573,778)	ı	(252,974)	(127,603)	(1,500)	(64,563)	1	(80,276)	•		(1,180,257)
		T-4 OR Block 1	T-4 OR Block 2	T-4 OR Block 3	T-3 OR Block 1	T-3 OR Block 2							
	Firm Only - Commercial	ı	¢	1	•	ı							
	Firm Only - Industrial	ı	•	1		•							
	Other - Int Customers	(11,639)	(23,390)	1	(109,126)	٠							
	Large Int Customers	1	(2,020)		(31,890)	-							
	Sub-total	(11,639)	(25,410)	•	(141,016)	•							
		T-2/G-1 Block 1	T-2/G-1 Block 2	T-2/G-1 Block 3	T-2/G-2 Block 1	T-2/G-2 Block 2	T-3 Block 1	T-3 Block 2	T4 Block 1	T-4 Block 2	T4 Block 3	Special Contract	TOTAL TRANSP.
	Firm Only - Commercial	•	•	•		•	٠,	•	•	ı		ı	•
	Firm Only - Industrial	4,005	•	•	1	,		,	•	1	1	•	4,005
	Other - Int Customers	(3,753)	(24,009)	•	(229,742)	(58,376)	584,168	(19,621)	107,983	756,659	ı	•	1,113,309
	Large Int Customers	,		,			(104,622)	(841,169)	(3,600)	(83,598)	(310,532)	101,730	(1,241,791)
	Sub-total	252	(24,009)	•	(229,742)	(58,376)	479,546	(860,790)	104,383	673,061	(310,532)	101,730	(124,477)

	Firm Bills	Transp. Bills	Int Bills
Firm Only - Commercial	(119)	1	1
Firm Only - Industrial	206	(12)	
Other - Int Customers	(16)	391	23
Large Int Customers	ı	(12)	(12)
Total	П	367	11

BREAKDOWN OF SPECIAL CONTRACT VOLUMES/REVENUES

Revenue Pro-Forma Adjustment Revenue	976,17	(234,897) 1,620,452	(234,897) 1,692,428
Actual Revenue	976,17	1,855,349	1,927,325
Pro-Forma Volume	303,083	0 13,029,020	0 13,332,103
Volume Adjustment	,	-	3 101,730
Actual Volume	ustomers 303,083	stomers 12,927,290	13,230,373
	Other - Int Custome	Large Int Customer	Total

BREAKDOWN OF ADDITIONAL CONTRACT REFORMATIONS

(a) R	@ Current Rates Revenue Adjustment	@ Proposed Rates Revenue Adjustment
Other - Int Customers	(68,000)	(84,000)
Large Int Customers	(1,032,000)	(1,100,884)
Total	(1,100,000)	(1,184,884)

WINTER PERIOD

Western Kentucky Gas Company Case No. 99-070

GG2 LVS-1 LVS-1 LVS-1 LVS-2 LVS-2 FOR	Cacommercial	7												
(13,800) (120,727) (40 (4) (6) (6) (9) (9) (9) (9) (9) (9) (9) (9) (13,800) (120,727) (142,780) (172,82) (600) (26,845) (13,411) (13,719)		Ordoner #	P. G.1	G-1 Block 2	G-1 Block 3	G-2 Block 1	G-2 Block 2	LVS-1 Block 1	LVS-1 Block 2	LVS-1 Block 3	LVS-2 Block 1	LVS-2 Block 2		TOTAL
(13.500) (120.727) (13.579) (14.780) (72.282) (600) (26.845) (13.441) (14.2780) (72.282) (600) (76.845) (13.441) (14.2780) (72.282) (600) (76.845) (13.441) (14.2780) (72.282) (600) (76.845) (13.441) (14.2780) (72.282) (600) (76.845) (13.441) (13.57) (14.2780) (72.282) (600) (76.845) (13.441) (13.57) (14.2780) (72.282) (600) (76.845) (13.441) (13.56		(a)	(b)	(0)	(p)	(e)	(j)	(8)	(H)	Θ	0	(K)		(
(38.776) (33.5087) (13.379) (142.780) (72.282) (600) (26.845) (31.441) (31.373) (31.	Firm Only	y - Commercial	(13,800)	(120,727)										(134,527)
(36.776) (31.379) (142.780) (72.282) (600) (26.645) (31.441) (38.776) (36.9193) . (142.780) (72.282) (600) (26.645) . (31.441) (2.515) (13.373) . (30.797) . (11.503) (2.515) (13.373) . (42.300) . (12.642) . (12.642) . (12.641) . (12.642) . (12.641) . (12.642) .	Firm Only	y - Industrial	(21,053)	(235,087)				(009)	(26,845)					(283,585)
18,776 (369,193)	Other - In	rt Customers	(3,923)	(13,379)		(142,780)	(72,282)				(31,441)			(263,805)
Tark	Large Int	Customers	1	•		1	•			1	•			•
T40R	Sub-total		(38,776)	(369,193)	1	(142,780)	(72,282)	(009)	(26,845)	1	(31,441)	•	,	(681,917)
(2.515) (13.373) (42.300) (2.515) (13.373) (42.300) (2.515) (13.373) (42.300) (2.515) (13.56) (13.56) (13.546) 36.248 285.007 (362,141) (1.500) (35.857) (146,797) 31.503 (2.100) (13.566) (13.9460) 36.248 285.007 (362,141) (1.500) (35.857) (146,797) 31.503			T4 OR Block 1	T-4 OR Block 2	T4 OR Block 3	T-3 OR Block 1	T-3 OR Block 2							
(2,515) (13,373) - (30,797) - (11,503) - (11,503) - (42,300) - (42	Firm Only	y - Commercial	ı	•	•	ı	,							
C2515 (13,373) C1503 C1515 C11,503 C11,50	Firm Only	y - Industrial	•	,	1	•	•							
(2,515) (13,373) . (42,300)	Other - In	nt Customers	(2,515)	(13,373)	•	(30,797)	•							
(2,515) (13,373) - (42,300) T-2/G-1 T-2/G-1 T-2/G-2 T-2/G-2 T-3 T-3 T-4 T-4 T-4 Special TO Block 1 Block 2 Block 1 Block 2 Block 1 Block 2 Block 1 Block 2 Block 1 T-4 Block 1 Block 2 Block 3 Contract TB 900 (3,000) (13,566) - (139,460) 36,248 322,650 (597) (146,797) 31,503 (2,100) (13,566) - (139,460) 36,248 285,007 (362,141) (1,500) (146,797) 31,503	Large Int	Customers	•			(11,503)								
T-2/G-1 T-2/G-1 T-2/G-2 T-2/G-2 T-2/G-2 T-3 T-3 T-4 T-4 T-4 T-4 T-7 T-7	Sub-total		(2,515)	(13,373)	•	(42,300)								
900			T-2/G-1 Block 1	T-2/G-1 Block 2	T-2/G-1 Block 3	T-2/G-2 Block 1	T-2/G-2 Block 2	T-3 Block 1	T-3 Block 2	T4 Block 1	T-4 Block 2	T4 Block 3	Special Contract	TOTAL TRANSP.
900 (3,000) (13,566) . (139,460) 36,248 322,650 (597) 51,415 432,757	Firm Only	y - Commercial	•	1	•	•	•	•	1	•		ı	1	•
(3,000) (13,566) (139,460) 36,248 322,650 (597) 51,415 432,757 - - (37,643) (362,141) (1,500) (35,857) (146,797) 31,503 (2,100) (13,566) (139,460) 36,248 285,007 (362,738) 49,915 396,900 (146,797) 31,503	Firm Only	y - Industrial	006	•	,	•	•	•	,	ı	•		•	006
(2,100) (13,566) (139,460) 36,248 285,007 (362,738) 49,915 396,900 (146,797) 31,503	Other - In	nt Customers	(3,000)	(13,566)	•	(139,460)	36,248	322,650	(597)	51,415	432,757		ı	686,447
(2,100) (13,566) . (139,460) 36,248 285,007 (362,738) 49,915 396,900 (146,797) 31,503	Large Int	Customers	• !	·	٠			(37,643)	(362,141)	(1,500)	(35,857)	(146,797)	31,503	(552,435)
	Sub-total		(2,100)	(13,566)	•	(139,460)	36,248	285,007	(362,738)	49,915	396,900	(146,797)	31,503	134,912

'	Firm Bills	Transp. Bills	Int		
Firm Only - Commercial	(48)	•	•		
Firm Only - Industrial	25	(5)	•		
Other - Int Customers	•	200	10		
Large Int Customers	1	(S)	(5)		
Total	36	190	'n		
BREAKDOWN OF SPECIAL CONTRACT VOLUMES/REVENUES	ACT VOLUMES/R	EVENUES			
	Actual Volume	Volume Adjustment	Pro-Forma Volume	Actual Revenue	Revenue Adjustment
Other - Int Customers					•
Large Int Customers		31,503			(139,177)
Total		31,503			(139,177)
•					
BREAKDOWN OF ADDITIONAL CONTRACT REFORMATIONS	NTRACT REFORM	MATIONS			
		@ Current Rates Revenue Adjustment			@ Proposed Rates Revenue Adjustment
Other - Int Customers		(30,000)			(35,000)
Large Int Customers		(430,000)			(500,000)
Total		(460,000)			(535,000)

Pro-Forma Revenue

Western Kentucky Gas Company Case No. 99-070 KPSC Data Request Dated August 19, 1999 DR Item Question 70

Witness: Thomas H. Petersen

Data Request:

Refer to the Direct Testimony of Thomas H. Petersen and the response to Item 47(i) of the Commission's July 16, 1999 Order. Many of the notes describing the functionalization and classification processes within the model seem to represent assumptions based upon historic precedent and industry knowledge. What analysis has Western undertaken currently or during recent cases to validate that the assumptions used as inputs to the cost-of-service study are reasonable? Has western completed any analyses to validate the sensitivity of these judgmental inputs? Provide any such analyses. If no analyses have been completed, how can the Commission be assured that the results of the cost-of-service model are reasonable?

Response:

In each case in which Western has filed a class cost of service study, including this case, the functionalization and classification processes have been reviewed as part of the preparation of the study. The review has generally consisted of considering whether any changes in the company's operations would indicate that an existing functionalization or classification method was no longer reasonable. Additionally, the existing methods have been compared to the methods discussed in the NARUC Gas Distribution Rate Design Manual. The most significant change considered as a result of this comparison would have classified administrative and general expense in the same proportions as all other non-gas operating and maintenance expense. This change would have shifted expenses from the commodity class to the customer class. A summary of the results of the study if this change had been adopted is attached.

WESTERN KENTUCKY GAS COMPANY Page 1 ALTERNATE CLASS COST OF SERVICE STUDY (Alternate A&G Classification) RATE OF RETURN AT PRESENT RATES

1411		310101	T LICEUPINI	****	_
TWELVE	MONTHS	ENDED	SEPTEMBER	30,	1998

Line			Firm	Firm	Firm	Interr. &	Large
No.	Cost Item	Total	Residential	Commercial	Industrial	Carriage	Int. & Carr.
		(a)	(b)	(c)	(d)	(e)	(f)
1 Total	l Operating Margins	44,842,983	24,208,630	10,071,538	1,234,217	3,880,223	5,448,375
2							
30 & 1	M Expense	23,121,835	12,922,100	6,476,781	445,414	1,230,439	2,047,101
5 Depre	ec. & Amortization	6,486,839	3,836,843	1,605,100	131,167	331,123	582,606
	erty & Other Taxes	1,908,720	1,116,682	471,813	40,375	100,707	179,144
9 Inte	rest	4,754,687	2,733,603	1,162,396	104,084	262,977	491,628
10							
11 Pre-	Tax Expenses	36,272,081	20,609,228	9,716,090	721,040	1,925,246	3,300,478
12							
13 Taxal	ble Income	8,570,902	3,599,402	355,448	513,177	1,954,977	2,147,897
14							
	me Taxes	3,459,430	1,452,809	143,468	207,131	789,078	866,945
16					440 400	4 400 056	1 550 500
17 Retu	rn	9,866,159	4,880,196	1,374,376	410,130	1,428,876	1,772,580
18							
19 Rate	Base	124,468,251	71,560,291	30,429,217	2,724,703	6,884,208	12,869,831
20							
21 Rate	Of Return	7.93%	6.82%	4.52%	15.05%	20.76%	13.77%

Western Kentucky Gas Company Case No. 99-070 KPSC Data Request Dated August 19, 1999 DR Item Question 71

Witness: Thomas H. Petersen

Data Request:

Provide the summary pages of the cost-of-service model assuming the "minimum system" method had been incorporated rather than the "zero intercept" method for both the historic period and the forecasted period. Describe what changes are necessary to implement this change.

Response:

Please see attached. The changes necessary to implement this modification were to change the plant allocator percentages on line 19 and 20 of sheet 4 from .7736 and .2264 based on the regression minimum from sheet 7 to .2168 and .7832 based on the minimum system from sheet 7 of the class cost of service study.

WESTERN KENTUCKY GAS COMPANY CLASS COST OF SERVICE STUDY OF RETURN AT PRESENT RATES - MINIMUM

RATE OF RETURN AT PRESENT RATES - MINIMUM SYSTEM TWELVE MONTHS ENDED SEPTEMBER 30, 1998

Line			Firm	Firm	Firm	Interr. &	Large
No.	Cost Item	Total	Residential	Commercial	Industrial	Carriage	Int. & Carr.
		(a)	(b)	(c)	(d)	(e)	(f)
	l Operating Margins	44,842,983	24,208,630	10,071,538	1,234,217	3,880,223	5,448,375
2 30 &	M Expense	23,121,835	13,500,710	5,994,785	405,832	1,061,697	2,158,811
5 Depr	ec. & Amortization	6,486,839	4,508,584	1,462,996	82,604	169,518	263,137
-	erty & Other Taxes	1,908,720	1,308,997	434,565	27,258	52,729	85,172
9 Inte 10	rest	4,754,687	3,191,988	1,075,143	73,169	147,864	266,523
11 Pre-	Tax Expenses	36,272,081	22,510,279	8,967,489	588,863	1,431,808	2,773,643
	ble Income	8,570,902	1,698,351	1,104,049	645,354	2,448,415	2,674,732
	me Taxes	3,459,430	685,497	445,622	260,481	988,242	1,079,589
16 17 Retu	rn	9,866,159	4,204,842	1,733,570	458,042	1,608,037	1,861,666
18 19 Rate	Base	124,468,252	83,559,895	28,145,118	1,915,421	3,870,782	6,977,036
20 21 Pate	Of Return	7.93%	5.03%	6.16%	23.91%	41.54%	26.68%
41 Kate	Or veraru	7.338	3,038	0.10%	43.310	41.240	20.000

WESTERN KENTUCKY GAS COMPANY CLASS COST OF SERVICE STUDY RATE OF RETURN AT PROPOSED RATES - MINIMUM SYSTEM TWELVE MONTHS ENDED SEPTEMBER 30, 1998

Line			Firm	Firm	Firm	Interr. &	Large
No.	Cost Item	Total	Residential	Commercial	Industrial	Carriage	Int. & Carr.
		(a)	(b)	(c)	(d)	(e)	(f)
1 Total	Operating Margins	58,832,845	33,664,978	13,477,236	1,498,327	4,497,037	5,695,268
2							
30 & M 4	Expense	23,121,835	13,500,710	5,994,785	405,832	1,061,697	2,158,811
5 Depre	c. & Amortization	6,486,839	4,508,584	1,462,996	82,604	169,518	263,137
	rty & Other Taxes	1,908,720	1,308,997	434,565	27,258	52,729	85,172
9 Intere	est	4,754,687	3,191,988	1,075,143	73,169	147,864	266,523
10							
11 Pre-Ta	ax Expenses	36,272,081	22,510,279	8,967,489	588,863	1,431,808	2,773,643
12		**					
13 Taxabi	le Income	22,560,764	11,154,699	4,509,747	909,464	3,065,229	2,921,625
14							
	e Taxes	9,106,088	4,502,315	1,820,247	367,082	1,237,203	1,179,241
16							
17 Return	n.	18,209,363	9,844,372	3,764,643	615,551	1,975,890	2,008,907
18							
19 Rate I	Base	124,468,252	83,559,895	28,145,118	1,915,421	3,870,782	6,977,036
20							
21 Rate (Of Return	14.63%	11.78%	13.38%	32.14%	51.05%	28.79%

WESTERN KENTUCKY GAS COMPANY CLASS COST OF SERVICE STUDY

RATE OF RETURN AT PRESENT RATES - MINIMUM SYSTEM TWELVE MONTHS ENDED DECEMBER 31, 2000

Line			Firm	Firm	Firm	Interr. &	Large
No.	Cost Item	Total	Residential	Commercial	Industrial	Carriage	Int. & Carr.
		(a)	(b)	(c)	(d)	(e)	(f)
			04 405 600	40 005 044	050 500	4 484 483	2 600 551
	Operating Margins	42,981,173	24,126,628	10,085,014	972,788	4,174,173	3,622,571
2	_						
30 & M	Expense	26,583,268	15,450,520	6,781,630	469,085	1,401,647	2,480,388
4							
5 Depre	c. & Amortization	10,054,906	7,069,258	2,274,372	119,055	261,025	331,196
6							
7 Prope	rty & Other Taxes	1,952,000	1,343,781	446,247	27,550	56,638	77,784
8							
9 Inter	est	4,984,495	3,385,889	1,131,758	71,692	158,155	237,001
10							
11 Pre-T	ax Expenses	43,574,669	27,249,447	10,634,006	687,382	1,877,465	3,126,369
12	-						
13 Taxab	le Income	(593,496)	(3,122,819)	(548,992)	285,406	2,296,708	496,202
14				1			
15 Incom	e Taxes	(239,550)	(1,260,448)	(221,587)	115,197	927,009	200,280
16							
17 Retur	n	4,630,549	1,523,518	804,353	241,901	1,527,854	532,923_
18		(n. 16) - Carlo Ca					
19 Rate	Base	130,484,161	88,635,840	29,627,166	1,876,755	4,140,180	6,204,220
20							
	Of Return	3.55%	1.72%	2.71%	12.89%	36.90%	8.59%

Page 1A of 19

WESTERN KENTUCKY GAS COMPANY CLASS COST OF SERVICE STUDY RATE OF RETURN AT PROPOSED RATES - MINIMUM SYSTEM TWELVE MONTHS ENDED DECEMBER 31, 2000

Line			Firm	Firm	Firm	Interr. &	Large
No.	Cost Item	Total	Residential	Commercial	Industrial	Carriage	Int. & Carr.
		(a)	(b)	(c)	(d)	(e)	(f)
1 2	Total Operating Margins	57,108,821	33,347,891	13,415,036	1,178,065	4,873,571	3,799,795
	O & M Expense	26,661,524	15,496,216	6,800,012	470,699	1,408,325	2,485,594
5 6	Deprec. & Amortization	10,054,906	7,069,258	2,274,372	119,055	261,025	331,196
7 8	Property & Other Taxes	1,952,000	1,343,781	446,247	27,550	56,638	77,784
9 10		4,984,495	3,385,889	1,131,758	71,692	158,155	237,001
11 12	-	43,652,925	27,295,144	10,652,389	688,997	1,884,143	3,131,575
13 14		13,455,896	6,052,747	2,762,647	489,068	2,989,428	668,220
15 16		5,431,136	2,443,040	1,115,074	197,400	1,206,608	269,710
17 18	Return	13,009,255	6,995,596	2,779,331	363,360	1,940,975	635,511
19 20	Rate Base	130,484,161	88,635,840	29,627,166	1,876,755	4,140,180	6,204,220
21	Rate Of Return	9.97%	7.89%	9.38%	19.36%	46.88%	10.24%

Western Kentucky Gas Company Case No. 99-070 KPSC Data Request #2 Dated August 19, 1999 DR Item 72 Witness: Petersen

Data Request:

Provide a reconciliation of the volume units and dollar amounts used by the financial, rate design and cost-of-service witnesses for the unadjusted historic test period, the adjusted historic test period, and the forecasted test period.

Response:

The revenue dollar amounts used in the filing by financial witness Rebecca Buchanan for the base period of twelve months ended September 30, 1999 are per books amounts for the first six months of the period and budget amounts for the last six months. Neither the rate design or class cost of service witnesses prepared any revenue estimates for this period in this case.

The revenue dollar amounts used in the filing (FR 10(10)(c)1) by Rebecca Buchanan for the forecasted test year ended December 31, 2000 are \$120,503,329 at current rates and \$134,630,995 at proposed rates. These amounts came from Exhibits GLS-1 and GLS-7 attached to rate design witness Gary Smith's testimony. The volumes Mr. Smith used to calculate these revenues totaling 48,286,139 mcf are shown on those exhibits. These volumes include 48,848,731 from the reference year ended September 30, 1998 plus a weather normalization adjustment of 1,165,578 as well as other adjustments. The volumes used by class cost of service study witness Thomas Petersen in the study originally filed in this case were the sum of the reference year volumes and the weather adjustment from Mr. Smith's exhibits. This total of 50,014,309 was used on page 18 of the study to calculate revenues at current rates for the class cost of service study for the year ended September 30, 1998. The response to KPSC DR #2 Item 69 (originally DR#1 Item 47f) provides a class cost of service study for the forecasted test period ended December 31, 2000. The volumes and revenues used in this study match those for the forecasted period from Mr. Smith's exhibits and FR 10(10)(c)1.

Western Kentucky Gas Company Case No. 99-070 KPSC Data Request Dated August 19, 1999 DR Item Question 73

Witness: Thomas H. Petersen

Data Request:

Refer to the response to item 47(g) of the Commission's July 16, 1999 Order. Provide a detailed breakdown of the amount for "Other Revenue" of \$1,094,414 shown on Sheet 6 and 9 of the functional allocations attached to the cost-of-service analysis utilizing proposed rates.

Response:

Please see the attached sheet. All the items on the attached sheet are included in the \$1,094,414 except for the EFM Equipment Charges on line 15 and 17.

SERVICE CHARGES

WESTERN KENTUCKY GAS COMPANY MARGIN ANALYSIS - PROPOSED RATES TEST YEAR ENDED DECEMBER 31, 2000

Line	(a)	(p)	(c)	(4)		(e)
No.		2000	Proposed Rates	Rates		TOTAL
	Normal Hrs/Unit After Hrs	rs charged After Hrs	Normal Hrs	After Hrs	EL.	REVENUE
1 SERVICE CHARGES						
2	0000	10	\$28.00	\$35.00	€9	61,950
3 Meter Set	0044	2				
4 5 Turn On	15,000	25	20.00	25.00	↔	300,625
6 7 Reconnect Delinquent Service	1,500	30	34.00	40.00	₩	52,200
8 9 Read	24,000	ហ	12.00	14.00	€	288,070
10		ı	00	73.00	49	4,265
11 Seasonal Charge	09	n			•	
12	3,000	N.A.	23.00		4	69,000
13 Returned Check Charge						
14 15 Class 1 EFM Equipment Charge	622	N.A.	105.00		€9	65,310
	73	A Z	245.00		69	16,415
17 Class 2 EFM Equipment Charge						
18 19 Premises Charge · Requiring Main Extension	0	N.A.	13.09	13.09	€	
20				00	•	,
21 Premises Charge - Not Requiring Main Extension	0	N.A.	11.28	11.28	•	
22	,		ď	0.05	49	308,304
23 Late Payment Charge	\$6,166,082		en		•	
24					49	\$ 1,166,139
25 TOTAL Misc. Service Revenue (Acct 488)						
26					*	10,000
27 Other Gas Revenues (Acct 495)						
28					€4	\$ 1,176,139
29 GRAND TOTAL - Misc. & Other Gas Revenues						

Western Kentucky Gas Company Case No. 99-070 KPSC Data Request Dated August 19, 1999 DR Item Question 74

Witness: Thomas H. Petersen

Data Request:

Refer to the response to Item 47(e) of the Commission's July 16, 1999 Order. Western states that the allocation could be applied to differing numbers of customer classes and/or differing customer sizes within customer classes, albeit requiring significant analysis. Has Western completed such an analysis? If so, provide the results. If not, what assurances can be given that the current customer classifications are the most optimal?

Response:

No. The current customer classes are based on the characteristics of primary interest when doing an embedded class cost of service study for this company. Firm service customers are segregated by type between residential, commercial and industrial. Between these classes average annual use per customer varies significantly as shown on page 2 of the class cost of service study. Additionally, the firm industrial customers as a group have a higher load factor than the residential and commercial customer groups. The remaining approximately 150 customers who subscribe to some interruptible or carriage service are divided into two groups by size. The size break is at 200,000 mcf per year with the group of smaller customers averaging approximately 50,000 mcf per year and the group of larger customers averaging approximately 1 million mcf per year. The group of larger customers also has higher load factor.

I'm not sure what is meant by "customer classifications (that) are the most optimal," but the classifications used in the filed study capture differences in characteristics of the customer population that are of interest, utilize available data and keep even the smallest class at a meaningful size.

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PUBLIC SERVICE COMMISSION

Western Kentucky Gas Company Case No. 99-070 KPSC Data Request #2 Dated August 19, 1999 DR Item 1

Witness: Gruber

Data Request:

Refer to the response to Item 1 of the Commission's July 16, 1999 Order. Provide the following information concerning WKG Storage, Inc. and Western Kentucky Energy Services, Inc.:

- a. Describe the nature of the affiliate's business operations.
- b. Indicate when the affiliate was established.
- c. Indicate whether any of Western's assets, liabilities, capital, or personnel were transferred to either affiliate.

Response:

- a. WKG Storage, Inc. will acquire, own and operate natural gas storage fields. WKG Energy Services, Inc. will sell behind the meter retail products and services such as appliance warranties.
- b. WKG Storage was incorporated under the laws of the State of Delaware on April 30, 1999 and became qualified to do business in Kentucky on August 3, 1999. Western Kentucky Energy Services, Inc., which has changed its name to WKG Energy Services, Inc., was incorporated under the laws of the State of Delaware on April 30, 1999 and became qualified to do business in Kentucky on August 11, 1999.
- c. No assets, liabilities, capital or personnel of Western or Atmos Energy Corporation were directly transferred to either affiliate. As indicated in the response to Item 1 of the Commission's July 16, 1999 Order, neither affiliate referenced in this data request are direct subsidiaries of Atmos. Both are second tier subsidiaries. Atmos made capital contributions to Atmos Storage, Inc. which formed WKG Storage, Inc. and to Atmos Energy Services, Inc. which formed WKG Energy Services, Inc.

Western Kentucky Gas Company Case No. 99-070 KPSC Data Request #2 Dated August 19, 1999 DR Item #2

Witness: Burman (a,b,d) & Gruber (c,e)

Data Request:

Concerning transactions between Western, Atmos Energy Corporation ("Atmos"), and any other Atmos regulated divisions or non-regulated affiliated subsidiaries:

- a. For the base period and the five previous fiscal years, provide a schedule showing the total dollar value of affiliated party transactions between (1) Western and Atmos and (2) Western and all other Atmos affiliates. The schedule should separately identify the affiliate and the total dollar value of that affiliate's transactions for each of the periods requested.
- b. For the base period and the five previous fiscal years, provide A description of any transaction between Western and Atmos, or Western and an Atmos affiliate, where the dollar value of the transaction equaled or exceeded \$100,000. Identify which entity was the provider and which was the acquirer. Also, explain in detail how the value of the transaction was determined (cost, fair market value, etc.).
- c. Does Western attempt to estimate the dollar level of its affiliate transactions in its budgeting process? If yes, explain in detail how the estimate is determined. If no, explain why this is not done.
- d. For the base period and the five previous fiscal years, provide an analysis comparing the total dollar value of affiliated transactions Western incorporated in its fiscal year budget to the actual amount expended. Include an explanation for any differences between budgeted and actual amounts that exceeded 5 percent.
- e. For the forecasted period, provide the total dollar amount of affiliated transactions incorporated into the budget. Explain how Western determined that amount.

Response:

As a point of information, none of the five LDC business units of Atmos are 'affiliates". Each is an unincorporated division of Atmos, including Western.

Shared services between unincorporated divisions of Atmos are not affiliate transactions, but are implemented pursuant to shared service agreements that are well documented in this case. For reference related to shared services, please refer to FR 10(9)(u) Volume 9, Tab 2. This FR was revised in Western's response to KPSC #1, DR 34. Also, see response to KPSC #1 DR Item 83.

- a. Western's only significant transaction with an affiliate is a monthly billing to WKGR for costs incurred in operating storage facilities maintained by Western. Historically, the total annual billing has approximated \$30,000. This billing is credited to Western's operating expenses.
 - b. None.
- c. Yes, the only affiliate transaction that Western has is with WKGR to operate customer owned storage facilities. The revenues are budgeted as a credit to expense annually.
 - d. Not applicable. See 2.a. above.
- e. The amount disclosed in 2.a. above would have been included in the budget based on history, estimated labor and materials.

Western Kentucky Gas Company Case No. 99-070

KPSC Data Request #2 Dated August 19, 1999

DR Item #3

Witness: Donald P. Burman

Data Request:

3. Refer to the response to Item 3 of the Commission's July 16, 1999 Order. Provide the accounting entries Western normally would make to its books to record its post-retirement employee benefits ("OPEB") during a fiscal year. Identify the account numbers and titles used, as well as a description of each transaction.

Response:

The accounting entries to record OPEB are as follows:

Entry #1

040.0000.1840.13822.009000.0000

Clearing Account - FAS 106 Clearing

040.0000.2530.27706.009000.0000

Other Deferred Credits - FAS 106/OPEB

XXX

XXX

To accrue the FAS 106/OPEB liability for WKG per actuarial calculations

Entry #2

040.0000.1070.01290.009xxx.0000

Construction Work in Process - Benefit Load

XX

040.0000.1840.13803.009000.0000

Clearing Account – Benefit Clearing

XX

To record capitalized benefits offset from the Projects Accounting System

Entry #3

040.0000.1840.13803.009000.0000

Clearing Account – Benefit Clearing

XX

040.0000.1840.13822.009000.0000

Clearing Account - FAS 106 Clearing

XX

To reclass capitalized benefit offset (Entry #2) to individual benefit clearing accounts

Entry #4

040.xxxx.9260.01232.009xxx.0000 A&G – Employee Pensions & Benefits – FAS 106/OPEB

XX

040.0000.1840.13822.009000.0000 Clearing Account - FAS 106 Clearing

XX

To allocate non-capitalized portion of FAS 106/OPEB to various cost centers and service areas based on relative percentage of actual labor postings for each cost center and service area

Net effect of above entries

040.0000.1070.01290.009xxx.0000

Construction Work in Process – Benefit Load

XX

040.xxxx.9260.01232.009xxx.0000 A&G-

Employee Pensions & Benefits – FAS 106/OPEB XX

040.0000.2530.27706.009000.0000

Other Deferred Credits - FAS 106/OPEB

XXX

To record the FAS 106/OPEB liability for WKG

Western Kentucky Gas Company Case No. 99-070

KPSC Data Request #2 Dated August 19, 1999

DR Item #4 (a, b, c)

Witness: Donald P. Burman

Data Request:

- 4. For the forecasted period, the base period, and the five previous fiscal years, provide the following information concerning Western's OPEBs. In addition, explain how the items requested below were determined for the base and forecasted periods.
 - a. The amount of OPEB claims incurred and funded.
 - b. The amount of OPEB claims actuarially determined.
 - c. The amount of the OPEB liability recorded for each period.

Response:

- a. Expected retiree claims and administration costs, less retiree contributions:
 - (1) Forecasted and base periods:

\$827,500;

(2) Fiscal year ending 09/30/98:

\$615,400;

(3) Fiscal year ending 09/30/97:

\$558,600:

(4) Fiscal year ending 09/30/96:

\$533,600.

- b. Total annual OPEB cost:
 - (1) Forecasted and base periods:

\$1,583,200;

(2) Fiscal year ending 09/30/98:

\$1,430,400;

(3) Fiscal year ending 09/30/97:

\$1,478,000;

(4) Fiscal year ending 09/30/96:

\$1,395,500.

- c. Ending OPEB liability recorded:
 - (1) Forecasted and base periods:

\$5,511,500.

The information for items "a" and "b" were obtained from the annual "Analysis of Postretirement Benefits" prepared by Ernst & Young LLP. No further information on prior years is available.

Western Kentucky Gas Company Case No. 99-070 KPSC Data Request #2 Dated August 19, 1999 DR Item #5

Witness: Donald P. Burman

Data Request:

5. Concerning Western's OPEBs, provide citations to the applicable generally accepted accounting principles that support Western's accounting treatment.

Response:

Western is accounting for OPEB's in accordance with Statement of Financial Accounting Standards No. 106 (SFAS No. 106), which became effective for Westerns fiscal year ending September 30, 1994. The Standard states, in paragraph 45, ..."the cost of providing postretirement benefits shall be attributed to the periods of employee service rendered in exchange for those future benefits".... The Standard goes on to define the liability in paragraphs 151 to 154. The amounts to be recorded by Western have been determined annually by Ernst & Young LLP in accordance with the terms of SFAS No. 106.

Western Kentucky Gas Company Case No. 99-070 KPSC Data Request #2 Dated August 19, 1999 DR Item 6 Witness: Gary Smith

Data Request:

Refer to the response to Item 3, Sheet 5 of 5, of the Commission's July 16, 1999 Order and the reference to the response to Item 59(b). The response to Item 59(b) appears to deal exclusively with the impacts of weather on Western's customers' gas usage. Explain how the average decline in Mcf/year/customer, which apparently is based on this weather-related impact analysis, is indicative of the effects of conservation on Western's gas sales.

Response:

The response to Item 59(b) of the Commission's July 16, 1999 Order does, in fact, identify the declining usage per customer for residential and commercial classes. In order to assess trends in the customer's average annual natural gas requirements, it is essential, first, to factor out the impact of weather variations on gas usage. Schedule 59(b), Sheet 1 of 5, column (i), lines 23-31 summarizes the average annual natural gas requirements for the residential class from fiscal year 1990 through 1998. Column (p), lines 23-31 of the same Schedule summarizes the average natural gas requirements for the "commercial" (commercial and public authority) classes of customers for the same period of time. Attached hereto, Schedule KPSC DR 2, Item 6, Sheet 1 of 4 is a graphic depiction of the residential usage, as calculated in the workpapers provided.

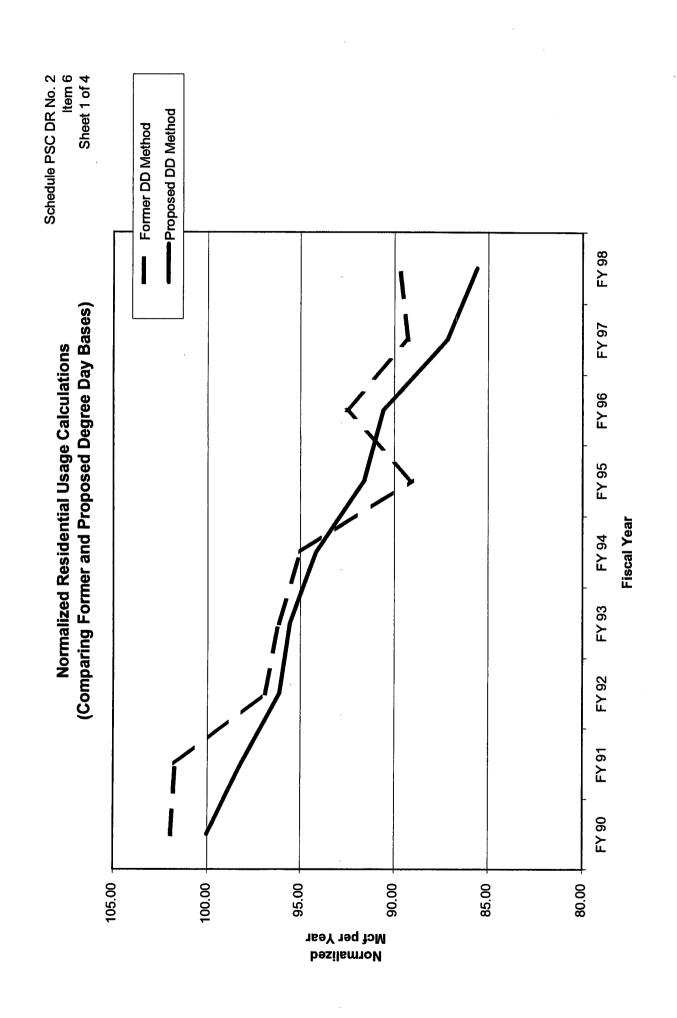
Upon identifying and quantifying this trend of declining customer usage, on a weather-normalized basis, Western incorporated a forward-looking adjustment in it's determination of the test year utilized in this Case. Please reference Volume 2 of 10 of the Company's Application, at Tab 11, Exhibits GLS-1 and GLS-6 for the inclusion of this occurrence in the test year. Western labeled the trend of declining gas requirements as "conservation and energy efficiency" for purposes of the volume adjustments.

In conjunction with our updating of information for the KPSC and AG data requests, Western has updated its original weather adjustment schedules Exhibit GLS-4, Schedules 2 through 4, using billing information through May 1999. In the Application, GLS-4 had weather normalized the 12-month period ending

Western Kentucky Gas Company Case No. 99-070 KPSC Data Request #2 Dated August 19, 1999 DR Item 6 Witness: Gary Smith

September 1998. Exhibit GLS-4, Schedule 3 of 5, calculated normalized average residential usage at 86.15 Mcf per year. Updated information, attached as Schedule KPSC DR 2, Item 6, Sheet 2 of 4, reveals a decrease in normalized usage to 84.85 Mcf per year. Similarly, the updated normalization for "commercial" customers reveals a continuing decline, from 357.31 Mcf per year in FY 1998 to 352.93 Mcf per year for the twelve months ending May 1999 (see Schedule KPSC DR 2, Item 6, Sheet 3 of 4).

Please refer also to the Western's response to Item 50 of this, the Commissions Second Data Request Dated August 19, 1999.



Schedule KPSC DR No. 2

Item 6 Sheet 2 of 4

Normalization Of Volumes For Weather Western Kentucky Gas Company 12-months Ending May 1999

Line		Lagged Normal	×			Normalized Usage ner	A P	Normalized	Actual	Weather
No.	Month	DDays	Coefficient	Product	Constant	Customer	Customers	Volumes		Adjustment
	(a)	(p)	(0)	(p)	(e)	(J)	(g)	(h)	(i)	(j)
_ 	Residential - Class 1 Rate 1	Class 1 Rate	-							
Н	36-unf	47.0	0.0151	0.7098	1.5444	2.2542	154,408	348,070	290,969	57,101
7	Jul-98	0.5	0.0151	0.0076	1.5444	1.5520	153,621	238,423	250,082	(11,659)
m	Aug-98	0.0	0.0151	0.0000	1.5444	1.5444	153,212	236,624	223,798	12,826
4	Sep-98	14.5	0.0151	0.2190	1.5444	1.7634	152,865	269,565	240,513	29,052
2	Oct-98	134.0	0.0151	2.0236	1.5444	3.5680	152,840	545,336	261,719	283,617
9	Nov-98	379.5	0.0151	5.7312	1.5444	7.2756	155,134	1,128,696	749,443	379,253
7	Dec-98	689.5	0.0151	10.4127	1.5444	11.9571	156,973	1,876,945	1,290,062	586,883
œ	Jan-99	933.0	0.0151	14.0900	1.5444	15.6344	158,276	2,474,554	2,701,698	(227,144)
6	Feb-99	0.006	0.0151	13.5917	1.5444	15.1361	158,684	2,401,860	1,877,477	524,383
10	Mar-99	673.0	0.0151	10.1635	1.5444	11.7079	158,829	1,859,557	1,974,343	(114,786)
11	Apr-99	399.5	0.0151	6.0332	1.5444	7.5776	158,179	1,198,621	1,340,638	(142,017)
12	May-99	169.5	0.0151	2.5598	1.5444	4.1042	157,075	644,671	531,742	112,929
13										
14	Total	4,340			1.5444		155,841	13,222,922	11,732,483	1,490,438
15	l									
16 /	Average Usage / Customer	e / Customer	Ŀ					84.85	75.28	

Western Kentucky Gas Company Normalization Of Volumes For Weather 12-months Ending May 1999

Schedule KPSC DR No. 2 Item 6

Sheet 3 of 4

Weather	Adjustment	(j)		(26,145)	29,072	(28,543)	(2,566)	85,959	194,745	282,482	(126,028)	248,693	(55,254)	(4,254)	87,562		685,722		
Actual	Volumes A	(j)		244,303	137,932	193,687	182,388	218,878	380,420	638,073	1,324,845	918,342	971,418	616,900	268,767		6,095,952		317.24
Normalized	Volumes	(h)		218,158	167,004	165,144	179,822	304,837	575,165	920,555	1,198,817	1,167,034	916,164	612,646	356,328		6,781,674		352.93
No. of	Customers	(g)		19,055	18,889	18,738	18,680	18,670	19,112	19,389	19,610	19,686	19,680	19,626	19,452	•	19,216	i	
Normalized Usage per	Customer	(f)		11.4489	8.8413	8.8133	9.6264	16.3276	30.0944	47.4782	61.1329	59.2824	46.5530	31.2160	18.3183				
	Constant	(e)		8.8133	8.8133	8.8133	8.8133	8.8133	8.8133	8.8133	8.8133	8.8133	8.8133	8.8133	8.8133		8.8133		
	Product	(p)	4 - Rate 1	2.6356	0.0280	0.000	0.8131	7.5143	21.2811	38.6649	52.3196	50.4691	37.7397	22.4027	9.5050				
×	Coefficient	(©)	ty - Class 2 &	0.05608	0.05608	0.05608	0.05608	0.05608	0.05608	0.05608	0.05608	0.05608	0.05608	0.05608	0.05608				
Lagged Normal	DDays	(þ)	ublic Authori	47.0	0.5	0.0	14.5	134.0	379.5	689.5	933.0	0.006	673.0	399.5	169.5		4,340		/ Customer
,	Month	(a)	Commercial/Public Authority - Class 2 &	Jun-98	Jul-98	Aug-98	Sep-98	Oct-98	Nov-98	Dec-98	Jan-99	Feb-99	Mar-99	Apr-99	May-99		Total	I	Average Usage / Customer
Line	No.		O	_	7	m	4	2	9	7	∞	6	10	11	12	13	14	15	16 A

Schedule KPSC DR No. 2
Item 6
Sheet 4 of 4

Western Kentucky Gas

Actual & Normal Degree Days	12 Months Ended 9/30/98	

				Lagged Actual	Lagged Normal	
Line		Actual	Normal	50% Prior	50% Prior	
No.	Month	Ddays	Ddays	Mo. DDays	Mo. DDays	
	(a)	(p)	(0)	(p)	(e)	
_	May-98	29	93			
7	96-unf	13	-	21.0	47.0	
33	Jul-98	0	0	6.5	0.5	
4	Aug-98	0	0	0.0	0.0	
2	Sep-98	3	29	1.5	14.5	
9	Oct-98	164	239	83.5	134.0	
7	Nov-98	445	520	304.5	379.5	
∞	Dec-98	752	859	598.5	689.5	
6	Jan-99	835	1,007	793.5	933.0	
10	Feb-99	909	793	720.0	0.006	
11	Mar-99	675	553	640.0	673.0	
12	Apr-99	184	246	429.5	399.5	
13	May-99	31	93	107.5	169.5	
14			í			
15	I	3,707	4,340	3,706	4,340	

Western Kentucky Gas Company Case No. 99-070 KPSC Data Request #2 Dated August 19, 1999 DR Item 7 Witness: David H. Doggette

Data Request:

7. Refer to the response to Item 9 of the Commission's July 16, 1999 Order. Western has indicated that the approach used to develop the capital budgets submitted in its application was not consistent with the approach normally used. Western has also indicated that it has not performed any analysis or review to determine if the "baseline" forecast approach produces a result similar to the usual "bottom up" approach. Explain in detail how the results of the baseline forecasting approach can be considered reasonable without some verification that the results from this approach are similar to the normal capital budgeting approach utilized by Western.

Response:

The results of the "baseline" forecasting of the capital budget can be considered reasonable because the forecasted number correlates with prior years budgeted and actual amounts.

Western Kentucky Gas Company Case No. 99-070 KPSC Data Request #2 Dated August 19, 1999 **DR Item 8**

Witness: David H. Doggette

Data Request:

8. Refer to the response to Item 9(f) of the Commission's July 16, 1999 Order. Explain in detail why an allocation factor based on Western's percentage of customers to the total Atmos customer count is appropriate.

Response:

Refer to KPSC 1-83. The information technology strategy is affected by the number of transactions, database sizing and data processing requirements, which is greatly impacted by the number of customers.

Western Kentucky Gas Company Case No. 99-070 KPSC Data Request #2 Dated August 19, 1999 DR Item 9

Witness: David H. Doggette

Data Request:

- 1. Refer to the response to Item 10 of the Commission's July 16, 1999 Order. Western was requested to provide the workpapers and assumptions used to determine that the projected increase in maintenance and improvements should be 36.25 percent for the FY 2000 capital budget. The response does not adequately satisfy the request.
 - a. Provide the originally requested workpapers and assumptions for the 36.25 percent factor.
 - b. For the base period and the 10 previous fiscal years, provide an analysis of the actual increase or decrease experienced by Western for maintenance and improvements. The analysis should compare the oldest fiscal year to the following year, and continue year-to-year comparisons through the base period.

Response:

a. Please see KPSC Supplemental Response to DR Item 10 for witness David H. Doggette. There are no similar amounts for FY 96, 97 and 98.

b.	1990 - \$2,115,805 1991 - \$2,148,572 1992 - \$2,475,743 1993 - \$2,048,660	1992 was higher by \$325,676 due to a Madisonville main relocation project
	1994 - \$2,804,727	1994 was higher by \$312,286 due to a well workover program for storage and \$235,863 for transmission line relocations
	1995 - \$5,928,011	1995-1998 are higher than our annual minimum needs of approximately \$2,000,000 for maintenance and improvements. The specific relocation projects and system improvement projects above our annual requirements are individually listed in the attached analysis.
	1996 - \$5,194,458	·
	1997 - \$7,346,609	
	1998 - \$6,040959	

Budget	No. Description Operating Area	Budget	Amount	Expen	diture Amount
	Owensboro Operations				
33400	Field M&R Station	\$	_	\$	(4,087)
35200	Wells	\$	-	\$	197
36720	Mains-Public Improvement	\$	-	\$	24,036
36900	Measuring & Regulating Sta Equip	\$	45,000	\$	· -
37630	Blanket Mains Leakage	\$	75,000	\$	57,987
37640	Mains Cathodic Protection	\$	18,000	\$	14,132
37650	Mains - Public Works	\$	28,000	\$	3,121
37800	Measuring & Regulating Sta Equip	Ge \$	40,000	\$	20,218
37900	Meas & Reg Sta Equip City Gate	\$	-	\$	2,843
38020	Services-Public Improvement	\$	24,940	\$	34,886
38500	Industrial Meas & Reg Sta Equip	\$	63,750	\$	51,112
	Total	\$	294,690	\$	204,444

Budget No	. Description	Budget Amount	Expend	diture Amount
W	KG Measurement Center			
36900	Meas & Reg Sta Equip	\$ -	• \$	16,028
37900	Meas & Reg Sta Equip City Gate	\$ -	\$	20,644
	Total	\$ -	. \$	36,672

Budget No. WK	Description G Technical Services	Budget	Amount	Expen	diture Amount
33400	Field Measuring & RegulatingStatio	n \$	-	\$	353
36700	Mains	\$	-	\$	57,827
36900	Measuring & Regulating Sta Equip	\$	-	\$	32,924
	Total	\$	-	\$	91,103
Mad	disonville Operations				
35200	Wells	\$	-	\$	5,583
35600	Purification Equipment	\$	-	\$	9,811
36740	Mains - Cathodic Protection	\$	30,000	\$	19,615
36750	Mains - Public Works	\$	43,000	\$	-
37620	Mains- Public Improvement	\$	20,500	\$	26,128
37630	Mains- Leakage	\$	97,500	\$	18,714
37640	Mains- Cathodic Protection	\$	-	\$	5,207
37800	M&R Sta Equipment Gen	\$	30,350	\$	13,426
37900	M&R Sta Equip City Gate	\$	26,000	\$	16,722
38020	Services-Public Improvement	\$	50,310	\$	28,809
38500	Industrial M&R Sta Equip	\$	97,500	\$	58,975
	Total	\$	395,160	\$	202,991

Budget No. Description		Budget Amount		Expen	diture Amount
Pad	lucah Operations				
36720	Mains Public Improv	\$	_	\$	106,764
36730	Mains- Leakage	\$	-	\$	8,766
36900	Meas & Reg Sta Equip	\$	12,000	\$	5,883
37630	Mains- Leakage	\$	75,000	\$	1,719
37640	Mains- Cathodic Protection	\$	15,000	\$	1,278
37800	Meas & Reg Sta Equip Gen	\$	10,000	\$	9,827
37900	Meas & Reg Sta Equip City Gate	\$	26,000	\$	9,156
38020	Services- Public Imp	\$	52,990	\$	26,224
38500	Ind Meas & Reg Sta Equip	\$	69,400	\$	28,368
	Total	\$	260,390	\$	197,986
Bov	vling Green Operations				
36720	Mains- Public Improv	\$	-	\$	4,223
36740	Mains- Cathodic Protection	\$	-	\$	10,728
37630	Mains- Leakage	\$	76,000	\$	78,674
37640	Mains- Cathodic Protection	\$	30,000	\$	15,006
37650	Mains- Public Works	\$	230,800	\$	141,898
37670	Mains- Other/Miscellaneous	\$	-	\$	3,983
37800	Meas & Reg Sta Equip Gen	\$	10,000	\$	64,732
38020	Services- Public Improve	\$	64,900	\$	50,489
38200	Meter Installations	\$	-	\$	2,370
38300	House Regs	\$	-	\$	784
38500	Ind Meas & Reg Sta Equip	\$	75,000	\$	33,244
	Total	\$	486,700	\$	406,132

Budget No. Dar	Description ville Operations	Budge	et Amount	Exper	nditure Amount
36730	Mains-Leakage	\$	-	\$	441,167
36750	Mains-Public Works	\$	392,500	\$	-
36900	Meas and Reg Sta Equip	\$	_	\$	22,688
37630	Mains- Leakage	\$	67,900	\$	70,072
37640	Mains- Cathodic Protection	\$	15,000	\$	7,628
37650	Mains- Public Works	\$	100,000	\$	161,468
37800	Meas & Reg Sta Equip Gen	\$	18,200	\$	1,066
37900	Meas & Reg Sta Equip City Gate	\$	2,000	\$	2,461
38020	Services- Public Imp	\$	21,870	\$	45,109
38500	Ind Meas & Reg Sta Equip	\$	71,250	\$	48,788
	Total	\$	688,720	\$	800,446
WK	G Overheads	\$	196,461	\$	176,032
	Grand Total	\$	2,322,121	\$	2,115,805

Budget No.	Description Operating Area	Budget /	Amount	Expenditure	Amount
	Owensboro Operations				
33400	Field Measuring & Reg Sta	\$	0	\$	1,760
35200	Wells	\$	577	\$	(197)
36720	Mains-Public Imp	\$	0	\$	2,705
36740	TP Mains Cathodic Protection	\$	3,000	\$	2,751
36920	M&R Sta-Public Imp	\$	3,000	\$	0
37620	Blanket Mains Public Improvemer	nts \$	55,812	\$	55,787
37630	Blanket Mains Leakage	\$	26,407	\$	12,711
37640	Mains Cathodic Protection	\$	18,746	\$	19,295
37820	Gen M&R Sta Equip-Public Imp	\$	3,664	\$	3,926
37920	City Gate M&R Sta Equip-Public I	mp \$	742	\$	2,726
38030	Services Leakage	\$	70,157	\$	72,114
38510	Ind M&R Equip- Sys Impr	\$	83,927	\$	38,341
	Total	\$	266,032	\$	211,920

Budget No.	Description Operating Area	Budget /	Amount	Expenditure	Amount
	Owensboro Storage & Transmission				
35200	Well Workovers	\$	405	\$	(1)
33400	Field Measuring & Reg Equip	\$	6,092	\$	(353)
35400	Compressor Station Equip	\$	26,000	\$	24,529
36910	M&R Sta-Sys Imp	\$	39,980	\$	31,963
	Total Resp Ctr	\$	72,477	• \$	56,138
	WKG Measurement Center				
37820	Gen M&R Sta Equipment-Public	lmp \$	64,071	\$	50,340
37920	City Gate M&R Sta Equip-Public	Imp \$	45,000	\$	(9,008)
	Total	\$	109,071	\$	41,332

Budget No.	•	Budget Amount		Expenditure Amount	
Ma	disonville Operations				
36720	Mains-Public Imp	\$	0	\$	616
36740	Transm Rectifier & Groundbed	\$	3,467	\$	4,505
37520	Structures-Public Imp	\$	4,600	\$	5,108
37620	Mains- Public (Hwy) Relocations	\$	41,440	\$	17,806
37630	Mains- Leakage	\$	84,004	\$	14,446
37640	Mains- Cathodic Protection	\$	30,000	\$	8,214
37820	Gen M&R Sta Equip-Public Imp	\$	0	\$	2,432
37920	City Gate M&R Sta Equip-Public I	mp \$	18,975	\$	5,276
38030	Services- Leakage	\$	114,154	\$	51,980
38520	Ind M&R Equip-Public Imp	\$	13,403	\$	0
	Total	\$	310,043	\$	110,385
Pa	ducah Operations				
36720	Transm Mains Public Improv	\$	17,876	\$	115,931
36730	Mains-Leakage	\$	1,178	\$	8,164
36910	M&R Sta Sys Improvement	\$	81,500	\$	3,633
36920	M&R Sta-Public Imp	\$	300	• \$	2,370
37610	Mains- System Improve	\$	439,689	\$	252,902
37620	Mains- Public Improve	\$	4,912	\$	15,568
37630	Mains- Leakage	\$	46,053	\$	8,019
37640	Mains- Cathodic Protection	\$	27,500	\$	10,135
37800	M&R Sta Equip Gen	\$	0	\$	5,568
37820	Gen M&R Sta Equip-Public Imp	\$	5,360	\$	8,033
37900	M&R Sta Equip City Gate	\$	0	\$	84
37920	City Gate M&R Sta Equip-Public I	mp \$	30,568	\$	20,739
38030	Services- Leakage	\$	127,234	\$	55,160
38510	Ind M&R Equip- Sys Impr	\$	72,226	\$	84,758
	Total	\$	854,396	\$	591,063

Budget No.	<u>-</u>	3udget	Amount	Expenditure	Amount
В	owling Green Operations				
36720	Mains-Public Imp	\$	0	\$	1,040
36740	Transm Mains- Cathodic Protectio	n \$	13,385	\$	(47)
36920	M&R Sta Sys Public Improv	\$	27,500	\$	0
37620	Mains- Public Improv	\$	141,183	\$	180,289
37630	Mains- Leakage	\$	61,467	\$	88,515
37640	Mains- Cathodic Protection	\$	50,144	\$	15,914
37820	Gen M&R Sta Equip-Public Imp	\$	715	\$	65
37920	City Gate M&R Sta Equip-Public II	mp \$	7,030	\$	4,043
38030	Services- Leakage	\$	104,641	\$	51,320
38300	House Regs	\$	0	\$	180
38510	Ind M&R Equip Sys Improv	\$	73,577	\$	86,689
	Total	\$	479,642	\$	428,009

Budget No.	Description anville Operations	Budget	Amount	Expenditur	e Amount
36730	Line 133 12" Replacement	\$	306,725	\$	66,133
36740	Trans Mains-Cathodic Prot	\$	2,500	\$	1,814
36900	M&R Sta Equip	\$	0	\$	17
36920	M&R Sta-Public Imp	\$	10,000	\$	29
37610	Mains- Sys Improve	\$	643,467	\$	239,305
37620	Mains- Public (Hwy) Relocat	\$	135,420	\$	157,501
37630	Mains- Leakage	\$	40,916	\$	17,969
37640	Mains- Cathodic Protection	\$	30,796	\$	18,150
37820	Gen M&R Sta Equip-Public Imp	\$	934	\$	(1)
37910	City Gate M&R Sta Equip Sys Imp	oro \$	18,000	\$	10,563
38030	Services- Leakage	\$	57,076	\$	108,060
38510	Ind M&R Equip- Sys Improv	\$	59,278	\$	90,184
	Total	\$	1,305,112	\$	709,725
W	/KG Overheads	\$	0		
	Grand Total	\$	3,396,773	\$	2,148,572

Budget No. Op	Description E perating Area	Budget :	Amount	Expendi	ture Amount
Ov	vensboro Operations				
33400 36720 36740 36920	Measuring & RegulatingStation Mains-Public Imp TP Mains Cathodic Protection M&R Sta-Public Imp	\$ \$ \$	0 294 11,036 3,290	\$ \$ \$	205 (4,400) 8,352 1,663
37620 37630 37640 38030	Blanket Mains Public Improvemen Blanket Mains Leakage Mains Cathodic Protection Services Leakage	ts \$ \$ \$ \$	139,457 97,007 30,156 53,797	\$ \$ \$	10,405 99,812 16,886 85,186
	Total	\$	335,037	\$	218,109
Budget No. O	Description E Derating Area	Budget	Amount	Expendi	iture Amount
O	wensboro Storage & Transmission				
33400 35200 35400 36720 37630	Measuring & RegulatingStation Wells Compressor Station Equip US 231 Hartford-Beaver Dam 6" F Blanket Mains Leakage	\$ \$ Reloc \$ \$	0 25,407 1,804 355,410 16,158	\$ \$ \$ \$ \$ \$	0 23,190 2,110 0 6,202
	Total Resp Ctr	\$	373,372	\$	8,312
W	KG Measurement Center				
37100 37920	Other Equipment City Gate M&R Sta Equip-Public I	\$ mp \$	0 39,410	\$ \$	(3,265) 34,498
	Total	\$	39,410	\$	31,233
W	KG Technical Services				
33400 35200 35500	Measuring & RegulatingStation Well Workovers Measuring & Regulating Equipme		0	\$ \$ \$	0 42,348 54,403
	Total	\$	43,080	\$	96,751

Budget No. Description Madisonville Operations		Budget Amount		Expenditure Amount	
36720	Marion Trans Line Relocate	\$	53,850	\$	0
36740	Transm Rectifier & Groundbed	\$	1,616	\$	0
37620	Mains- Public (Hwy) Relocations	\$	49,416	\$	375,092
37630	Mains- Leakage	\$	70,128	\$	100,868
37640	Mains- Cathodic Protection	\$	30,156	\$	25,361
38030	Services- Leakage	\$	83,740	\$	109,190
38520	Ind M&R Equip-Public Imp	\$	8,615	\$	0
	Total	\$	297,521	\$	610,510

Budget No.	Description	Budget Amount		Expenditure Amount	
Paducah Operations					
36720	Transm Mains Public Improv	\$	482,496	\$	0
36740	Transm Mains Cathodic Protection	n \$	1,616	\$	0
37620	Mains- Public Improve	\$	366,180	\$	36,077
37630	Mains- Leakage	\$	64,066	\$	10,017
37640	Mains- Cathodic Protection	\$	30,156	\$	8,739
38030	Services- Leakage	\$	134,630	\$	88,789
	Total	\$	1,079,144	\$	143,622

Budget No. Bo	Description Wling Green Operations	Budget An	nount	Expendit	ture Amount
36740	Transm Mains- Cathodic Protection	on \$	1,616	\$	0
36920	M&R Sta-Public Imp	\$	17,960	\$	36,488
37620	Mains- Public Improv	\$	105,087	\$	71,255
37630	Mains- Leakage	\$	59,235	\$	116,313
37640	Mains- Cathodic Protection	\$	43,836	\$	23,360
38030	Services- Leakage	\$	75,392	\$	107,512
38300	House Regs	\$	0	\$	372
	Total	\$	303,126	\$	355,299

Budget No. Description Danville Operations		Budget Aı	mount	Expenditure Amount		
	•					
36730	Line 133 12" Replacement	\$	339,894	\$	404,455	
36740	Trans Mains-Cathodic Protection	\$	1,616	\$	116	
36920	M&R Sta-Public Imp	\$	5,681	\$	6,463	
37620	Mains- Public (Hwy) Relocat	\$	106,286	\$	325,652	
37630	Mains- Leakage	\$	37,695	\$	31,283	
37640	Mains- Cathodic Protection	\$	30,156	\$	12,294	
38020	Services- Pub Improv	\$	9,208	\$	0	
38030	Services- Leakage	\$	77,413	\$	54,234	
	Total	\$	607,949	\$	834,498	
W	KG Overheads					
39900	Other Tang. Prop	\$	0	\$	274,160	
	Grand Total	\$	3,078,639	\$	2,475,743	

Budget No.

Description

Budget Amount

Expenditure Amount

Budget	No. Description Bud Operating Area	lget A	mount	Expenditu	re Amount
	Owensboro Operations				
33400	Field M&R Station	\$	-	\$	2,122
36740	Mains Cathodic Protection	\$	11,000	\$	4,684
37620	Blanket Mains Public Improvemen	t \$	65,608	\$	28,152
37630	Blanket Mains Leakage	\$	39,255	\$	48,925
37820	US 60 E Relocation	\$	31,736	\$	24,640
38030	Services Leakage	\$	43,000	\$	207,339
	Total	\$	190,599	\$	315,862

Budget	No. Description E	Budget	A	mount	Expenditu	re Amount
	Owensboro Storage & Transmission	n				
35100	Structures & Improvements	\$	5	10,564	\$	11,079
35200	Well Workovers	\$	5	332,770	\$	312,286
35400	Compressor Station Equip	\$	5	6,588	\$	7,033
35600	Purification Equip	\$	Б	5,760	\$	5,631
36720	Spencer Co 4" Relocation	\$	5	135,395	\$	63,425
36740	Mains Cathodic Protection-Trai	ns \$	5	10,873	\$	-
36920	M&R Sta- Public Improvement	\$	\$	12,842	\$	7,424
37620	US 231 Hartford-Beaver Dam 6	6" Re 5	\$	-	\$	9,585
	Total Resp Ct	r S	\$	514,792	\$	416,463
	WKG Measurement Center					
36910	M&R Sta System Impr	9	\$	-	\$	992
38520	Ind M&R Equip Public Improve	: 5	\$	180,150	\$	24,045
	Total	;	\$	180,150	\$	25,037

Budget No.	Description I	Budget	: A ı	mount	Expenditu	re Amount
Wk	G Technical Services					
35500	Measuring & RegulatingStation	า \$	6	126,317	\$	32,520
	Total	\$	6	126,317	\$	32,520
Ма	disonville Operations					
36720	Marion Trans Line Relocate	9	6	_	\$	32
36740	Transm Rectifier & Groundbed	-		30,958	\$	-
37620	Mains- Public (Hwy) Relocation			145,779	\$	58,334
37630	Mains- Leakage	9		91,492	\$	365,287
37640	Mains- Cathodic Protection	9		45,774	\$	39,725
37820	M&R Sta Equipment- Public Im	npr \$	6	-	\$	3,629
37920	City Gate M&R Sta Pub Impr		5	3,000	\$	-
38020	Services-Pub-Impr-SkyLine Dr	٠ \$	5	18,415	\$	-
38030	Services- Leakage	\$	5	114,500	\$	202,346
	Total	\$	\$	449,918	\$	669,353
Pa	ducah Operations					
36720	Transm Mains Public Improv	9	\$	200,000	\$	_
36740	Transm Mains Cathodic Protect	ction S	\$	2,000	\$	-
36920	M&R Sta Public Improvement	:	\$	1,500	\$	767
37620	Mains- Public Improve	5	\$	85,770	\$	10,471
37630	Mains- Leakage	5	\$	67,514	\$	20,460
37640	Mains- Cathodic Protection	5	\$	10,000	\$	25,616
38030	Services- Leakage	;	\$	193,000	\$	32,330
	Total	!	\$	559,784	\$	89,644
Во	wling Green Operations					
36740	Transm Mains- Cathodic Prote	ection :	\$	2,000	\$	_
37620	Mains- Public Improv		\$	85,825		15,553
37630	Mains- Leakage		\$	98,406		150,268
37640	Mains- Cathodic Protection		\$	20,000		16,905
37800	M&R Sta Sys Improv		\$	43,400		90,775
38020	Services- Public Improve		\$	44,909		1,580
38030	Services- Leakage		\$	150,000		270,342

Budget No. Description		Budget A	Amount	Expenditure Amount	
_	Total	\$	444,540	\$	545,423
Da	nville Operations				
36730	Line 133 12" Replacement	\$	175,000	\$	172,438
36740	Trans Mains-Cathodic Protect		4,761	\$	452
39620	M&R Sta- Aiken Rd PS Rebui	ld \$	75,000	\$	-
37620	Mains- Public (Hwy) Relocat	\$	270,403	\$	106,390
37630	Mains- Leakage	\$	169,441	\$	159,417
37640	Mains- Cathodic Protection	\$	25,070	\$	33,190
38030	Services- Leakage	\$	24,000	\$	95,027
	Total	\$	743,675	\$	566,914
W	KG Overheads	\$	196,461	\$	176,032
	Grand Total	\$	3,279,919	\$	2,804,728

Budget No. Description Operating Area		Budget Amount			Expenditure Amount		
Ov	vensboro Operations						
36700	Trans Mains Cathodic Protectio	n .	\$	1,000	\$	-	
36701	TP Mains Steel- Public Reloc		\$	350,020	\$	-	
36900 20	Commonwealth Purchase		\$	8,542	\$	35,498	
37600 40	Mains Cathodic Protection		\$	10,000	\$	24,915	
37601 20	Blanket Mains Public Improvem	ents	\$	282,671	\$	174,069	
37601 30	Blanket Mains Leakage		\$	144,674	\$	175,651	
37800 20	US 60 E Relocation		\$	7,096	\$	6,020	
38000 30	Services Leakage		\$	100,000	\$	187,178	
38200 20	Meter Installations Public Impro	V	\$	1	\$	165,271	
	Total		\$	904,004	\$	768,602	
Ov	vensboro Storage & Transmission	n					
25400.00	Christian C. Laurence		•	ED 400	•	54.000	
35100 02	Structures & Improvements		\$	58,480	\$	54,382	
35200 20	Well Workovers		\$	466,785	\$	254,946	
35400 20	Compressor Station Equip		\$	5,000	\$	9,134	
36701 20	Spencer Co 4" Relocation		\$	172,547	\$	173,221	
36900 20	M&R Sta- Public Improvement		\$	13,511	\$	7,708	
37601 20	US 231 Hartford-Beaver Dam 6	i" Rel	\$	199,895	\$	253,082	
	Total Resp Cti	r	\$	916,218	\$	752,473	
WKG Measurement Center							
35500 20	M&R Equipment		\$	3,600	\$	4,438	
37000	Communication Equip		\$	10,800	\$	10,055	
38500 20	Ind M&R Equip Public Improve		\$	420,380	\$	304,677	
00000 20			•			·	
	Total		\$	434,780	\$	319,170	
Ma	adisonville Operations						
36700 40	Transm Rectifier & Groundbed		\$	46,429	\$	36,094	
37640	Mains - Cathodic Protection		\$	23,407	\$	29,958	
37601 20	Mains - Cathodic Protection Mains - Public (Hwy) Relocation	16	φ \$	360,417	φ \$	29,956 38,594	
37601 20	Mains- Leakage		\$	199,800	\$ \$	458,842	
37602 20	Mains- PE Public (Hwy) Reloca	ation	φ \$	199,000	\$ \$	3,180	
37900 20	City Gate M&R Sta Pub Impr	auon	\$	2,999	φ \$	2,679	
38000 20	Services-Pub-Impr-SkyLine Dr		φ \$	18,415	φ \$	10,584	
30000 20	GOLVICES-I UD-IHIPI-OKYLINE DI		Ψ	10,413	Ф	10,004	

WKG CAPITAL BUDGET PROJECTS FY 1995

Completion	n Percent	age
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Budget No.	Description I	Budget Amount		Expenditure Amount		
38000 30	Services- Leakage	\$;	109,000	\$	280,294
38200 20	Meter Set Replacement	\$;	1	\$	49,858
38500 10	Indust M&R Equip KY 1789 Re	loc \$;	0	\$	19,346
	Total	\$	i	760,468	\$	929,429
Pa	ducah Operations					
36700 40	Transm Mains Cathodic Protec	tion \$;	2,000	\$	-
36900 20	M&R Sta Public Improvement	\$;	26,800	\$	3,429
37600 40	Mains- Cathodic Protection	\$;	20,000	\$	18,179
37601 20	Mains- Public Improve	\$;	190,224	\$	196,978
37601 30	Mains- Leakage	\$;	205,229	\$	222,152
38000 30	Services- Leakage	\$;	45,000	\$	75,890
38200 20	Meter Replacements	\$;	1	\$	28,953
	Total	\$	6	489,254	\$	545,581

Bowling Green Operations

36700 40	Transm Mains- Cathodic Protection	\$ 2,000	\$ -
36701 20	6" TP Line to Elrod Rd	\$ 379,096	\$ 377,094
36701 20	8" TP line to US 31W	\$ 380,859	\$ 390,624
36900 20	M&R Sta US 31W, Elrod Rd	\$ 103,945	\$ 138,830
37600 40	Mains- Cathodic Protection	\$ 21,000	\$ 7,816
37601 20	Mains- Public Improv	\$ 776,867	\$ 435,632
37601 30	Mains- Leakage	\$ 171,830	\$ 285,506
37800	M&R Sta Sys Improv	\$ 5,200	\$ 950
37900 20	City Gate M&R Sta Equip Pub Imp	\$ 15,000	\$ -
38000 20	Services- Public Improve	\$ -	\$ (3,933)
38000 30	Services- Leakage	\$ 85,000	\$ 240,413
38500 10	Ind M&R Equip Sys Improv	\$ 40,000	\$ -
38500 20	Ind M&R Equip Pub Improv	\$ 22,000	\$ 15,854
	Total	\$ 2,002,797	\$ 1,888,786

Danville Operations

36600 20	Structures & Improvements	\$ 1,702	\$ 1,505
36700 40	Trans Mains-Cathodic Protection	\$ 3,000	\$ -

WKG CAPITAL BUDGET PROJECTS FY 1995 Completion Percentage

Budget No.	Description	Budget /	Amount	Expenditu	re Amount
36701 20	Shelbyville Ind Tie-back	\$	273,400	\$	260,005
36701 30	Line 133 12" Replacement	\$	280,748	\$	241,210
36901 20	M&R Sta- Aiken Rd PS Rebuil	d \$	161,197	\$	183,064
37600 40	Mains- Cathodic Protection	\$	40,000	\$	63,966
37601 20	Mains- Public (Hwy) Relocat	\$	275,802	\$	333,935
37601 30	Mains- Leakage	\$	204,179	\$	57,140
37800 20	M&R Sta Equip Sys Improv	\$	7,100	\$	6,684
37900 20	Shelbyville Ind M&R Sta	\$	27,000	\$	30,624
38000 30	Services- Leakage	\$	70,000	\$	67,425
38200 20	Meter Replacements	\$	1	\$	76,672
	Total	\$	1,344,129	\$	1,322,230
Wi	KG Overheads				
39900		\$	0	\$	(598,260)
	Grand Total	\$	6,851,650	\$	5,928,011

WKG CAPITAL BUDGET PROJECTS FY 1996 Completion Percentage

Budget No. Description Budg Operating Area		Budget /	Amount	Actu	al Amount
Ov	vensboro Operations				
36900 20	Mains	\$	8,542	\$	_
37600 40	Mains Cathodic Protection	\$	21,000	\$	41,563
37601 20	Mains - Steel Relocate	\$	11,287	\$	64,289
37601 30	Mains - Steel Leakage	\$	101,221	\$	80,925
37602 20	Mains - Plastic	\$	183,110	\$	-
37602 30	Mains - Plastic Leakage	\$	•	\$	12,621
38000 30	Services Leakage	\$	170,000	\$	234,779
38200 20	Meter Installations Public Imp		30,000	\$	125,760
	Total	\$	525,160	\$	559,938
O	wensboro Storage & Transmiss	ion			
33400	Field Meas & Reg	\$	1,308	\$	1,976
35200 20	Well Workovers	\$	324,614	\$	118,100
35400 98	Compressor Station Equip	\$	7,750	\$	-
35600	Purification Equip	\$	22,800	\$	20,244
36600	Structures & Improv	\$	15,000	\$	10,883
36701 20	TP Mains - Stl Public Improve		1,849,640	\$	600,681
36701 30	TP Mains - Steel Leakage	\$	49,500	\$	6,477
36701 91	Mains - Steel	\$	(24,198)	\$	· -
36900 20	M&R Sta- Public Improvemen		232,500	\$	143,696
37601 20	Mains - Steel Public Improv	\$	6,088	\$	•
	Total Resp C	Ctr \$	2,485,002	\$	902,057
W	KG Measurement Center				
38500 20	Ind M&R Equip Public Improv	e \$	308,825	\$	217,654
	Total	\$	308,825	\$	217,654
M	adisonville Operations				
36700 40	Transm Rectifier & Groundbe	d \$	1,900	\$	-
36701	Mains - Steel	\$	18,001	\$	16,846
36900 20	M & R Station	\$	25,842	\$	12,531
37500	Structures and Improve	\$	-	\$	2,724
37600	Mains - Cathodic Protection	\$	22,100	\$	19,380
37601 20	Mains- Public (Hwy) Relocati		190,986	\$	38,642
37601 30	Mains- Leakage	\$	336,296	\$	213,195

WKG CAPITAL BUDGET PROJECTS FY 1996 Completion Percentage

Budget No.		_	Amount	tual Amount
37602 20	Mains- PE Public Relocations		-	\$ 1,461
37602 30	Mains - Plastic Leakage	\$	25,080	\$ 103,863
38000 20	Services Replace	\$	29,980	\$ -
38000 30	Services- Leakage	\$	192,771	\$ 135,944
38200 20	Meter Set Replacement	\$	19,576	\$ 63,362
	Total	\$	862,532	\$ 607,948
Pa	ducah Operations			
36700 40	Transm Mains Cathodic Protect	ctio \$	500	\$ -
36900 20	M&R Sta Public Improvement	\$	167,803	\$ 54,124
37600 40	Mains- Cathodic Protection	\$	30,000	\$ 10,069
37601 20	Mains- Public Improve	\$	420,200	\$ 72,808
37601 20	Husbands Rd Relocation	\$	212,800	\$ 164,884
37601 20	West Paducah 6" HP Feeder	\$	1,400,000	\$ 793,822
37601 30	Mains- Leakage	\$	149,650	\$ 95,035
37602 20	Mains - Plastic	\$	141,668	\$ 117,389
37602 30	Mains - Plastic Leakage	\$	42,555	\$ 5,333
37800 20	Meas. And Reg. Sta Equip	\$	· -	\$ 5,493
37900 20	City Gate M&R Sta Chk Sta	\$	-	\$ 209
38000 30	Services- Leakage	\$	50,000	\$ 37,001
38000 40	Services	\$	7,000	\$
38200 20	Meter Replacements	\$	29,000	\$ 29,679
	Total	\$	2,651,176	\$ 1,385,846
Вс	owling Green Operations			
36700 40	Transm Mains- Cathodic Prote	ectio \$	2,000	\$ -
36701 20	TP Mains - Stl Public Improv	\$	_	\$ 20,986
36900	Meas and Reg. Station	\$	30,000	\$ 34,743
37600 40	Mains- Cathodic Protection	\$	20,000	\$ 10,978
37601 20	US 68-80 Relocation	\$	77,166	\$ 82,409
37601 30	Mains- Leakage	\$	175,000	\$ 288,954
37602	Mains - Plastic	\$	-	\$ 52,704
37800	M&R Sta Sys Improv	\$	-	\$ 3,166
37900 20	City Gate M&R Sta Equip Pub		14,997	\$ -
38000 30	Services- Leakage	\$	150,000	\$ 135,031
38200 20	Meter Replacements	\$	100,000	\$ 42,743
38200 98	Meter Retirements	\$	-	\$ 12,333
	Total	\$	569,163	\$ 684,047

WKG CAPITAL BUDGET PROJECTS FY 1996 Completion Percentage

Budget No.	Description I	Budget Amount		Ac	Actual Amount		
Da	nville Operations						
36700 40	Trans Mains-Cathodic Protect	tion \$	10,875	\$	7,761		
37601 20	TP Mains - Stl Relocate	\$	-	\$	10,064		
36701 30	12" L-133 Replacement	\$	299,260	\$	249,071		
36900	Meas. And Reg. Sta	\$	1,766	\$	3,098		
37600 40	Mains- Cathodic Protection	\$	25,000	\$	16,782		
37601 20	Mains- Public (Hwy) Relocat	\$	4,700	\$	42,455		
37601 30	Mains- Leakage	\$	75,000	\$	117,886		
37602 30	Mains - Plastic Leakage	\$	-	\$	226,986		
37800 20	Meas & Reg. Sta	\$	25,001	\$	-		
38000 30	Services- Leakage	\$	100,080	\$	76,775		
38200 20	Meter Replacements	\$	51,930	\$	86,091		
	Total	\$	593,612	\$	836,969		
W	KG Overheads						
39900		\$	0	\$	-		
	Grand Total	\$	7,995,470	\$	5,194,458		

WKG CAPITAL BUDGET PROJECTS FY 1997 Completion Percentage

Budget No. Օր	Description E perating Area	Budget	Ar	nount	Expendi	ture Amount
Ov	vensboro Operations					
36700 40	Trans Mains Cathodic Protect	tion §	5	2,594	\$	-
36900 20	Fairview Dr Reg Sta	\$	5	-	\$	1,417
37400 20	Land Mosleyville PS	\$	5	-	\$	3,276
37600 40	Mains Cathodic Protection	\$	6	45,635	\$	17,612
37600 40	Mains CP Retirement	\$	6	176	\$	6
37601 20	Newbolt Rd. 4" HP	9	6	180,004	\$	254,483
37601 30	Blanket Stl Mains Leakage	5	5	76,635	\$	58,413
37602 20	Mains PE Whitesville KY 54 F	Reloc S	5	119,109	\$	220,654
37602 30	Mains PE Leakage	9	5	26,528	\$	23,308
37800 20	M&R Sta Yager Mat'l	5	5	-	\$	6,745
37900 20	Owensboro TB # 5 Reg Sta		\$	131,000	\$	90,618
38000 30	Services Leakage	5	\$	196,500	\$	242,968
38200 20	Meter Installations Replace	9	\$	130,214	\$	138,913
	Total	,	\$	908,395	\$	1,058,414

Budget No. Op	Description I perating Area	Budget A	Amount	Expendit	ure Amount
Ov	wensboro Storage & Transmiss	sion			
35100 20	Structures & Improvements	\$	937	\$	950
35200 20	Well Workovers	\$	678,551	\$	472,419
35200 40	Well Workovers	\$	12,073	\$	9,844
35400 20	Compressor Station Equip	\$	32,750	\$	26,294
35600 20	Purification Equip	\$	6,578	\$	15,384
36600 20	Structures ANR Intertie	\$	28,958	\$	19,721
36700 40	Cathodic Protection	\$	-	\$	4,106
36701 20	Madisonville 8" Loop	\$	949,147	\$	68,706
36701 20	ANR Bon Harb/ Kirkwood Inte	ertie \$	73,796	\$	91,159
36701 30	Madisonville 6" Replacement	t \$	37,860	\$	41,417
36900 20	M&R Sta-ANR Intertie	\$	578,005	\$	211,020
37601 20	Replace Cadiz TB	\$	5,879	\$	1,740
	Total Resp	Ctr \$	2,404,534	\$	962,760

Madisonville Operations

WKG CAPITAL BUDGET PROJECTS FY 1997 Completion Percentage

Budget No.	Description B	Budget	t A	mount	Expendi	ture Amount
36700 40	Transm Cathodic Protection	_	\$	49,009	• \$	19,288
36701 30	TP Mains Leakage		\$		\$	1,170
36900 20	M & R Station Equip Non-Rev		\$	13,310	\$	235
37600 40	Cathodic Protection		\$	24,235	\$	19,493
37601 20	Mains- Public (Hwy) Relocation		\$	252,135	\$	-
37601 30	Mains- Leakage		\$	183,400	\$	171,634
37602 20	Mains- PE Public (Hwy) Reloc		\$	· -	\$	1,594
37602 30	Mains Install PE for Leakage		\$	34,060	\$	71,196
37800 20	M&R Sta Equipment		\$	22,869	\$	28,979
37900 20	City Gate M&R Sta Pub Impr		\$	1,703	\$	1,863
38000 20	Services Relocate		\$	39,274	\$	_
38000 30	Services- Leakage		\$	170,837	\$	94,950
38200 20	Meter Set Replacement		\$	113,001	\$	94,158
			•	,	•	- 1,1-0
	Total		\$	903,833	\$	504,559
Pa	ducah Operations					
36701 20	TP Mains- Relocation		\$	_	\$	22,326
36900 20	M&R Sta		\$	125,734	\$	138,655
37600 40	Cathodic Protection		\$	59,493	\$	19,571
37600 40	C Prot Retirement		\$	30	\$	(890)
37601 20	Mains Relocation (Hwy)		\$	304,743	\$	410,074
37601 30	Mains		\$	83,407	\$	69,890
37602 20	Mains- PE Public (Hwy) Relo		\$	157,746	\$	151,967
37602 30	Mains Install PE for Leakage		\$	20,100	\$	23,196
37900 20	M&R Sta City Gate	• •	\$	1,384	\$	56
38000 30	Services- Leakage		\$	42,051	. \$	98,961
38200 20	Meter, Reg Replacements		\$	84,364	\$	25,552
38500 20	Industrial Measuring		\$	3,930	\$	5,087
38600 20	Other Prop. On Customer's		\$	· -	\$	11,799
	Total		\$	882,982	\$	976,242
Во	wling Green Operations					
36700 40	Transm Mains- Cathodic Prote	ectio	\$	2,000	\$	_
36900 20	M&R Sta		\$	39,333	\$	20,209
37600 40	Mains- Cathodic Protection		\$	15,065	\$	19,962
37601 30	Mains- Leakage		\$	172,744	\$	330,472
37602 20	Mains- PE Public (Hwy) Relo		\$	5,961	\$	4,734
37602 30	Mains Install PE for Leakage		\$	77,830	\$	181,766
38000 30	Services- Leakage		\$	187,330	\$	306,483
38000 30	Services-Retire		\$	50,000	\$	114,458
38200 20	Meter Replacements		\$	97,268	\$	117,750
	Total		\$	647,531	\$	1,095,834

WKG CAPITAL BUDGET PROJECTS FY 1997 Completion Percentage

Budget No. Da	Description E anville Operations	Budget	Α	mount	Expendit	ure Amount
36700 40	Trans Mains-Cathodic Protect	tion \$	5	3,900	\$	-
36701 30	Replace 12" L-133	\$	\$	311,807	\$	7,379
39900 20	Meas. & Reg	\$	\$	71,157	\$	-
37600 40	Mains- Cathodic Protection	\$	\$	32,500	\$	37,383
37601 20	Mains- Public (Hwy) Relocat	\$	\$	12,556	\$	13,075
37601 30	Mains- Leakage	\$	\$	87,508	\$	172,237
37602 20	Mains- PE Public (Hwy) Relo	catio \$	\$	75,878	\$	16,848
37602 30	Mains Install PE for Leakage	. 9	\$	15,000	\$	(65,441)
38000 30	Services- Leakage	\$	\$	93,565	\$	137,369
38000 98	Services- Retirements	\$	\$	33,425	\$	45,574
	Total	9	\$	737,296	\$	364,424
w	KG Overheads					
39900		\$	\$	2,673,677	\$	2,384,377
	Grand Total	\$	\$	9,158,248	\$	7,346,609

WKG CAPITAL BUDGET PROJECTS FY 1998 Completion Percentage

Budget No. O _l	Description E perating Area	Budget A	Amount	Expenditu	re Amount
O	wensboro Operations				
36700	Trans Mains Cathodic Protec	ction \$	1,000	\$	-
36701	TP Mains Steel- Public Relo	c \$	7,650	\$	-
37600 40	Mains Cathodic Protection	\$	33,864	\$	26,661
37601 20	Mains - Stl- Pub Improv	\$	100,500	\$	64,267
37601 30	Mains - Stl - Repl-Leakage	\$	48,600	\$	72,868
37602 20	Mains - Plastic Pub Improv	\$	152,959	\$	82,516
37602 30	Mains - Plastic Leakage	\$	19,200	\$	15,360
37800 20	Meas and Reg. Sta Equipme	ent \$	4,600	\$	5,369
38000 30	Services Leakage	\$	87,000	\$	202,722
38200 20	Meter Installations Public Im	prov \$	75,640	\$	82,883
	Total	\$	531,013	\$	552,646

Budget No. O	Description perating Area	Budget A	mount	Expendite	ure Amount
0	wensboro Storage & Transmi	ssion			
36701 20	Spencer Co 4" Relocation	\$	-	\$	4,877
	Total Resp	Ctr \$	-	\$	4,877
W	/KG Measurement Center				
38500 20	Ind M&R Equip Public Impre	ove \$	-	\$	5,529
	Total	\$	-	\$	10,406
W	/KG Technical Services				
35100	Structures & Improv	\$	3,501	\$	3,072
36900 20	Measuring & Reg Station E		80,210	\$	93,680
37601	Mains - Steel	\$	0	\$	871
38500 20	Industrial Measuring and	\$	280,776	\$	179,290
	Total	\$	364,487	\$	276,913
M	adisonville Operations				
36700 40	Transm Rectifier & Groundl	bed \$	1,092	\$	-

WKG CAPITAL BUDGET PROJECTS FY 1998 Completion Percentage

Budget No.	Description E	Budget	: A i	mount	Expenditu	re Amount
36701 20	TP Mains - Pub Improv	\$	5	-	\$	3,479
36701 30	TP Mains - Steel Leakage	9	5	15,742	\$	3,313
36900 30	M & R Station Equip		\$		\$	1,072
37600 40	Mains - Cathodic Protection		\$	11,012	\$	14,819
37601 20	Mains - Stl- Pub Improv		\$	199,899	\$	79,398
37601 30	Mains - Stl - Repl-Leakage		\$	62,100	\$	39,260
37602 20	Mains - Plastic Pub Improv		\$	5,265	\$	6,458
37602 30	Mains - Plastic Leakage		\$	49,474	\$	14,269
37800 20	M&R Sta Equipment		\$	4,059	\$	4,078
38000 30	Services Leakage		₽ \$	75,345	\$	31,389
38200 20	Meter Set Replacement		₽ \$	48,628	\$	63,372
30200 20	Meter Set Neplacement	•	₽	40,020	Φ	03,372
	Total	9	\$	472,616	\$	260,907
Pa	ducah Operations					
36600	Structures & Improvements	(\$	0	\$	15,868
36700 40	TP Mains - Cathodic Protecti		Ψ \$	500	\$	0
36700 40	TP Mains - Steel Leakage		φ \$			U
36900 20				2,475	\$	2 002
	M&R Sta Public Improvemen	11 3	\$	45.000	\$	2,893
37600 40	Mains- Cathodic Protection	3	\$	15,000	\$	8,211
37601 20	Mains- Public Improve	3	\$	47,390	\$	36,510
37601 30	Mains- Leakage		\$	28,350	\$	1,061
37602 20	Mains - Plastic Pub Improv	3	\$	5,458	\$	11,289
37602 30	Mains - Plastic Leakage		\$	18,000	\$	4,715
38000 30	Services- Leakage	;	\$	33,000	\$	19,910
	Total	:	\$	150,173	\$	100,457
Во	owling Green Operations					
36700 40	Transm Mains- Cathodic Pro	tecti	\$	708	\$	-
36701 30	TP Mains - SteelLeakage	:	\$	9,908	\$	4,505
37600 40	Mains- Cathodic Protection	:	\$	23,647	\$	16,102
37601 20	Mains- Public Improv	:	\$	-	\$	36,957
37601 30	Mains- Leakage	:	\$	123,525	\$	210,403
37602 30	Mains - Plastic Leakage		\$	80,125	\$	127,828
37900 20	City Gate M&R Sta Equip Pu	ıb I	\$	45,554	\$	5,492
38000 30	Services- Leakage		\$	148,718	\$	161,718
38200 20	Meter Replacements		\$	84,280	\$	50,904
	Total		\$	516,465	\$	613,909
Da	anville Operations					
36700 40	Trans Mains-Cathodic Prote	ction	\$	2,250	\$	_
36701 20	Mains - Steel Pub Improv		\$	23,500		-
36900	Measuring & Reg. Sta		\$	8,000		_
00000	dodning & riog. Ota		Ψ	5,000	Ψ	

WKG CAPITAL BUDGET PROJECTS FY 1998

Completion Percentage

Budget No.	Description	Budget A	Amount	Expendit	ure Amount
37600	Mains- Cathodic Protection	\$	24,250	\$	11,925
37601 20	Mains- Public Improve	\$	-	\$	8,574
37601 30	Mains- Leakage	\$	43,200	\$	114,765
37602 20	Mains - Plastic Pub Improv	\$	5,168	\$	17,629
37602 30	Mains - Plastic Leakage	\$	4,800	\$	26,525
37900 20	Harrodsburg M&R Sta Rep	ol \$	-	\$	28,612
38000 30	Services- Leakage	\$	44,400	\$	62,777
38200 20	Meter Replacements	\$	57,146	\$	90,037
	Total	\$	212,714	\$	360,844
w	KG Overheads				
39900		\$	2,897,717	\$	3,860,000
	Grand Tol	al \$	5,145,185	\$	6,040,959

Western Kentucky Gas Company Case No. 99-070

KPSC Data Request #2 Dated August 19, 1999

DR Item 10 a and b Witness: John P. Reddy

Data Request:

- 10. Refer to the response to Item 12 of the Commission's July 16, 1999 Order.
- a. Provide the actual capital ratios for Atmos as of April 30, 1999 and June 30, 1999.
- b. Provide the actual capital ratios for Atmos as of July 31, 1999; August 31, 1999; and September 30, 1999. This information will be due on December 1, 1999.

Response:

a. Atmos' actual capital ratios as of April 30, and June 30, 1999 are as follows.

(\$000)

	April 30, 1999		June 30, 1	999		
	Amount	Percent	Amount	Percent		
Long-term Debt*	\$401,955	44.23%	\$399,607	43.85%		
Short-term Debt	95,143	10.47%	110,228	12.10%		
Shareholders' Equity	411,699	45.30%	401,378	44.05%		
Total	\$908,797	100.00%	\$911,213	100.00%		

^{*}Includes current maturities portion of long-term debt.

b. To be provided December 1, 1999 as requested.

Western Kentucky Gas Company Case No. 99-070 KPSC Data Request #2 Dated August 19, 1999 DR Item 11 a and b Witness: John P. Reddy

Data Request:

- 11. Refer to the response to Item 13 of the Commission's July 16, 1999 Order.
- a. Explain in detail why, if Atmos' objective is to maintain a capital structure comprised of approximately 50 percent equity and 50 percent debt, it is using a 5-year financial plan which results in equity levels significantly above 50% by FY 2002 and FY 2003.
- b. Describe the changes in the assumptions for the 5-year financial plan that would be necessary to yield equity percentages for FY 2002 and FY 2003 that are closer to the stated goal of 50 percent.

Response:

- a. As explained in the response to Data Request 13 a of the Commission's July 16, 1999 Order, a number of significant assumptions are made in preparing the 5-year financial plan. As further explained in that response, the actual financial results in any future period are highly sensitive to the major assumptions underlying the plan. Therefore, it is logical to put more emphasis on the early years of the plan projections and to view the out years as indicative of the trends reflected in the initial years. Any number of factors may combine to change the financial picture in the out years of the 5-year plan. For example, weather patterns, capital spending levels, interest rates, utility acquisitions and other factors may differ significantly from the base financial plan assumptions. For that reason, the Atmos financial plan is updated annually with a rolling five-year forecast. Adjustments will be made along the way to ensure that Atmos' capital structure remains aligned with Atmos' financial objectives, including maintaining the appropriate weighted average cost of capital.
- b. Factors which would keep Atmos' debt/equity ratio closer to the stated goal of 50%/50% include slower than projected growth rates in earnings and free cash flow as a result of lower customer growth, adverse weather patterns, higher than projected capital spending levels, customer acquisitions financed with debt, reduced equity issuances, and similar occurrences.

Western Kentucky Gas Company Case No. 99-070 KPSC Data Request #2 Dated August 19, 1999 DR Item 12

Witness: Becky Buchanan

Data Request:

For each of the items listed below, provide the percentage that Western's operations represent compared to the total regulated Atmos operations. This information is to be provided as of the end of the forecasted period, the base period, and the five previous fiscal years.

- a. Total number of customers
- b. Total number of employees
- c. Total gas throughput in Mcf
- d. Total revenues from gas sales and transportation
- e. Total purchased gas costs
- f. Total other operating and maintenance expenses
- g. Total net operating income
- h. Total net income

Response:

Item	Fcst Pd	Base Pd	FY 98	FY 97	FY 96	FY 95	FY 94
a.	18%	18%	18%	18%	17%	18%	17%
b .	20%	19%	17%	16%	15%	14%	14%
c.	25%	25%	25%	25%	23%	21%	22%
d.	14%	13%	17%	18%	18%	17%	18%
e.	15%	13%	18%	20%	19%	17%	19%
f.	17%	17%	17%	16%	14%	15%	15%
g.	5%	7%	13%	15%	16%	10%	13%
h.	1%	6%	11%	12%	17%	8%	13%

Western Kentucky Gas Company Case No. 99-070

KPSC Data Request #2 Dated August 19, 1999
DR Item 13 a through g
Witness: John P. Reddy

Data Request:

- 13. Refer to the response to Item 14 of the Commission's July 16, 1999 Order.
- a. Concerning Item 14(a), provide Western's definition of "normal weather conditions."
- b. For FY 1999 to date and the previous 10 fiscal years, indicate whether Atmos experienced normal weather conditions.
- c. In how many jurisdictions does an Atmos business unit have in operation a Weather Normalization Adjustment ("WNA") tariff similar to the one proposed in this proceeding? Indicate the percentage of Atmos' total regulated operations impacted by this mechanism. The percentage should be based on total gas sales revenues.
- d. In how many jurisdictions does Atmos plan to propose, within the next two fiscal years, a WNA tariff similar to the one proposed in this proceeding? Indicate the percentage of Atmos' total regulated operations that would be impacted if the proposals were adopted. The percentage should be based on total gas sales revenues.
- e. Indicate the status of the proposed Universal Shelf Offering discussed in the response to Item 14(b).
- f. Concerning the response to Item 14(d), Atmos has completed five major acquisitions within the past 12 years. Explain in detail why it would not be reasonable to have modeled one additional acquisition in the current 5-year financial plan.
- g. Concerning the responses to Items 14(e) and 14(f), it is stated that these items are dependent upon the reasonableness of other assumptions contained in the 5-year financial plan. Does Atmos perform any sensitivity analysis during the development of the 5-year financial plan to evaluate the reasonableness of the assumptions used? If yes, describe the analysis. If no, explain in detail why such an analysis is not performed.

Response:

a. "Normal weather conditions" reflect a long-term average number of heating degree days. A heating degree day, in turn, is equivalent to each degree that the average of the high and the low temperatures for a day is below 65 degrees. The greater the number of heating degree days, the colder the climate. Heating degree days are used

Western Kentucky Gas Company Case No. 99-070

KPSC Data Request #2 Dated August 19, 1999 DR Item 13 a through g

Witness: John P. Reddy

in the natural gas industry to measure the coldness of weather experienced and to compare relative temperatures between one geographic area and another. For Western Kentucky Gas, the long-term average number of degree days in a fiscal year is 4,333.

b. The following table compares annual weather in Atmos' jurisdictions against "normal weather" as a percent of normal degree days.

1999	1998	1997	1996	1995	1994	1993	1992	1991	1990	1989
84%*	95%	98%	101%	93%	97%	102%	92%	90%	94%	96%

^{*}For the nine months ended June 30, 1999.

- c. Atmos' United Cities Gas Company division has a Weather Normalization Adjustment ("WNA") similar to the one proposed in this proceeding in Tennessee and Georgia, applicable to approximately 170,000 customers or approximately 17% of the company's total customers and revenues.
- d. Atmos will consider whether to seek WNA's in additional jurisdictions as a part of normal rate case planning. Atmos' long-term objective is to have WNA's applicable to roughly 50% of consolidated customers and revenues. Specific plans for seeking WNA's in the next two fiscal years have not yet been developed.
- e. At its August meeting, the Atmos Board of Directors authorized management to prepare and file an application for a Universal Shelf Offering. The application is being prepared with a target filing date of September 1999.
- f. It was not reasonable to model an additional acquisition in the current 5-year financial plan because the projections are sensitive to the timing and size of an acquisition which can vary significantly. It is not possible without having a specific acquisition in mind to forecast whether the acquisition will take place in year 1, 2, 3, 4 or year 5 of the plan. Similarly, the size of the acquisition can not be determined in a vacuum it is case specific. For example, the Company's 1995 acquisition of Oceana Heights Gas Company had an acquisition cost of about \$6 million. In contrast, the 1997 acquisition of United Cities Gas Company had an acquisition cost of approximately \$460 million (before merger expenses). Given the impact of these variables, it was not reasonable to include acquisitions in the 5-year plan.
- g. The reasonableness of the assumptions used in the 5-year plan is evaluated against historical occurrences and anticipated future operating conditions. Sensitivity analyses are not typically performed.

Western Kentucky Gas Company Case No. 99-070 KPSC Data Request #2 Dated August 19, 1999 DR Item 14

Witness: John P. Reddy

Data Request:

14. Refer to the response to Item 15 of the Commission's July 16, 1999 Order. For the first nine months of FY 1999 and the five previous fiscal years, provide the base stock capital growth associated with the Employee Stock Ownership Plan, the Direct Stock Purchase Plan, and the UCG Plan. Provide the number of shares issued and the dollar increase in Atmos' equity balances associated with these plans.

Response:

	Shares Issued	Amount (\$000)
Nine Months - FY 1999		
ESOP	52,738	1,448
DSPP	524,494	13,471
UCG Plan	5,550	128
FY 1998		
ESOP	52,473	1,485
DSPP	531,353	14,485
UCG Plan	55,500	1,533
FY 1997		
ESOP	212,327	5,114
DSPP	85,243	1,888
UCG Plan	-	-
FY 1996		
ESOP	161,477	3,642
DSPP	251,224	4,323
UCG Plan	16,900	241
FY 1995		
ESOP	233,789	4,174
DSPP	388,484	5,834
UCG Plan	6,000	83
FY 1994		
ESOP	149,463	2,714
DSPP	449,716	7,203
UCG Plan	3,000	41

Western Kentucky Gas Company Case No. 99-070 SC Data Bagnest #2 Datad August 10

KPSC Data Request #2 Dated August 19, 1999 DR Item 15. a.

Witness: Marks

Data Request:

- 15. Refer to the response to Item 20(a) of the Commission's July 16, 1999 Order.
- a. For each of the recommendations listed in the Executive Summary of the "Process and Impact Evaluation of Western Kentucky Gas WKG CARES Program" ("Evaluation Report"), describe in detail the actions taken by the Western collaborative in response to those recommendations.

Response:

Process Evaluation

1. Secure Permission From The Collaborative To Prudently Fund Paid Promotional Efforts.

Approved up to \$5000 for direct mail promotion.

2. WKG Should Hold More Frequent Status Meetings With CAP Agencies.

Approved quarterly meetings with the Program Manager and the W/X Directors.

3. Develop An Educational Supplement That Can Be Uniformly Distributed By All CAPs To All Incoming Participants That Heightens The Conservation Message While Clearly Conveying The Role Played By WKG.

Approved up to \$1000 to develop and print an educational/safety brochure for the agencies to leave with the client after the home has been weatherized through the Program.

4. Contact The Remaining CAP Agencies That Share A Portion Of WKG's Territory And Solicit Their Participation In The Program.

Approved the addition of Multipurpose, Central Kentucky and Lake Cumberland agencies to the WKG CARES Program effective immediately.

5. In The Interest Of Standardization, WKG Should Execute A Written Contract With Each Of The Participating CAP Agencies.

Approved the implementation of a contract between WKG and each agency for the weatherization work to be performed under the Program.

Impact Evaluation

1. The WKG CARES Program Should Continue In Its Current Structure With No Modifications In Measure Specification.

Approved continuation of WKG CARES Program measures.

2. The Impact Evaluation Could Not Determine Whether There Is Any Degradation In The Savings Level Through Time. An Evaluation of Year-One Participants Following Year-Three Of The Program Would Determine If Such Savings Degradation Has Occurred.

Postponed approving evaluation of Program for degradation determination at end of three-year Program period.

Western Kentucky Gas Company Case No. 99-070 KPSC Data Request #2 Dated August 19, 1999 DR Item 15. b. Witness: Marks

Data Request:

- 15. Refer to the response to Item 20(a) of the Commission's July 16, 1999 Order.
- b. On page 2 of the Evaluation Report, it is recommended that written contracts be designed and implemented with each of the participating community assistance program ("CAP") agencies. Explain in detail why written contracts were not already part of the process when WKG CARES was first established.

Response:

From the beginning of the design of the WKG CARES Program, it was the intent to minimize the administrative burden on the CAP agencies so that the maximum amount of funding could be applied to the need of the low income client. The "piggy back" approach of approved funding for the weatherization measures already done by the CAP agencies under DOE guidelines was selected to accomplish the minimum administrative burden.

Western Kentucky Gas Company Case No. 99-070 KPSC Data Request #2 Dated August 19, 1999 DR Item 15. c. Witness: Marks

Data Request:

- 15. Refer to the response to Item 20(a) of the Commission's July 16, 1999 Order.
- c. On page 5 of the Evaluation Report, it is stated that net per -participant energy savings had been estimated as 16.8 Mcf. It is also stated that the savings related to participants in the program covered the period from November 1996 to September 1997. Explain in detail why the actual level of achieved savings was not calculated or presented in the report. In addition, explain why a full year of program activity was not utilized.

Response:

There are two separate questions. The response to the first question is that impact evaluations of DSM programs do not measure actual savings in the literal sense. One could postulate that the simple difference between pre and post energy consumption is the "actual savings". However, while such a raw change score may be an interesting statistic, it can in no way be deemed "actual savings" since it fails to control for non-programmatic influences on energy consumption. Such influences are controlled for in this evaluation protocol through the use of an industry standard weather-normalization technique (PRISM) and a non-participant control group. The inclusion or exclusion of such a "raw change" statistic is not germane to the identification of the program's true impact on the energy consumption of the program participants.

The billing analysis technique employed for this impact evaluation is far superior to engineering analysis-based impact evaluation, which is the other common technique used in the industry. Furthermore, AEG's billing analysis methodology paid special attention to sample size, data quality and weather effects, all of which served to enhance the accuracy of the results. It is clear that while the impact evaluation results are an estimate, they are very accurate based upon the techniques and methodology employed.

The response to the second question is that as noted on page 47 of the Evaluation Report, customers who participated in the program after September 1997 were omitted from the study due to insufficient post-treatment billing history. Please recall that this evaluation was initiated in March 1998. It would have been necessary to exclude November 1997 data for the October 1997 participants in order to ensure a firm demarcation between pre and post-treatment consumption. The exclusion of November readings would then have caused these participants to be screened from the sample due to the lack of 100 winter days (November - March).

Western Kentucky Gas Company Case No. 99-070 KPSC Data Request #2 Dated August 19, 1999 DR Item 15. d. Witness: Marks

Data Request:

- 15. Refer to the response to Item 20(a) of the Commission's July 16, 1999 Order.
- d. On page 12 of the Evaluation Report is a listing of the nine efficiency measures included in the WKG CARES program. Explain why the following programs were included in WKG CARES, even though they failed three of the four standard demand side management ("DSM") cost/benefit screening tests conducted during pre-implementation.
 - (1) Wall insulation.
 - (2) Floor insulation.
 - (3) Water heater replacement/repairs.
 - (4) Duct insulation.
 - (5) Repair/replace furnace.

Response:

In mid-1996, when AEG was hired by the Collaborative, we were instructed to develop a low-income DSM program under some specific guidelines that had been voted upon and agreed to by the Collaborative. These guidelines included (1) full use of the annual budget that was available per year in support of low-income customers who needed assistance, (2) utilization of CAP agencies to support implementation, (3) the use of the TRC Test (Societal Test) as the benchmark for measure (not program as stated in the above question) selection. As is clearly articulated throughout the Pre-Implementation Benefit/Cost Screening Results document (see pages 8 - 10), the TRC Test was used for final measure selection. While AEG was asked to provide expert advise on how best to utilize the various benefit/cost tests, it was our understanding that there were already guidelines in place based upon prior policy and regulatory rulings from the Kentucky Commission. I recall in a number of Collaborative meetings during the program design phase, that the Collaborative discussed inviting a representative from the Commission to participate in the final development of the program. I further recall that a member of the Collaborative briefed Kentucky Commission staff on our final program design recommendations and how they were arrived at. Finally, I recall being told that while the Commission did not wish to participate in the Collaborative meetings, they did not have any problems with the WKG CARES program design. I bring these issues up because Data Request 15d appears to be questioning the program design when it was my understanding that the Commission was supportive of the program design in 1996 when it was finalized.

Western Kentucky Gas Company Case No. 99-070 KPSC Data Request #2 Dated August 19, 1999 DR Item 15. e. Witness: Adams

Data Request:

- 15. Refer to the response to Item 20(a) of the Commission's July 16, 1999 Order.
- e. Explain in detail how Western recorded the funding of WKG CARES during the Evaluation Report review period.

Response:

See response to KSPC Data Request #2 Dated August 19, 1999, DR Item 17.a., 17.b. and 17.c.

Western Kentucky Gas Company Case No. 99-070 KPSC Data Request #2 Dated August 19, 1999 DR Item 15. f. Witness: Marks

Data Request:

- 15. Refer to the response to Item 20(a) of the Commission's July 16, 1999 Order.
- f. On page 17 of the Evaluation Report it is stated that at least 10 percent of all homes that have been weatherized using WKG CARES funds are inspected. Explain why only 10 percent are inspected and how the level of inspections was determined.

Response:

The level of 10% was recommended by AEG based upon our experience in DSM program implementation and evaluation. We have evaluated well over 400 DSM programs and participated in the implementation of over 30. A 10% figure provides a large enough sample to capture problems related to direct installation (such as poor workmanship or leaving a home messy). It should also be recognized that the CAP agencies inspected 100% of their projects, so the WKG inspections were an additional check, not the primary one. We also knew that we would be conducting a telephone survey which could also uncover problems with the measure installations should any exist.

Western Kentucky Gas Company Case No. 99-070 KPSC Data Request #2 Dated August 19, 1999 DR Item 15. g. Witness: Marks

Data Request:

- 15. Refer to the response to Item 20(a) of the Commission's July 16, 1999 Order.
- g. Refer to page 30 of the Evaluation Report. A review of the information presented in Table IV.1 shows that while Bluegrass Community Action Agency had approximately 3 percent of the total WKG CARES participants, it represented 10 percent of the home surveys. The Pennyrile Allied Community Action Agency had approximately 33 percent of the WKG CARES participants, but represented only 24 percent of the home surveys. Explain in detail why these situations occurred and why the home survey sampling approach did not result in a distribution of the home survey that more closely matched the actual participant distributions by CAP agency.

Response:

In order to achieve comparable statistical accuracy, it was necessary to have more sample points (as a percentage of the population) for Bluegrass Community Action Agency than for the other four CAP agencies. A review of sample design theory in most statistic textbooks will confirm this statement. Another way to look at this is as follows: A properly designed sample of 300 can provide comparable statistical accuracy for populations of 1,000 and 10,000, even though these samples represent 30% and 3% of their respective populations.

Western Kentucky Gas Company Case No. 99-070 KPSC Data Request #2 Dated August 19, 1999 DR Item 15. h. Witness: Marks

Data Request:

- 15. Refer to the response to Item 20(a) of the Commission's July 16, 1999 Order.
- h. If the home surveys were conducted in conjunction with an evaluation of WKG CARES, explain why it was necessary to include questions concerning customer satisfaction with Western as the customer's service provider.

Response:

3

As stated in the Response to 15f, the on-site inspections performed by WKG staff were primarily to check installations for quality of workmanship that is best determined through on-site inspections. The surveys conducted as part of the evaluation were telephone surveys, which were primarily designed to ascertain customer opinions on other issues, as discussed in the Evaluation Report. Customer satisfaction was one of the items evaluated as part of the telephone survey.

Western Kentucky Gas Company Case No. 99-070 KPSC Data Request #2 Dated August 19, 1999 DR Item 15. i. Witness: Marks

Data Request:

- 15. Refer to the response to Item 20(a) of the Commission's July 16, 1999 Order.
 - i. On page 38 of the Evaluation Report is a continuation of bullet point observations from the home surveys. Reconcile the last two bullet points on page 38 with the results shown on Table IV.4 on page 33.

Response:

The bullet points on page 38 are consistent with Table IV.4. Table IV.4 was specifically related to how the participant had learned about the program. If they did not learn about the program through their prior participation in a weatherization program, then they would not have responded as such.

Western Kentucky Gas Company Case No. 99-070 KPSC Data Request #2 Dated August 19, 1999 DR Item 15. j. Witness: Marks

Data Request:

- 15. Refer to the response to Item 20(a) of the Commission's July 16, 1999 Order.
- j. Beginning on page 42 of the Evaluation Report is a discussion of how a statistical billing analysis was used to estimate the change in annual Mcf consumption for a sample of program participants and non-participants. Explain in detail why the evaluation did not compare actual customer usage prior to, during, and after the program review period to determine the actual energy savings.

Response:

Actual customer billing data (usage) was used in the billing analysis. The data was run through the PRISM software as discussed in detail in the Evaluation Report. As indicated in the response to DR 15c, "actual energy savings" as defined in DR 15j, fails to account for non-programmatic influences on program participant's energy consumption.

Note that the objective of an impact evaluation is to determine the difference between (a) the level of energy actually consumed in the post-treatment period and (b) the level of energy that would have been consumed in the absence of the program. This process is complex since we do not have access to an outcome which did not occur (b). The process of weather-normalization is employed to solve this dilemma by estimating the level of consumption in the pre and post-treatment periods under normal weather conditions. The difference between the two "normalized annual consumption" values is considered to be the true savings, absent non-weather influences on consumption or, more specifically, non-weather influences on the change in consumption. The latter influences (e.g., changes in economic conditions, changes in the general attitude towards energy conservation) can be controlled for by the use of a non-participant control group as has been done in this evaluation framework. To illustrate, if program participants experienced a reduction of 5% in energy consumption and non-participants experienced the same 5% reduction, the net savings for program participants could be considered to be 0%.

Western Kentucky Gas Company Case No. 99-070 KPSC Data Request #2 Dated August 19, 1999 DR Item 15. k. Witness: Marks

Data Request:

- 15. Refer to the response to Item 20(a) of the Commission's July 16, 1999 Order.
- k. Explain how the data used in the Princeton Scorekeeping Methodology ("PRISM") was weather normalized. Specifically state what time period was used to determine "normal" weather.

Response:

PRISM uses an iterative estimation procedure to estimate the following regression model to billing period data for each customer in the analysis sample (for both the pre and post-treatment analysis periods):

$$F_i = \alpha + BH_i(t) + \varepsilon_i$$

where F_i is the average daily consumption for customer i within each billing period, calculated by dividing billing energy use by the number of days in the billing period. The intercept term (α) measures average daily non-weather sensitive usage. B is an estimate of the heating slope, and H(t) measures heating degree-days per day, based on the reference temperature that optimizes the fit of the model to the data.

The model is then used to simulate each customer's consumption for each analysis period by inputting actual degree-day data into the estimated equation.

Normal weather was based on actual weather for the 1980-1991 time-frame as recommended in the PRISM software manual.

Western Kentucky Gas Company Case No. 99-070 KPSC Data Request #2 Dated August 19, 1999 DR Item 15. l. Witness: Marks

Data Request:

- 15. Refer to the response to Item 20(a) of the Commission's July 16, 1999 Order.
- 1. Western has stated in its data responses that the winters of 1996 and 1997 were generally normal. If that is the case, explain why the data for the PRISM analysis had to be weather normalized.

Response:

The fact that 1996 and 1997 may have had generally normal weather is irrelevant to the PRISM methodology. PRISM will weather normalize the data as much or as little as necessary. If 1996 and 1997 were near normal, then the weather normalization adjustment should be relatively small. We do not modify the methodology to fit the data. To do so introduces bias into the evaluation processes and makes it impossible to rely upon the results.

Western Kentucky Gas Company Case No. 99-070 KPSC Data Request #2 Dated August 19, 1999 DR Item 15. m. Witness: Marks

Data Request:

- 15. Refer to the response to Item 20(a) of the Commission's July 16, 1999 Order.
- m. Provide a schedule showing the <u>actual</u> Mcf usage for each of the 114 participants and the 112 non-participants for these time periods: November 1995 through October 1996; November 1996 through September 1997; and April 1997 through March 1998. Reference numbers should be used rather than customer names. The data should not be weather normalized.

Response:

Attached are two Excel 97 files containing the billing histories for both participants and non-participants. This is the only form in which we have the requested information. There may be more than 114 participants and 112 non-participants because this data is not filtered for weather or any other of the criteria discussed in the Evaluation Report.

DR(P)T KPSC #2-15.M.

HouseID		Jse	Billdays	billcode
1	02/20/1998	124	30	
1	01/21/1998	115	29	
1	12/23/1997	251	62	
1	10/22/1997	34	30	
1	09/22/1997	22	33	
1	08/20/1997	21	29	
1	07/22/1997	22	32	•
1	06/20/1997	21	29	
1	05/22/1997	43	31	
1	04/21/1997	60	28	
1	03/24/1997	83	32	
1	02/20/1997	129	30	
1	01/21/1997	230	33	
1	12/19/1996	172	28	
1	11/21/1996	170	30	•
1	10/22/1996	65	32	
1	09/20/1996	18	31	
1	08/20/1996	14	29	
1	07/22/1996	5	17	1
1	06/21/1996	0	31	6
1	05/21/1996	0	29	6
1	04/22/1996	0	5	6
1	04/17/1996	98	27	2
1	03/21/1996	158	29	
1	02/21/1996	263	29	
1	01/23/1996	270	34	
1	12/20/1995	148	30	
1	11/20/1995	131	31	
3	02/10/1998	111	29	
3	01/12/1998	113	33	
3	12/10/1997	94	30	
3	11/10/1997	50	31	
3	10/10/1997	13	30	•
3	09/10/1997	10	30	
3	08/11/1997	10	31	
3	07/11/1997	11	30	
3	06/11/1997	20	30	
3	05/12/1997	46	31	
3	04/11/1997	73	32	
3	03/10/1997	84	28	
3	02/10/1997	166	31	
3	01/10/1997	120	31	
3	12/10/1996	146	32	
3	11/08/1996	45	29	
3	10/10/1996	16	29	
3	09/11/1996	13	33	
3	08/09/1996	10	29	
3	07/11/1996	11	30	
3	06/11/1996	20	32	
3	05/10/1996	36	30	

3	04/10/1996	108	33
3	03/08/1996	125	28
3	02/09/1996	217	29
3	01/11/1996	180	31
3	12/11/1995	153	32
3	11/09/1995		
		78	28
6	02/13/1998	186	30
6	01/14/1998	180	35
6	12/10/1997	173	30
6	11/10/1997	90	28 1
6	10/13/1997	3	5 2
6	10/08/1997	22	28
6	09/10/1997	20	28
6	08/13/1997	26	35
6	07/09/1997	22	29
6	06/10/1997	24	29
6	05/12/1997	68	33
6	04/09/1997	84	29
6	03/11/1997	114	28
6	02/11/1997	187	29
6	01/13/1997	178	34
6	12/10/1996	144	28
6	11/12/1996	98	33
6	10/10/1996	19	30
6	09/10/1996	12	27
6	08/14/1996	16	34
6	07/11/1996	16	30
6	06/11/1996	22	32
6	05/10/1996	50	29
6	04/11/1996	149	30
6	03/12/1996	162	28
6	02/13/1996	241	29
6	01/15/1996	250	33
6	12/13/1995	186	29
6	11/14/1995	111	29
7	02/25/1998	129	29
7	01/27/1998	124	28
7	12/30/1997	115	29
7			
	12/01/1997	102	32
7	10/30/1997	39	28
7	10/02/1997	13	36
7	08/27/1997	9	27
7	07/31/1997	9	31
7	06/30/1997	12	31
7	05/30/1997	36	30
7	04/30/1997	82	30
7	03/31/1997	111	33
7	02/26/1997	126	28
7	01/29/1997	173	30
7	12/30/1996	189	35
7	11/25/1996	129	28
•	11/20/1990	123	20

_		.=	
7	10/28/1996	15	32
7	09/26/1996	56	29
7	08/28/1996	24	29
7	07/30/1996	28	32
7	06/28/1996	26	30
7	05/29/1996	39	30
7	04/29/1996	107	34
7	03/26/1996	179	28
7	02/27/1996	175	28
7	01/30/1996	196	33
7	12/28/1995	154	29
7	11/29/1995	123	30
8	02/23/1998	90	31
8	01/23/1998	90	31
8	12/23/1997	77	28
8	11/25/1997	67	27
8	10/29/1997	26	34
8	09/25/1997	17	30
8	08/26/1997	18	32
8	07/25/1997	18	29
8	06/26/1997	19	30
8	05/27/1997	31	33
8	04/24/1997	43	28
8	03/27/1997	61	31
8	03/21/1997	88	28
8	02/24/1997	101	32
8	12/26/1996	130	31
8	11/25/1996	78	28
8	10/28/1996	78 49	34
8	09/24/1996	16	32
8		16	28
	08/23/1996	19	31
8	07/26/1996 06/25/1996		28
8		18 38	26 34
8	05/28/1996	30 73	33
8	04/24/1996	• =	25
8	03/22/1996	98 453	
8	02/26/1996	153 468	32
8	01/25/1996	168	35
8	12/21/1995	100	24
8	11/27/1995	107	32
9	02/11/1998	174	29
9	01/13/1998	187	34
9	12/10/1997	180	33
9	11/07/1997	95	30
9	10/08/1997	7	29
9	09/09/1997	7	32
9	08/08/1997	7	29
9	07/10/1997	10	30
9	06/10/1997	32 75	32
9	05/09/1997	75 400	29
9	04/10/1997	108	30

9	03/11/1997	139	29
9	02/10/1997	187	28
9	01/13/1997	208	34
9	12/10/1996	211	33
9	11/07/1996	90	30
9	10/08/1996	16	29
9	09/09/1996	13	32
9	08/08/1996	5	29
9	07/10/1996	13	29
9	06/11/1996	26	33
9	05/09/1996	77	29
9	04/10/1996	179	30
9	03/11/1996	180	27
9	02/13/1996	248	29
9	01/15/1996	261	34
9	12/12/1995	255	34
9	11/08/1995	57	28
10	01/30/1998	64	30
10	12/31/1997	77	30
10	12/01/1997	60	32
10	10/30/1997	27	30
10	09/30/1997	9	32
10	08/29/1997	1	3
10	07/31/1997	0	30 6
10	07/01/1997	0	20 6
10	06/11/1997	1	9 2
10	06/02/1997	28	32
10	05/01/1997	62	29
10	04/02/1997	73	34
10	02/27/1997	79	28
10	01/30/1997	123	30
10	12/31/1996	112	34
10	11/27/1996	89	28
10	10/30/1996	36	29
10	10/01/1996	14	32
10	08/30/1996	4	30
10	07/31/1996	4	30
10	07/01/1996	4	32
10	05/30/1996	4	29
10	05/01/1996	57	33
10	03/29/1996	134	30
10	02/28/1996	126	29
10	01/30/1996	150	28
10	01/02/1996	135	33
10	11/30/1995	73	30
10	10/31/1995	0	28 6
11	02/20/1998	166	29
11	01/22/1998	172	31
11	12/22/1997	172	32
11	11/20/1997	148	29
11	10/22/1997	26	30

11	09/22/1997	12	32
11	08/21/1997	10	29
11	07/23/1997	11	30
11	06/23/1997	13	32
11	05/22/1997	39	29
11	04/23/1997	94	33
11	03/21/1997	119	29
11	02/20/1997	187	29
11	01/22/1997	237	33
	12/20/1996	220	30
11	11/20/1996	220 15	
11			28
11	10/23/1996	21	30
11	09/23/1996	13	32
11	08/22/1996	14	30
11	07/23/1996	20	32
11	06/21/1996	20	30
11	05/22/1996	58	30
11	04/22/1996	183	28
11	03/25/1996	173	33 3
11	02/21/1996	273	29
11	01/23/1996	295	33
11	12/21/1995	215	30
11	11/21/1995	166	28
12	02/10/1998	208	29
12	01/12/1998	201	33
12	12/10/1997	171	30
12	11/10/1997	94	31
12	10/10/1997	29	30
12	09/10/1997	29	30
12	08/11/1997	34	31
12	07/11/1997	25	30
12	06/11/1997	28	30
12	05/12/1997	66	31
12	04/11/1997	101	32
12	03/10/1997	117	28
12	02/10/1997	257	31
12	01/10/1997	176	31
12	12/10/1996	169	32
12	11/08/1996	76	29
12	10/10/1996	19	29
12	09/11/1996	15	33
12	08/09/1996	20	29
12	07/11/1996	30	30
12	06/11/1996	46	32
12	05/10/1996	89	30
12	04/10/1996	17 4	33
12	03/08/1996	189	28
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98	09/06/1996	30	25
98	08/07/1996	28	24
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101	01/22/1996	34	220
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75	03/11/1998	28	75
75	02/11/1998	29	92
75	01/13/1998	34	124
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75	03/12/1997	29	74
75	02/11/1997	32	155
75	01/10/1997	30	105
75	12/11/1996	30	74
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17	03/20/1997	29	64
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21	01/22/1998	31	154
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21	03/21/1997	29	29
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21	12/20/1996	30	139
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21	03/25/1996	33	119 3
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21	11/21/1995	28	118
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18	12/20/1996	30	191
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18	07/23/1996	32	35

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18	11/21/1995	28	128
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12	05/07/1997	29	125
12	04/08/1997	34	1 5
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12	04/04/1996	30	191
12	03/05/1996	28	156
12	02/06/1996	29	245
12	01/08/1996	33	242
12	12/06/1995	30	165
12	11/06/1995	28	85
7	03/02/1998	31	125
7	01/30/1998	30	122
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7	02/28/1996	29	122
7	01/30/1996	28	138
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7	10/31/1995	28	37
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19	03/21/1997	29	121
19	02/20/1997	29	183
19	01/22/1997	33	223
19	12/20/1996	30	172
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19	02/21/1996	29	206
19	01/23/1996	33	224
19	12/21/1995	30	169
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26	03/04/1998	29	71
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26	03/01/1996	28	69
26	02/02/1996	29 29	135
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26	11/02/1995	28	23
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29	02/04/1997	29	92
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23	09/04/1997	30	15
23	08/05/1997	29	14
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23	04/07/1997	34	118
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23	02/04/1997	29	239
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23	08/05/1996	31	13
23	07/05/1996	30	10
23	06/05/1996	30	14
23	05/06/1996	33	73

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23	02/05/1996	31	239
23	01/05/1996	31	244
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23	11/03/1995	28	72
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27	10/03/1997	30	16
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27	06/04/1997	30	23
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27	01/03/1997	31	90
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27	08/02/1996	30	8
27	07/03/1996	29	9
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27	04/02/1996	32	87
27	03/01/1996	28	93
27	02/02/1996	29	158
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22	05/06/1997	29	
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22	03/04/1997	28	147
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22	01/06/1997	33	167
22	12/04/1996	30	141

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24	12/04/1997	30	51
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24	01/06/1997	33	60
24	12/04/1996	30	52
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90	10/07/1996	32	36
90	09/05/1996	31	21
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90	07/08/1996	33	30
90	06/05/1996	33	42
90	05/03/1996	25	88
90	04/08/1996	33	237
90	03/06/1996	28	195
90	02/07/1996	29	301
90	01/09/1996	33	303
90	12/07/1995	29	187
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35	12/23/1997	33	88
35	11/20/1997	29	62
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აა 35		29 35	119
აი 35		30	65
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30	06/30/1997	28	22
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30	02/04/1997	28	327
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45	11/02/1995	28	36 75
31	03/04/1998	28	75 85
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31	01/08/1996	33	110
31	12/06/1995	33	86
31	11/03/1995	29	37
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53 53	03/11/1997 02/10/1997	29 22	139
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53	03/11/1996	31	231
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53	12/11/1995	32	214
53	11/09/1995	29	95
54	03/10/1998	28	83
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88	04/16/1997	30	59
88	03/17/1997	32	90
88	02/13/1997	29	134
88	01/15/1997	33	152
88	12/13/1996	29	103
88	11/14/1996	29	66
88	10/16/1996	30	28 1
88	09/16/1996	32	0 6
88	08/15/1996	24	0 6
88	07/22/1996	5	0 2
88	07/17/1996	30	4 5
88	06/17/1996	32	7
88	05/16/1996	31	25
88	04/15/1996	32	84
88	03/14/1996	27	95
88	02/16/1996	29	156
88	01/18/1996	31	153
88	12/18/1995	31	109
88	11/17/1995	30	81
85	03/03/1998	29	41 47
85	02/02/1998	31 27	47 50
85	01/02/1998	37 27	53 28
85 85	11/26/1997	27	28
85 85	10/30/1997	30	12
85 85	09/30/1997	32 30	7 8
85 85	08/29/1997	29 31	
85 85	07/31/1997 06/30/1997	31 32	9 10
85 ee		32	
85 85	05/29/1997 05/01/1997	28 30	9 15
85	04/01/1997	30 29	22
85	03/03/1997	29 31	46
J	JOI JOI 1991	J 1	70

85	01/31/1997	29	75
85	01/02/1997	30	54
85	12/03/1996	33	53
85	10/31/1996	29	10
85	10/02/1996	29	10
85	09/03/1996	32	10
85	08/02/1996	31	10
85	07/02/1996	32	11
85	05/31/1996	29	9
85	05/02/1996	30	32
85	04/02/1996	29	62
85	03/04/1996	28	65
85	02/05/1996	33	113
85	01/03/1996	30	82
85	12/04/1995	32	74
85	11/02/1995	29	18
84	03/02/1998	33	100
84	01/28/1998	28	109
84	12/31/1997	36	131
84	11/25/1997	29	92
84	10/27/1997	31	37
84	09/26/1997	30	17
84	08/27/1997	28	17
84	07/30/1997	34	21
84	06/26/1997	29	20
84	05/28/1997	29	33
84	04/29/1997	29	68
84	03/31/1997	31	85
84	02/28/1997	29	112
84	01/30/1997	30	149
84	12/31/1996	29	102
84	12/02/1996	33	101
84	10/30/1996	30	38
84	09/30/1996	32	20
84	08/29/1996	29	19
84	07/31/1996	30	19
84	07/01/1996	32	21
84	05/30/1996	30	22
84	04/30/1996	33	64
84	03/28/1996	28	101
84	02/29/1996	28	106
84	02/01/1996	30	141
84	01/02/1996	32	123
84	12/01/1995	30	86
84	11/01/1995	29	29
40	02/25/1998	28	145
40	01/28/1998	28	134
40	12/31/1997	30 31	188
40 40	12/01/1997	31 20	152 76
40	10/31/1997 10/02/1997	29 34	41
ŦΨ	10/02/100/	34	→ 1

40	08/29/1997	14	10 1
40	08/12/1997	11	9 2
40	08/01/1997	31	29
40	07/01/1997	29	43
40	06/02/1997	32	78
40	05/01/1997	30	106
40	04/01/1997	33	134
40	02/27/1997	28	138
40	01/30/1997	28	185
40	01/02/1997	31	154
40	12/02/1996	32	148
40	10/31/1996	30	75
40	10/01/1996	33	35
40	08/29/1996	29	13
40	07/31/1996	29	10
40	07/02/1996	33	24
40	05/30/1996	30	37
40	04/30/1996	32	91
40	03/29/1996	29	142
40	02/29/1996	30	171
40	01/30/1996	28	166
40	01/02/1996	33	168
40	11/30/1995	29	128
40	11/01/1995	29	60
36	02/26/1998	29	38
36	01/28/1998	29	39
36	12/30/1997	35	49
36	11/25/1997	29	39
36	10/27/1997	32	16
36	09/25/1997	29	0
36	08/27/1997	30	0
36	07/28/1997	33	0
36	06/25/1997	28	20
36	05/28/1997	29	24
36	04/29/1997	29	13
36	03/31/1997	32	25
36	02/27/1997	28	33
36	01/30/1997	28 26	46 43
36	01/02/1997	36 29	43 31
36 36	11/27/1996 10/29/1996	29 32	31 18
36	09/27/1996	30	5
36	08/28/1996	29	6
36	07/30/1996	32	6
36	06/28/1996	29	5
36	05/30/1996	30	9
36	04/30/1996	32	20
36	03/29/1996	29	36
36	02/29/1996	31	44
36	01/29/1996	31	47
36	12/29/1995	30	42

36	11/29/1995	33	42
100	04/02/1996	15	30
87	10/21/1996	5	-1
89	10/01/1996	15	-1
39	10/21/1997	22	-1
40	08/15/1997	3	-1
100	05/28/1996	13	-1
111	12/06/1996	15	-1
58	08/25/1997	7	-1
64	10/24/1996	21	-1
68	10/03/1996	24	-1
4	10/04/1996	23	-1

Western Kentucky Gas Company Case No. 99-070 KPSC Data Request #2 Dated August 19, 1999 DR Item 15. n. Witness: Marks

Data Request:

- 15. Refer to the response to Item 20(a) of the Commission's July 16, 1999 Order.
- n. Define the phrase "naturally-occurring reduction in consumption" as it is used on page 55 of the Evaluation Report. Also, explain in detail why such an adjustment was needed in the development of the net energy savings.

Response:

"Naturally-occurring reduction in consumption" refers to the changes in consumption due to non-programmatic and non-weather influences. This reduction could be attributed to changes in economic conditions as well as changes in general attitudes towards energy conservation. The inclusion of a control group is standard procedure in a quasi-experimental design and is necessary, again, to control for non-programmatic and non-weather influences on the change in energy consumption. Note that such a control group adjustment could have potentially indicated a "naturally-occurring" increase in consumption.

Western Kentucky Gas Company Case No. 99-070 KPSC Data Request #2 Dated August 19, 1999 DR Item 15. o. Witness: Marks

Data Request:

- 15. Refer to the response to Item 20(a) of the Commission's July 16, 1999 Order.
- o. Explain what the phrase "environmental damage associated with the consumption of natural gas" means as it is used on page 55 of the Evaluation Report.

Response:

The concept that energy consumption has an impact on the environment is a common and accepted fact. How much that impact is and how to define it is a topic which is widely debated. For the purposes of the analysis, we have assumed that natural gas, as with any other energy fuel (e.g., coal, nuclear and oil), has a impact on the environment when it is consumed. Whether that impact is related to how the fuel is extracted from its source and/or the emissions that it produced when it is burned, is a question better answered by environmental experts.

Western Kentucky Gas Company Case No. 99-070 KPSC Data Request #2 Dated August 19, 1999 DR Item 15. p. Witness: Marks

Data Request:

- 15. Refer to the response to Item 20(a) of the Commission's July 16, 1999 Order.
- p. Explain why an environmental damage factor for natural gas obtained from the Minnesota Department of Public Service was included in the cost/benefit testing analysis. Include with the explanation a discussion of why a factor based on Minnesota's experience is applicable to Kentucky.

Response:

We attempted to obtain an environmental externality factor for Kentucky and were told by representatives of the Commission that they were not aware of any such measurement. The Minnesota DPS factor was based upon Environmental Protection Agency data, which is national in scope. Furthermore, it was from a regulatory agency, which was considered an objective source. Finally, it was used to provide a "proxy" for the relative change in the TRC Test, and was not relied upon for any of the conclusions reached in the Report. Its important to note that the conclusions reached in the Evaluation Report were the same with or without environmental externalities. That is, the Societal Test showed greater benefits than costs with or without environmental externalities (see page 56 in the Evaluation Report).

Western Kentucky Gas Company Case No. 99-070 KPSC Data Request #2 Dated August 19, 1999 DR Item 15. q. Witness: Marks

Data Request:

- 15. Refer to the response to Item 20(a) of the Commission's July 16, 1999 Order.
- $\ q.\$ Provide the material referenced in Appendix A Bill Stuffer of the Evaluation Report.

Response:

A copy is attached.

AUTOMATIC PAYMENT PLAN

An easy and efficient way to pay your gas bills

With WKG's Automatic Payment Plan you may never have to write another check to pay your gas bill. This plan lets you authorize the transfer of funds automatically from either your checking or savings account.

Just think about it. No checks to write, no trips to the post office to get stamps, no trips to the local WKG office to pay your bill in person, or no more worries about

paying your gas bill on time when you travel. Isn't that an easy and efficient way to pay your gas bill?

We will continue to send you a copy of your gas bill, but it will indicate "Receipt Only - Automatic Bank Payment." The amount deducted from your account will be shown on your monthly statement from your financial institution.

It's easy to get on the Automatic Payment Plan. Contact your local WKG office about an Automatic Payment Plan authorization form, fill it out, attach a voided check and send it with your next gas bill payment or if you are in the area, stop by the office and complete the form while you're there. WKG will do the rest.

If you are on the WKG Budget
Billing Plan, consider using the
Automatic Payment Plan in conjunction with your monthly Budget
Billing amount. This is an excellent
way to help you balance your budget each month.



WKG has formed a cost-sharing partnership with five community action agencies called CARES (Community Action Residential Energy Service). CARES, a pilot program, is designed to conserve energy and lower utility bills for low income customers in WKG's service area.

The energy conservation measures covered by CARES include installing attic, floor and wall insulation, sealing unnecessary air leaks, and furnace and water heater repair or replacement. To qualify for the CARES program, applicants must meet the Community Action Agency guidelines for income and home evaluation. Also, CARES will work hand-in-hand with the agency's weatherization program.

The five participating community action agencies in WKG's service area are:
Audubon Area Community Services,
Bluegrass Community Action Agency,
Community Action of Southern Kentucky,
Pennyrile Allied Community Services and

Western Kentucky Allied Services.

To find out if you qualify for this pilot program, contact the community action agency that provides ser-

vice in your area.



Western Kentucky Gas Company Case No. 99-070 KPSC Data Request #2 Dated August 19, 1999 DR Item 16 Witness: Marks

Data Request:

Order. The request asked why actual customer savings were not developed as part of the impact evaluation. The testimony cited in the response states that "net per-participant energy savings has been estimated" (emphasis added), while pages 45 through 48 of the Evaluation Report contain references to "estimated reads were combined with subsequent actual reads," "normalized annual consumption estimates were developed for each of the program participants," and "net energy savings estimates were developed." While the analysis may have started with actual consumption data, the Evaluation Report makes it clear that the reported customer savings were estimated. Provide the information originally requested.

Response:

The response given previously to Data Request 20c was based upon an interpretation that "actual customer savings" was referring to customers that actually participated in the program. It is clear from this question that this was not the intent of that question.

Please refer to the response to Data Request 15c for the response to this question.

Western Kentucky Gas Company Case No. 99-070 KPSC Data Request #2 Dated August 19, 1999 DR Item 17

Witness: Betty Adams

Data Request:

- 17. Refer to the response to Item 27 of the Commission's July 16, 1999 Order. The response indicates that Western expensed all DSM pilot costs. However, the account numbers listed for the schedule of pilot program costs are all miscellaneous deferred debit accounts.
 - a. Indicate the account number(s) used to show these expenses on Western's income statement.
 - b. Provide a sample accounting entry made to Western's books to record a DSM pilot program cost.
 - c. Explain in detail why, if the DSM pilot costs were expensed, the accounts identified in this response are miscellaneous deferred debit accounts.

Response:

- a. The general ledger account used to book the DSM expense is 910007590.
- b. The following accrual entry is made monthly:

The following entries are made for actual expenditures for monthly DSM costs:

1860 70699 xxx 2320 00000(A/P) xxx 2320 90310 xxx 1860 70699 xxx

c. Due to the nature of these expenses, most work being completed in the summer months, the estimated annual spending is amortized over the 12 month period to level expense by month. The accrual entry is made to reflect this estimation. The actuals are accumulated in a separate account and total expense is trued up at fiscal year end.

Western Kentucky Gas Company Case No. 99-070 KPSC Data Request #2 Dated August 19, 1999 DR Item 18

Witness: David H. Doggette

Data Request:

18. Refer to the response to Item 28 of the Commission's July 16, 1999 Order. Provide the same information as was supplied in this response for the capital projects for fiscal years 1989 through 1993 ("FY89-FY93 Period").

Response:

See attached schedules entitled "WKG CAPITAL BUDGET PROJECTS" for each of the fiscal years from 1990 through 1993, pages 1 to 22. Fiscal year 1989 is not available because WKG was not on the Atmos budget and accounting system at that time.

WKG CAPITAL BUDGET PROJECTS Completion Percentage

FY 1990

Budget	No. Description But Operating Area	ıdge	get Amount Expenditure Amount		Expenditure %	
	WKG Company Office					
	Total	\$	-	\$	-	#DIV/0!
	Owensboro Operations					
33400	Field M&R Station	\$	-	\$	(4,087)	#DIV/0!
35200	Wells	\$	-	\$	197	#DIV/0!
36720	Mains-Public Improvement	\$	-	\$	24,036	#DIV/0!
36900	Measuring & Regulating Sta Equip	\$	45,000	\$	-	0.0
37610	Blanket Mains System Improvements	\$	100,000	\$	118,886	118.9
37630	Blanket Mains Leakage	\$	75,000	\$	57,987	77.3
37640	Mains Cathodic Protection	\$	18,000	\$	14,132	78.5
37650	Mains - Public Works	\$	28,000	\$	3,121	11.1
37800	Measuring & Regulating Sta Equip Ge	\$	40,000	\$	20,218	50.5
37900	Meas & Reg Sta Equip City Gate	\$	-	\$	2,843	#DIV/0!
38000	Services	\$	-	\$	692,587	#DIV/0!
38010	Services System Improvement	\$	99,400	\$	78,791	79.3
38020	Services-Public Improvement	\$	24,940	\$	34,886	139.9
38500	Industrial Meas & Reg Sta Equip	\$	63,750	\$	51,112	80.2
38700	Other Equipment	\$	10,475	\$	913	8.7
39000	Structures and Improvement	\$	900	\$	-	. 0.0
39110	Office Furniture	\$	2,225	\$	1,712	77.0
39210	Transportation Equip-Vehicles	\$	240,500	\$	215,169	89.5
39400	Tools, Shop & Garage Equipment	\$	3,400	\$	2,499	73.5
39710	Communication Equip-Telephones	\$	9,045	\$	2,049	22.7
39720	Communication Equip-Radios	\$	5,400	\$	9,055	167.7
39900	Other Tangible Property	\$		\$	26,014	#DIV/0!
39985	Mainframe Hardware	\$	3,135	\$	3,135	100.0
39987	PC Software	\$	300	\$	-	0.0
	Total	\$	769,470	\$	1,355,254	176.1

O/Doggette/Rate Case 99/KPSC DR 2/ DR-2-18 Sched.xls

Budget No. Description Operating Area		Budget A	mount	ount Expenditure Amount		Expenditure %
W	KG Measurement Center					
36900	Meas & Reg Sta Equip	\$	-	\$	16,028	#DIV/0!
37900	Meas & Reg Sta Equip City Gate	\$	-	\$	20,644	#DIV/0!
38100	Meters	\$	500,000	\$	452,429	90.5
38300	House Regs	\$	200,000	\$	81,562	40.8
38700	Other Equipment	\$	7,100	\$	12,098	170.4
39000	Structures and Imp	\$		\$	2,670	#DIV/0!
39110	Office Furniture	\$	900	\$	-	0.0
39210	Transportation Equip-Vehicles	\$	131,300	\$	30,437	23.2
39400	Tools, Shop and Garage Equip	\$	25,000	\$	3,801	15.2
39600	Power Operated Equip	\$	3,900	\$	-	0.0
39710	Communication Equip-Telephone	es \$	7,965	\$	-	0.0
39985	Mainframe Hardware	\$	4,335	\$	4,335	100.0
	Total	\$	880.500	\$	624.003	70.9

DR2 18 Page 3 of 22

WKG Technical Services

33400	Field Measuring & RegulatingStation	\$ -	\$	353	#DIV/0!
36700	Mains	\$ -	\$	57,827	#DIV/0!
36900	Measuring & Regulating Sta Equip	\$ -	\$	32,924	#DIV/0!
37100	Other Equipment	\$ 56,000	\$, ·	0.0
38700	Other Equipment	\$ 10,500	\$	-	0.0
39000	Structures and Imp	\$ -	Ψ	5288.75	#REF!
39100	Office Furniture and Equipment	\$ _	\$	59,384	#DIV/0!
39110	Office Furniture	\$ 7,700	\$	8,281	107.5
39120	Office Machines	\$ 20,065	\$	14,884	74.2
	Transportation Equip - Vehicles	\$ 462,800	φ \$	403,600	87.2
39210 39400	• • •		φ \$	659	
	Tools, Shop and Garage Equip	\$ 5,500			12.0
39600	Power Operated Equipment	\$ 42,900	\$	26,016	60.6
39710	Communication Equipment-Tele	\$ 89,235	\$	92,053	103.2
39720	Communication Equipment-Radios	\$ 10,125	\$		0.0
39800	Miscellaneous Equipment	\$ 3,564	\$	3,276	91.9
39985	Mainframe Hardware	\$ 14,040	\$	50,571	360.2
39986	PC Hardware	\$ 18,810	\$	10,080	53.6
39987	PC Software	\$ 1,902	\$	2,353	123.7
	Total	\$ 743,141	\$	767,547	103.3
Ma	adisonville Operations				
	·				
35200	Wells	\$ _	\$	5,583	#DIV/0!
35600	Purification Equipment	\$ _	\$	9,811	#DIV/0!
36740	Mains - Cathodic Protection	\$ 30,000	\$	19,615	65.4
36750	Mains - Public Works	\$ 43,000	\$	-	0.0 Deferred
37610	Mains- System Improvements	\$ 176,500	\$	226,842	128.5
37620	Mains- Public Improvement	\$ 20,500	\$	26,128	127.5
37630	Mains- Leakage	\$ 97,500	\$	18,714	19.2
37640	Mains- Cathodic Protection	\$, <u>-</u>	\$	5,207	#DIV/0!
37800	M&R Sta Equipment Gen	\$ 30,350	\$	13,426	44.2
37900	M&R Sta Equip City Gate	\$ 26,000	\$	16,722	64.3
38010	Services- Sys Imp	\$ 188,740	\$	99,342	52.6
38020	Services-Public Improvement	\$ 50,310	\$	28,809	57.3
38500	Industrial M&R Sta Equip	\$ 97,500	\$	58,975	60.5
38700	Other Equipment	\$ 11,400	\$	-	0.0
39000	Structures and Improvement	\$ 11,400	\$	9,040	#DIV/0!
39110	Office Furniture	\$ 1,750	\$	761	43.5
39120	Office Machines	1,730			
	Transportation Equip-Vehicles	\$	\$ •	126	93.8
39210 39400	• • • •	\$ 362,700 10.575	\$	326,434	90.0
	Tools, Shop & Garage Equip	\$ 10,575	\$	15,003	141.9
39600	Power Operated Equip	\$ 44.445	\$	3,715	#DIV/0!
39710	Communication Equip-Telephones	\$ 14,445	\$	12,141	84.1
39985	Mainframe Hardware	\$ 6,270	\$	6,270	100.0
	Total	\$ 1,167,674	\$	902,665	77.3

Paducah Operations

36720	Mains Public Improv	\$	_	\$	106,764	#DIV/0!	
36730	Mains- Leakage	\$	_	\$	8,766	#DIV/0!	
36900	Meas & Reg Sta Equip	\$	12,000	\$	5,883	49.0	
37610	Mains- System Improvement	\$	250,000	\$	229,455	91.8	
37630	Mains- Leakage	\$	75,000	\$	1,719	2.3	
37640	Mains- Cathodic Protection	\$	15,000	\$	1,278	8.5	
37800	Meas & Reg Sta Equip Gen	\$	10,000	\$	9,827	98.3	
37900	Meas & Reg Sta Equip City Gate	\$	26,000	\$	9,156	35.2	
38010	Services- Sys Imp	\$	192,250	\$	192,698	100.2	
38020	Services- Public Imp	\$	52,990	\$	26,224	49.5	
38500	Ind Meas & Reg Sta Equip	\$	69,400	\$	28,368	40.9	
38700	Other Equipment	\$	4,500	\$		0.0	
39000	Structures and Imp	\$.,	\$	1,314	#DIV/0!	
39110	Office Furniture	\$	1,850	\$	1,414	76.4	
39120	Office Machines	\$	939	\$	865	92.1	
39210	Transportation Equip-Vehicles	\$	270,400	\$	221,354	81.9	
39400	Tools, Shop and Garage Equip	\$	3,370	\$	18,571	551.1	
39600	Power Operated Equip	\$	58,900	\$	_	0.0 Defe	rred
39710	Communication Equip-Telephones	\$	3,375	\$	2,660	78.8	
00		•	-,	,	,		
	Total	\$	1,045,974	\$	866,317	82.8	
Во	owling Green Operations						
36720	Mains- Public Improv	\$	_	\$	4,223	#DIV/0!	
36740	Mains- Cathodic Protection	\$	-	\$	10,728	#DIV/0!	
37610	Mains System Improv	\$	237,500	\$	251,222	105.8	
37630	Mains- Leakage	\$	76,000	\$	78,674	103.5	
37640	Mains- Cathodic Protection	\$	30,000	\$	15,006	50.0	
37650	Mains- Public Works	\$	230,800	\$	141,898	61.5	
37670	Mains- Other/Miscellaneous	\$	-	\$	3,983	#DIV/0!	
37800	Meas & Reg Sta Equip Gen	\$	10,000	\$	64,732	647.3	
38010	Services- Sys Imp	\$	186,900	\$	160,446	85.8	
38020	Services- Public Improve	\$	64,900	\$	50,489	77.8	
38200	Meter Installations	\$ \$	-	\$	2,370	#DIV/0!	
38300	House Regs		-	\$	784	#DIV/0!	
38500	Ind Meas & Reg Sta Equip	\$	75,000	\$	33,244	44.3	
38700	Other Equipment	\$	7,950	\$	906	11.4	
39000	Structures and Improvement	\$	18,000	\$	-	0.0	
39110	Office Furniture	\$	1,700	\$	472	27.7	
39120	Office Machines	\$	268	\$	251	93.8	
39210	Transportation Equip-Vehicles	\$	262,600	\$	208,550	79.4	
39400	Tools, Shop and Garage Equip	\$	2,725	\$	2,431	89.2	
39600	Power Operated Equip	\$	41,600	\$	40,376	97.1	
39710	Communication Equip-Telephones	\$	9,315	\$	12,235	131.3	
99100	Public Works Reimbursement Gla	\$	(28,800)	\$	-	0.0 Defe	rred
	Total	\$	1,226,458	\$	1,083,020	88.3	

Danville Operations

36730	Mains-Leakage	\$ -	\$ 441,167	#DIV/0!
36750	Mains-Public Works	\$ 392,500	\$ -	0.0 Deferred
36900	Meas and Reg Sta Equip	\$ -	\$ 22,688	#DIV/0!
37610	Mains- Sys Improve	\$ 215,000	\$ 177,800	82.7
37630	Mains- Leakage	\$ 67,900	\$ 70,072	103.2
37640	Mains- Cathodic Protection	\$ 15,000	\$ 7,628	50.9
37650	Mains- Public Works	\$ 100,000	\$ 161,468	161.5
37800	Meas & Reg Sta Equip Gen	\$ 18,200	\$ 1,066	5.9
37900	Meas & Reg Sta Equip City Gate	\$ 2,000	\$ 2,461	123.1
38010	Services- Sys Imp	\$ 117,700	\$ 154,730	131.5
38020	Services- Public Imp	\$ 21,870	\$ 45,109	206.3
38500	Ind Meas & Reg Sta Equip	\$ 71,250	\$ 48,788	68.5
38700	Other Equipment	\$ 4,500	\$ -	0.0
39000	Structures and Imp	\$ 1,000	\$ -	0.0
39110	Office Furniture	\$ 1,150	\$ 459	39.9
39120	Office Machines	\$ 536	\$ 502	93.6
39210	Transportation Equip-Vehicles	\$ 265,200	\$ 239,073	90.1
39400	Tools, Shop and Garage Equip	\$ 12,150	\$ 7,852	64.6
39710	Communication Equip-Telephones	\$ 3,375	\$ -	0.0
	Total	\$ 1,309,331	\$ 1,380,861	105.5
WI	KG Overheads	\$ 196,461	\$ 176,032	89.6
	Grand Total	\$ 7,339,009	\$ 7,155,701	97.5

WKG CAPITAL BUDGET PROJECTS

FY 1991

Completion Percentage

Budget No.	Description E	Budge	et Amount		Expenditure	Amount	Expenditure %
	perating Area						
W	KG Company Office						
38700	Other Equipment	\$	7,5	55	\$	7,869	104.2
39000	Structures	\$	188,6	11	\$	45,519	24.1
39150	Office Furniture	\$	4,9	81	\$	2,622	52.6
39211	Vehicles	\$	17,0	00	\$	19,670	115.7
39400	Tools, Shop Equipment	\$	11,0	50	\$	13,823	125.1
39711	Commun. Equipment-phones	\$	2,5	00	\$	1,037	41.5
39721	Commun. Equipment-Mobile Radi	io \$	21,0	00	\$	15,359	73.1
39900	Oth Tang Prop	\$		0	\$	604,305	#######
39985	Oth Tang Prop-Mainframe Hardwa	ar \$	2,5	60	\$	2,962	115.7
39986	Oth Tang Prop-P.C. Hardware	\$	11,6	44	\$	10,865	93.3
39987	Oth Tang Prop-P.C.Software	\$		10	\$	2,867	109.8
	Total	\$	269,5	11	\$	726,897	269.7
0	wensboro Operations						
33400	Field Measuring & Reg Sta	\$		0	\$	1,760	########
35200	Wells	\$		77	\$	(197)	(34.1)
36710	Mains-Sys Imp	\$		00	\$	32,682	86.0
36720	Mains-Public Imp	\$		0	. \$	2,705	########
36740	TP Mains Cathodic Protection	\$		00	\$	2,751	91.7
36920	M&R Sta-Public Imp	\$			\$	0	0.0
37610	Blanket Mains System Improveme				\$	114,986	44.9
37620	Blanket Mains Public Improvemer				\$	55,787	100.0
37630	Blanket Mains Leakage	\$			\$	12,711	48.1
37640	Mains Cathodic Protection	\$			\$	19,295	102.9
37820	Gen M&R Sta Equip-Public Imp	\$			\$	3,926	107.1
37920	City Gate M&R Sta Equip-Public			42	•	2,726	367.4
38010	Services System Improvement	\$			\$	204,283	129.1
38030	Services Leakage	\$			\$	72,114	102.8
38510	Ind M&R Equip- Sys Impr	\$			\$	38,341	45.7
39000	Structures	\$	4,2		\$	4,342	102.2
39150	Office Furniture	\$	2,8		\$	1,491	52.0
39170	Other Office Equipment	\$	5 2,4		\$	2,412	100.3
39211	Vehicles	\$			\$	143,459	97.6
39400	Tools, Shop Equipment	\$			\$	15,116	90.5
39600	Power Operated Equip	\$			\$	1,785	119.0
39900	Other Tang. Property	\$		0	\$	10,586	########
39985	Mainframe Hardware	\$			\$	49,019	107.3
39986	PC Hardware	\$			\$	805	9.0
39987	Other Tang Property-PC Software				\$	6,405	77.1
98100	Main Ext Forfeitures	\$	•	0	\$	(15,851)	#######
	Total	\$	956,3	99	\$	783,440	81.9

Budget No. Description Budget Amount Expenditure Amount Expenditure %

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Operating Area

Owensboro Storage & Transmission

35200 33400 35400 36910 38700 39211 39400 39600	Well Workovers Field Measuring & Reg Equip Compressor Station Equip M&R Sta-Sys Imp Other Equipment Vehicles Tools Shop Equip Power Operated Equipment	\$ \$ \$ \$ \$ \$ \$ \$	405 6,092 26,000 39,980 1,600 20,000 1,700 43,700	\$ \$ \$ \$ \$ \$ \$ \$ \$	(1) (353) 24,529 31,963 1,809 24,639 1,762 15,887	(0.2) (5.8) 94.3 79.9 113.1 123.2 103.6 36.4	
	Total Resp Ctr	\$	139,477	\$	100,236	71.9	
WKG Measurement Center							
37100 37820 37920 38100 38300 39000 39150 39211 39400	Other Equipment Gen M&R Sta Equipment-Public Im City Gate M&R Sta Equip-Public Im Meters House Regs Structures Office Furniture Vehicles Tools, Shop Equip Total	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$	0 64,071 45,000 1,060,569 283,491 0 3,500 203,000 2,331 1,661,962	****	3,265 50,340 (9,008) 1,349,622 111,149 8,877 2,400 200,342 716 1,717,705	####### 78.6 (20.0) 127.3 39.2 ####### 68.6 98.7 30.7	
WKG Technical Services							
36910 38700 39000 39100 39150 39211 39985 39986 39987	M&R Sta-Sys Imp Other Equipment Structures Office Furniture & Equipment Office Furniture Vehicles Oth Tang Prop-Mainframe Hardwar Oth Tang Prop-P.C. Hardware Oth Tang Prop-P.C. Software	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$	0 0 0 0 0 0 6,000 15,861 8,498	* * * * * * * * *	73 1,324 4,354 1,378 (1) 45,127 5,560 15,922 7,819	######## ######## ######## ######## 92.7 100.4 92.0	
	Total	\$	30,359	\$	81,556	268.6	

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Madisonville Operations

36720	Mains-Public Imp	\$ 0	\$ 616	#######
36740	Transm Rectifier & Groundbed	\$ 3,467	\$ 4,505	129.9
37520	Structures-Public Imp	\$ 4,600	\$ 5,108	111.0
37610	Mains- System Improvements	\$ 341,212	\$ 229,689	67.3
37620	Mains- Public (Hwy) Relocations	\$ 41,440	\$ 17,806	43.0
37630	Mains- Leakage	\$ 84,004	\$ 14,446	17.2
37640	Mains- Cathodic Protection	\$ 30,000	\$ 8,214	27.4
37820	Gen M&R Sta Equip-Public Imp	\$ 0	\$ 2,432	#######
37920	City Gate M&R Sta Equip-Public Im	\$ 18,975	\$ 5,276	27.8
38010	Services- New	\$ 292,011	\$ 230,819	79.0
38030	Services- Leakage	\$ 114,154	\$ 51,980	45.5
38510	M&R Sta- Sys Impr	\$ 59,218	\$ 19,759	33.4
38520	Ind M&R Equip-Public Imp	\$ 13,403	\$ 0	0.0
38700	Other Equipment	\$ 2,100	\$ 2,636	125.5
39000	Structures	\$ 13,800	\$ 12,781	92.6
39150	Office Furniture	\$ 7,795	\$ 1,492	19.1
39160	Office Machines	\$ 11,080	\$ 12,115	109.3
39170	Other Office Equipment	\$ 2,895	\$ 2,520	87.0
39400	Tools, Shop Equip	\$ 26,519	\$ 22,929	86.5
39600	Power Operated Equip	\$ 87,500	\$ 88,278	100.9
39711	Communications Equip-Telephones	\$ 0	\$ 623	#######
39721	Communication Equip- Mobile Radi	\$ 0	\$ 2,710	#######
39985	Mainframe Hardware	\$ 2,800	\$ 2,595	92.7
98100	Main Ext Forfeiture	\$ 0	\$ (49,585)	########
	Total	\$ 1,156,973	\$ 689,746	59.6
Pa	aducah Operations			
36710	Mains-Sys Imp	\$ 0	\$ 6,530	######
36720	Transm Mains Public Improv	\$ 17,876	\$ 115,931	648.5
36730	Mains-Leakage	\$ 1,178	\$ 8,164	693.0
36910	M&R Sta Sys Improvement	\$ 81,500	\$ 3,633	4.5
36920	M&R Sta-Public Imp	\$ 300	\$ 2,370	789.9
37610	Mains- System Improve	\$ 439,689	\$ 252,902	57.5
37620	Mains- Public Improve	\$ 4,912	\$ 15,568	316.9
37630	Mains- Leakage	\$ 46,053	\$ 8,019	17.4
37640	Mains- Cathodic Protection	\$ 27,500	\$ 10,135	36.9
37800	M&R Sta Equip Gen	\$ 0	\$ 5,568	#######
37820	Gen M&R Sta Equip-Public Imp	\$ 5,360	\$ 8,033	149.9
37900	M&R Sta Equip City Gate	\$ 0	\$ 84	########
37920	City Gate M&R Sta Equip-Public Im	\$ 30,568	\$ 20,739	67.8
38010	Services- New	\$ 266,085	\$ 332,962	125.1
38030	Services- Leakage	\$ 127,234	\$ 55,160	43.4
38510	Ind M&R Equip- Sys Impr	\$ 72,226	\$ 84,758	117.4
39000	Structures	\$ 125,050	\$ 87,939	70.3
39150	Office Furniture	\$ 400	\$ 1,150	287.5
39160	Office Machines	\$ 10,340	\$ 11,699	113.1
39170	Other Office Equip	\$ 2,895	\$ 2,797	96.6
39211	Vehicles	\$ 54,000	\$ 57,555	106.6
39400	Tools, Shop Equip	\$ 15,900	\$ 8,433	53.0
39985	Mainframe Hardware	\$ 2,400	\$ 2,224	92.7
98100	Main Extension Forfeiture	\$ -	\$ (44,648)	#DIV/0!
	Total	\$ 1,331,466	\$ 1,057,703	79.4

Bowling Green Operations

36720	Mains-Public Imp	\$ 0	\$ 1,040	#######
36740	Transm Mains- Cathodic Protection	\$ 13,385	\$ (47)	(0.3)
36920	M&R Sta Sys Public Improv	\$ 27,500	\$ 0	0.0
37610	Mains System Improv	\$ 513,133	\$ 349,706	68.2
37620	Mains- Public Improv	\$ 141,183	\$ 180,289	127.7
37630	Mains- Leakage	\$ 61,467	\$ 88,515	144.0
37640	Mains- Cathodic Protection	\$ 50,144	\$ 15,914	31.7
37820	Gen M&R Sta Equip-Public Imp	\$ 715	\$ 65	9.1
37920	City Gate M&R Sta Equip-Public Im	\$ 7,030	\$ 4,043	57.5
38010	Services- New	\$ 261,992	\$ 269,389	102.8
38030	Services- Leakage	\$ 104,641	\$ 51,320	49.0
38300	House Regs	\$ 0	\$ 180	#######
38510	Ind M&R Equip Sys Improv	\$ 73,577	\$ 86,689	117.8
38700	Other Equipment	\$ 1,900	\$ 2,773	145.9
39150	Office Furniture	\$ 3,488	\$ 1,393	39.9
39160	Office Machines	\$ 11,080	\$ 12,115	109.3
39170	Other Office Equipment	\$ 2,895	\$ 2,480	85.7
39211	Vehicles	\$ 73,000	\$ 71,887	98.5
39400	Tools, Shop Equip	\$ 12,350	\$ 11,915	96.5
39800	Misc Equip	\$ 0	\$ 338	########
39900	Other Tang Property	\$ 0	\$ 111	######################################
39985	Mainframe Hardware	\$ 2,800	\$ 2,595	92.7
98100	Main Extension Forfeiture	\$ 0	\$ (53,805)	#########
	Total	\$ 1,362,280	\$ 1,098,905	80.7

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Danville Operations

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36730	Line 133 12" Replacement	\$ 306,725	\$ 66,133	21.6
36740	Trans Mains-Cathodic Prot	\$ 2,500	\$ 1,814	72.6
36900	M&R Sta Equip	\$ 0	\$ 17	########
36920	M&R Sta-Public Imp	\$ 10,000	\$ 29	0.3
37610	Mains- Sys Improve	\$ 643,467	\$ 239,305	37.2
37620	Mains- Public (Hwy) Relocat	\$ 135,420	\$ 157,501	116.3
37630	Mains- Leakage	\$ 40,916	\$ 17,969	43.9
37640	Mains- Cathodic Protection	\$ 30,796	\$ 18,150	58.9
37820	Gen M&R Sta Equip-Public Imp	\$ 934	\$ (1)	(0.1)
37910	City Gate M&R Sta Equip Sys Impro	\$ 18,000	\$ 10,563	58.7
38010	Services- New	\$ 180,802	\$ 283,125	156.6
38030	Services- Leakage	\$ 57,076	\$ 108,060	189.3
38510	Ind M&R Equip- Sys Improv	\$ 59,278	\$ 90,184	152.1
38700	Other Equipment	\$ 7,300	\$ 8,521	116.7
39000	Structures	\$ 1,800	\$ 1,963	109.1
39150	Office Furniture- Danville	\$ 2,485	\$ 620	25.0
39160	Office Machines	\$ 9,600	\$ 11,320	117.9
39170	Other Office Equipment	\$ 2,895	\$ 2,480	85.7
39211	Vehicles	\$ 107,000	\$ 117,755	110.1
39400	Tools, Shop Equip	\$ 22,898	\$ 22,310	97.4
39600	Power Op Equip	\$ 44,000	\$ 45,239	102.8
39711	Communication Equip	\$ 0	\$ 5,664	#########
39721	Communication Equip- Mobile Radi	\$ 0	\$ 1,092	#######
39985	Mainframe Hardware	\$ 2,000	\$ 1,853	92.7
98100	Main Ext Forfeiture	\$ 0	\$ (13,048)	######
	Total	\$ 1,685,892	\$ 1,198,619	71.1
W	KG Overheads	\$ 0		-
	Grand Total	\$ 8,594,319	\$ 7,454,806	86.7

WKG CAPITAL BUDGET PROJECTS

FY 1992

Completion Percentage

Budget No. Description Operating Area		Budget Amount		Expendi	ture Amount	Expenditure %
•	KG Company Office					
39009	Improvements-Leased Premises	\$	1,875	\$	0	0.0
39150	Office Furniture	\$	781	\$	0	0.0
39160	Office Machines	\$	0	\$	427	######
39170	Other Office Equipment	\$	8,185	\$	6,755	82.5
39211	Vehicles	\$	62,574	\$	61,634	98.5
39400	Tools, Shop Equipment	\$	2,693	\$	228	8.5
39985	Mainframe Hardware	\$	4,741	\$	22,323	470.8
39986	PC Hardware	\$ \$	12,224	\$	13,274	108.6
39987	PC Software	Ф	3,393	\$	3,068	90.4
	Total	\$	96,466	\$	107,710	111.7
Ov	wensboro Operations					
33400	Measuring & RegulatingStation	\$	0	\$	205	######
36710	Mains-Sys Imp	\$	5,318	\$	13,481	253.5
36720	Mains-Public Imp	\$	294	\$	(4,400)	######
36740	TP Mains Cathodic Protection	\$	11,036		8,352	75.7
36920	M&R Sta-Public Imp	\$	3,290	\$	1,663	50.6
37610	Blanket Mains System Improven		168,859	\$	142,820	84.6
37620	Blanket Mains Public Improveme		139,457	\$	10,405	7.5
37630	Blanket Mains Leakage	\$	97,007	\$	99,812	102.9
37640	Mains Cathodic Protection	\$ \$	30,156	\$ \$	16,886 259,899	56.0 137.9
38010 38030	Services System Improvement Services Leakage	\$ \$	188,481 53,797	Ф \$	259,699 85,186	158.3
38510	Ind M&R Equip- Sys Impr	\$	90,178	φ \$	1,366	1.5
38700	Other Equipment	\$	5,275	\$	5,145	97.5
39000	Structures	\$	15,191	\$	39,368	259.2
39009	Improvements-Leased	\$	0	\$	740	######
39150	Office Furniture	\$	4,281	\$	0	0.0
39211	Vehicles	\$	125,902	\$	129,083	102.5
39221	CNG Equip/Accessories	\$	23,368	\$	0	0.0
39400	Tools, Shop Equipment	\$	25,640	\$	24,806	96.7
39600	Power Operated Equip	\$	17,824	\$	14,027	78.7
39693	Ditcher & Trenchers	\$	53,850	\$	51,616	95.9
39711	Telecomm Equip- Telephones	\$	12,655	\$	12,719	100.5
39985	Mainframe Hardware	\$	431	\$	3,076	713.7
39986	PC Hardware	\$	862	\$	5,308	615.8
39987	PC Software	\$. 0	\$	1,362	######
98100	Main Ext Forfeitures	\$	(110,647)		(15,432)	13.9
99100	Reimbursement- Public Works	\$	(17,125)	\$	0	(0.0)
	Total	\$	945,380	\$	907,493	96.0

Budget No. Description Operating Area		sudget A	mount	Expenditure Amount		Expenditure %
C	Owensboro Storage & Transmission					
33400	Measuring & RegulatingStation	\$	0	\$	0	100.0
35200	Wells	\$	25,407	\$	23,190	91.3
35400	Compressor Station Equip	\$	1,804	\$	2,110	117.0
36720	US 231 Hartford-Beaver Dam 6" R	eloc \$	355,410	\$	0	0.0
37630	Blanket Mains Leakage	\$	16,158	\$	6,202	38.4
38700	Other Equipment	\$	7,486	\$	7,691	102.7
39150	Office Furniture	\$	808	\$	421	52.1
39211	Vehicles	\$	19,386	\$	24,368	125.7
39400	Tools Shop Equip	\$	2,046	\$	2,869	140.2
39600	Power Operated Equipment	\$	38,179	\$	39,194	102.7
99100	Reimbursement- US 231 6"	\$	(195,476)	\$	0	(0.0)
	Total Resp Ctr	\$	245,801	\$	82,854	33.7
V	VKG Measurement Center					
37100	Other Equipment	\$	0	\$	(3,265)	######
37920	City Gate M&R Sta Equip-Public In		39,410	\$	34,498	87.5
38100	Meters	\$	1,512,653	\$	1,836,739	121.4
38300	House Regs	\$	352,253	\$	289,865	82.3
38700	Other Equipment	\$	89,202	\$	56,986	63.9
39004	HVAC		8,918	\$	0	0.0
39211	Vehicles	\$ \$	67,851	\$	65,077	95.9
39400	Tools, Shop Equip	\$	77,375	\$	67,573	87.3
39600	Power Operated Equipment	\$	8,401	\$	6,132	73.0
39711	Communication Equip	\$	5,116	\$	2,263	44.2
	Total	\$	2,161,179	\$	2,355,868	109.0
V	VKG Technical Services		·			
33400	Measuring & RegulatingStation	\$	43,080	\$	0	0.0
35200	Well Workovers	\$	0	\$	42,348	######
35500	Measuring & Regulating Equipmer		0	\$	54,403	######
36910	M&R Sta System Impr	\$	0	\$	152,574	######
37810	Gen. M&R Equip-sys Imp	\$	0	\$	9,894	######
37910	City Gate M&R sta Equip-Sys Imp	\$	0	\$	6,642	######
38700	Other Equipment	\$	83,522	\$	1,664	2.0
39150	Office Furniture	\$	378,512	\$	0	0.0
39211	Vehicles	\$	37,264	\$	17,658	47.4
39985	Mainframe Hardware	\$	5,172	\$	3,523	68.1
39986	PC Hardware	\$	14,405	\$	25,173	174.8
39987	PC Software	\$	19,440	\$	73,753	379.4
	Total	\$	581,395	\$	387,632	66.7

Madisonville Operations

36710	Eddyville 4" Pipeline	\$ 193,322	\$ 1	0.0	Deferred
36710	Bremner 4"	\$ 143,450	\$ 0	0.0	Deferred
36710	Bremner 6"	\$ 209,084	\$ 0	0.0	Cancelled
36720	Marion Trans Line Relocate	\$ 53,850	\$ 0	0.0	
36740	Transm Rectifier & Groundbed	\$ 1,616	\$ 0	0.0	
36910	M&R Sta- Sys Impr	\$ 60,150	\$ 765	1.3	
37610	Mains- System Improvements	\$ 447,100	\$ 330,738	74.0	
37620	Mains- Public (Hwy) Relocations	\$ 49,416	\$ 375,092	759.0	
37630	Mains- Leakage	\$ 70,128	\$ 100,868	143.8	
37640	Mains- Cathodic Protection	\$ 30,156	\$ 25,361	84.1	
38010	Services- New	\$ 233,716	\$ 482,442	206.4	
38030	Services- Leakage	\$ 83,740	\$ 109,190	130.4	
38510	M&R Sta- Sys Impr	\$ 60,187	\$ 7,780	12.9	
38520	Ind M&R Equip-Public Imp	\$ 8,615	\$ 0	0.0	
38700	Other Equipment	\$ 6,839	\$ 7,698	112.6	
38900	Land	\$ 23,694	\$ 0	0.0	
39000	Structures	\$ 22,617	\$ 0	0.0	
39004	HVAC Equip	\$ 4,308	\$ 10,387	241.1	
39009	Improvements-Leased Premises	\$ 21,378	\$ 2,002	9.4	
39150	Office Furniture	\$ 34,751	\$ 5,549	16.0	
39160	Office Machines	\$ 862	\$ 2,794	324.2	
39170	Other Office Equipment	\$ 1,185	\$ 0	0.0	
39211	Vehicles	\$ 188,100	\$ 180,961	96.2	
39300	Stores Equip	\$ 3,985	\$ 0	0.0	
39400	Tools, Shop Equip	\$ 80,561	\$ 59,181	73.5	
39693	Ditchers & Trenchers	\$ 138,718	\$ 139,850	100.8	
39695	Welders - Large	\$ 15,508	\$ 7,174	46.3	
39721	Communication Equip- Mobile Radios	\$ 5,169	\$ 3,595	69.5	
39722	Communication Equip- Fixed Radios	\$ 16,155	\$ 0	0.0	
39800	Misc Equip	\$ 969	\$ 0	0.0	
39985	Mainframe Hardware	\$ 862	\$ 602	69.8	
39986	PC Hardware	\$ 862	\$ 886	102.7	
98100	Main Ext Forfeiture	\$ (191,378)	\$ (10,618)	5.5	
98200	AIC Reimbursement	\$ (46,310)	\$ 0	(0.0))
	Total	\$ 1,973,365	\$ 1,842,296	93.4	

Paducah Operations

36720	Transm Mains Public Improv	\$ 482,496	\$ 0	0.0
36740	Transm Mains Cathodic Protection	\$ 1,616	\$ 0	0.0
36910	M&R Sta Sys Improvement	\$ 15,250	\$ 632	4.1
37610	Mains- System Improve	\$ 309,278	\$ 324,036	104.8
37620	Mains- Public Improve	\$ 366,180	\$ 36,077	9.9
37630	Mains- Leakage	\$ 64,066	\$ 10,017	15.6
37640	Mains- Cathodic Protection	\$ 30,156	\$ 8,739	29.0
37910	City Gate M&R Sta Equip- Sys Impr	\$ 6,032	\$ 1,480	24.5
38010	Services- New	\$ 288,106	\$ 489,266	169.8
38030	Services- Leakage	\$ 134,630	\$ 88,789	66.0
38510	Ind M&R Equip- Sys Impr	\$ 59,690	\$ 0	0.0
38700	Other Equipment	\$ 4,604	\$ 4,519	98.2
39009	Imp-Leased Premises	\$ 7,280	\$ 8,388	115.2
39000	Structures	\$ 13,003	\$ 11,059	85.1
39150	Office Furniture	\$ 6,193	\$ 1,393	22.5
39211	Vehicles	\$ 163,274	\$ 163,267	100.0
39221	Transport Equip Accessories	\$ 16,703	\$ 1,053	6.3
39400	Tools, Shop Equip	\$ 42,115	\$ 27,702	65.8
39600	Power Operated Equip	\$ 8,131	\$ 7,680	94.5
39693	Ditchers & Trenchers	\$ 68,928	\$ 67,861	98.5
39695	Welders - Large	\$ 7,754	\$ 0	0.0
39721	Communication Equip- Mobile Radios	\$ 3,446	\$ 2,396	69.5
39985	Mainframe Hardware	\$ 431	\$ 301	69.8
39986	PC Hardware	\$ 862	\$ 886	102.7
98100	Main Extension Forfeiture	\$ (126,481)	\$ (9,392)	7.4
99100	Pub Works Reimbursement Gla	\$ (745,284)	\$ 0	(0.0)
	Total	\$ 1,228,459	\$ 1,246,150	101.4

Bowling Green Operations

36710	TP Mains-Sys Imp	\$ 205,976	\$ 0	0.0
36740	Transm Mains- Cathodic Protection	\$ 1,616	\$ 0	0.0
36910	M&R Sta Sys Improv-Perkins	\$ 21,002	\$ 0	0.0
36920	M&R Sta-Public Imp	\$ 17,960	\$ 36,488	203.2
37610	Mains System Improv	\$ 331,125	\$ 294,715	89.0
37620	Mains- Public Improv	\$ 105,087	\$ 71,255	67.8
37630	Mains- Leakage	\$ 59,235	\$ 116,313	196.4
37640	Mains- Cathodic Protection	\$ 43,836	\$ 23,360	53.3
38010	Services- New	\$ 288,106	\$ 405,862	140.9
38030	Services- Leakage	\$ 75,392	\$ 107,512	142.6
38300	House Regs	\$ 0	\$ 372	######
38510	Ind M&R Equip Sys Improv	\$ 126,747	\$ 6,125	4.8
38700	Other Equipment	\$ 7,943	\$ 8,659	109.0
39000	Structures	\$ 5,754	\$ 5,898	102.5
39004	HVAC Equip	\$ 7,701	\$ 9,684	125.7
39009	Imp-Leased premises	\$ 0	\$ 580	######
39150	Office Furniture	\$ 9,424	\$ 2,473	26.2
39160	Office Machines	\$ 0	\$ 2,521	######
39170	Other Office Equipment	\$ 270	\$ 254	94.0
39211	Vehicles	\$ 62,897	\$ 64,978	103.3
39221	Transport Equip Accessories	\$ 12,349	\$ 0	0.0
39400	Tools, Shop Equip	\$ 35,140	\$ 28,430	80.9
39694	Backhoe	\$ 62,466	\$ 61,574	98.6
39711	Communication Equipment	\$ 323	\$ 0	0.0
39985	Mainframe Hardware	\$ 862	\$ 301	34.9
39986	PC Hardware	\$ 862	\$ 1,087	126.1
98100	Main Extension Forfeiture	\$ (46,490)	\$ (27,439)	59.0
99100	Public Works Reimbursement	\$ (38,762)	\$ 0	(0.0)
	Total	\$ 1,396,821	\$ 1,221,000	87.4

Danville Operations

36710	TP Mains-sys imp	\$ 25,525	\$ 10,093	39.5
36730	Line 133 12" Replacement	\$ 339,894	\$ 404,455	119.0
36740	Trans Mains-Cathodic Protection	\$ 1,616	\$ 116	7.2
36910	M&R Sta- Aiken Rd PS Heater & Filter	\$ 6,785	\$ 5,828	85.9
36920	M&R Sta-Public Imp	\$ 5,681	\$ 6,463	113.8
37610	Mains- Sys Improve	\$ 254,166	\$ 277,593	109.2
37620	Mains- Public (Hwy) Relocat	\$ 106,286	\$ 325,652	306.4
37630	Mains- Leakage	\$ 37,695	\$ 31,283	83.0
37640	Mains- Cathodic Protection	\$ 30,156	\$ 12,294	40.8
37910	City Gate M&R Sta Equip Sys Improv	\$ 29,704	\$ 28,999	97.6
38010	Services- New	\$ 188,480	\$ 484,894	257.3
38020	Services- Pub Improv	\$ 9,208	\$ 0	0.0
38030	Services- Leakage	\$ 77,413	\$ 54,234	70.1
38510	Ind M&R Equip- Sys Improv	\$ 82,393	\$ (7,680)	(9.3)
38700	Other Equipment	\$ 8,833	\$ 7,145	80.9
38900	Land	\$ 258,480	\$ 0	0.0 Deferred
39000	Structures	\$ 48,583	\$ 0	0.0
39004	Heating & A/C Equip	\$ 10,232	\$ 7,494	73.2
39009	Improv Leased Premises	\$ 1,887	\$ 276	14.6
39150	Office Furniture- Danville	\$ 152,741	\$ 2,331	1.5
39211	Vehicles	\$ 112,979	\$ 105,269	93.2
39400	Tools, Shop Equip	\$ 29,776	\$ 29,092	97.7
39600	Power Op Equip	\$ 2,585	\$ 2,714	105.0
39693	Ditchers & Trenchers	\$ 68,928	\$ 36,405	52.8
39695	Welders - Large	\$ 7,001	\$ 8,170	116.7
39711	Communication Equip	\$ 323	\$ 579	179.3
39721	Communication Equip- Mobile Radios	\$ 2,693	\$ 2,158	80.1
39985	Mainframe Hardware	\$ 2,155	\$ 902	41.9
39986	PC Hardware	\$ 862	\$ 886	102.7
98100	Main Ext Forfeiture	\$ (27,435)	\$ (4,942)	18.0
98200	AIC Reimbursement	\$ (307,062)	\$ `´o´	(0.0)
99100	Public Works Reimbursement	\$ (67,851)	\$ 0	(* * *)
	Total	\$ 1,500,712	\$ 1,832,701	122.1
WK	G Overheads			
39900	Other Tang. Prop	\$ 0	\$ 274,160	######
	Grand Total	\$ 10,129,578	\$ 9,870,231	97.4

WKG CAPITAL BUDGET PROJECTS FY 1993 Completion Percentage

Budget No. Description Operating Area WKG Company Office		Budget Amount		Expenditure Amount		Expenditure %	
39170	Other Office Equipment	\$	-	\$	1,417	#DIV/0!	
39711	Communication Equip	•		\$	9,799	#DIV/0!	
39800	Miscellaneous Equip	\$	19,038		•	0.0	
39986	PC Hardware	\$	322	\$	298	92.5	
	Total	\$	19,360	\$	11,514	59.5	
Ow	vensboro Operations						
36740	Mains Cathodic Protection	\$	2,000	\$	_	0.0	
37610	Blanket Mains System Improvemen		207,384	\$	285,044	137.4	
37620	Blanket Mains Public Improvements		142,511	\$	112,317	78.8	
37630	Blanket Mains Leakage	\$	38,700	\$	26,324	68.0	
37640	Mains Cathodic Protection	\$	20,000	\$	3,031	15.2	
37820	Gen M&R Sta Equip-Public Imp	\$	15,509	\$	-	0.0	
37910	City Gate M&R Sta Eq-Sys Imp	\$	3,123	\$	2,040	65.3	
38010	Services System Improvement	\$	140,000	\$	458,556	327.5	
38030	Services Leakage	\$	110,000	\$	108,202	98.4	
38700	Other Equipment	\$	763	\$	696	91.2	
39000	Structures	\$	1,750	\$		0.0	
39009	Improvements- Leased Premises	\$	26,385	\$	3,727	14.1	
39160	Office Machines	\$	13,787	\$	13,906	100.9	
39211	Vehicles	\$	19,165	\$	42,523	221.9	
39221	Transport. Equip-Acessories	\$	41,168	\$	2,629	6.4	
39400	Tools, Shop Equipment	\$	6,078	\$	6,341	104.3	
39711	Commun Equip-Telephones	\$	511	\$	-	0.0	
39985	Mainframe Hardware	\$	1,800	\$	860	47.8	
39986	PC Hardware	\$	7,297	\$	5,860	80.3	
39987	PC Software	\$	1,574	\$	1,484	94.3	
39988	App Software	\$	60,000	\$	54,751	91.3	
98100	Main Ext Forfeitures	\$	(10,090)	\$	(9,118)	90.4	
99100	Pub Works Reimbursement Gla	\$	(1,367)	\$	-	0.0	
99800	Retirements	\$	12	\$	-	0.0	
	Total	\$	848,060	\$	1,119,171	132.0	

Budget No. O _l	Description perating Area	Budge	t Amount	Exper	nditure Amount	Expenditure %	
Ov	wensboro Storage & Transmission						
33400	Field Meas & Reg Station	\$	8,266	\$	4,232	51.2	
35100	Structures & Improvements	\$	14,750	\$	10,934	74.1	
35200	Well Workovers	\$	159,240	\$	22,467	14.1	
35400	Compressor Station Equip	\$	93,950	\$	55,894	59.5	
36720	Mains Public Improvement	\$	160,694	\$	-	0.0 Deferred	
36730	Mains Leakage	\$	31,968	\$	19,319	60.4	
38700	Other Equipment	\$	1,025	\$	1,928	188.1	
39400	Tools Shop Equip	\$	5,333	\$	4,884	91.6	
39600	Power Operated Equipment	\$	4,700	\$	4,953	105.4	
39985	Mainframe Hardware	\$	425	\$	187	44.0	
98200	AIC Sugar Creek	\$	-	\$	(8,266)	#DIV/0!	
99100	Pub Works Reimbursement Gla	\$	(1)	\$	-	0.0	
99800	Retirements	\$	7	\$	-	0.0	
	Total Resp Ctr	\$	480,357	\$	116,533	24.3	
W	KG Measurement Center						
36910	M&R Sta System Impr	\$	15,875	\$	15,627	98.4	
37810	Gen M&R Sta Equip Sys Impr	\$	10,000	\$	-	0.0	
37820	Gen M&R Sta Equip Public Impr	\$	20,369	\$	4,886	24.0	
38100	Meters	\$	1,924,762	\$	1,766,164	91.8	
38300	House Regs	\$	347,189	\$	354,804	102.2	
39009	Improvements- Leased Premises	\$	31,500	\$	85,757	272.2	
39150	Office Furniture	\$	12,500	\$	-	0.0	
39160	Office Machines	\$	3,052	\$	2,742	89.8	
39211	Vehicles	\$	18,390	\$	46,344	252.0	
39400	Tools, Shop Equip	\$	22,525	\$	22,425	99.6	
99800	Retirements & Salvage	\$	10	\$	-	0.0	
	Total	\$	2,406,172	\$	2,298,748	95.5	
W	KG Technical Services						
35500	Measuring & RegulatingStation	\$	40,897	\$	21,285	52.0	
36910	M & R Sta-Sys Imp	\$	71,426	\$	64,564	90.4	
38700	Other Equipment	\$	77,900	\$	714	0.9	
39150	Office Furniture	\$	533,305	\$	508,302	95.3	
39160	Office Machines	\$	1,720	\$	1,724	100.2	
39211	Vehicles	\$	60,882	\$	60,074	98.7	
39400	Tools, Shop & Garage Equip	\$	325	\$	-	0.0	
39986	PC Hardware	\$	12,248	\$	6,225	50.8	
39987	PC Software	\$	3,084	\$	3,112	100.9	
99800	Retirements & Salvage	\$	5	\$	-	0.0	
	Total	\$	801,792	\$	666,000	83.1	

Madisonville Operations

36710	Mains-Sys Imp	\$ 312,457	\$ 285,878	91.5
36720	Mains-Public Imp	\$ -	\$ 58,886	#DIV/0!
36740	Mains-Cath Pro	\$ 4,000	\$ -	0.0
36910	M&R Sta-Sys Imp	\$ 2,000	\$ 1,800	90.0
37610	Mains- System Improvements	\$ 475,134	\$ 316,514	66.6
37620	Mains- Public (Hwy) Relocations	\$ 14,556	\$ 38,028	261.3
37630	Mains- Leakage	\$ 45,291	\$ 123,499	272.7
37640	Mains- Cathodic Protection	\$ 38,800	\$ 25,660	66.1
37810	M&R Sta Equipment-Sys Imp	\$ 1,790	\$ 1,662	92.8
37820	M&R Sta Equip-Public Impr	\$ -	\$ 18,876	#DIV/0!
37910	City Gate M&R Sta Eq Pub Imp	\$ 12,289	\$ 8,633	70.2
38010	Services-Sys Imp	\$ 240,240	\$ 573,499	238.7
38030	Services- Leakage	\$ 110,000	\$ 109,095	99.2
38510	Ind M&R Equip-Sys Imp	\$ -	\$ 11,055	#DIV/0!
38700	Other Equipment	\$ 2,145	\$ 2,591	120.8
39009	Improvements- Leased Premises	\$ 20,528	\$ 18,208	88.7
39150	Office Furniture	\$ 161,418	\$ 29,024	18.0
39160	Office Machines	\$ 7,340	\$ 8,643	117.8
39170	Other Office Equipment	\$ 1,185	\$ 673	56.8
39211	Vehicles	\$ 166,552	\$ 141,311	84.8
39300	Stores Equipment	\$ 3,983	\$ 4,094	102.8
39400	Tools, Shop Equip	\$ 13,571	\$ 11,762	86.7
39600	Power Operated Equip	\$ 30,000	\$ -	0.0
39693	Ditchers and Trenchers	\$ 104,540	\$ 60,723	58.1
39711	Communication Equip-Tele	\$ 4,428	\$ -	0.0
39721	Comm Equip-Mobile Radios	\$ 1,535	\$ -	0.0
39722	Comm Equip-Fixed Radios	\$ 16,617	\$ 4,767	28.7
39800	Miscellaneous Equipment	\$ 967	\$ 937	96.9
39985	Mainframe Hardware	\$ 918	\$ 374	40.8
39986	PC Hardware	\$ 7,297	\$ 5,816	79.7
39987	PC Software	\$ 1,574	\$ 1,467	93.2
98100	Main Ext Forfeiture	\$ (15,346)	\$ (15,945)	103.9
98200	AIC Reimbursement	\$ (338,050)	\$ -	0.0 Deferred
99100	Public Works Reimbursement	\$ (111,822)	\$ -	0.0 Deferred
99800	Retirements	\$ 33	\$ -	0.0
	Total	\$ 1,335,970	\$ 1,847,532	138.3

Paducah Operations

36740	Mains Cathodic Protection	\$ 2,000	\$ -	0.0
37610	Mains- System Improve	\$ 533,318	\$ 377,931	70.9
37620	Mains- Public Improve	\$ 531,839	\$ 123,140	23.2
37630	Mains- Leakage	\$ 70,428	\$ 63,861	90.7
37640	Mains- Cathodic Protection	\$ 10,000	\$ 27,411	274.1
37910	City Gate M&R Sta Eq-Sys Imp	\$ 2,594	\$ 6,139	236.7
38010	Services- New	\$ 242,400	\$ 551,656	227.6
38030	Services- Leakage	\$ 146,900	\$ 44,190	30.1
38700	Other Equipment	\$ 5,295	\$ 6,703	126.6
39009	Improvements-Leased Premises	\$ 5,000	\$ -	0.0
39160	Office Machines	\$ 9,612	\$ 8,342	86.8
39211	Transportation Equip-Vehicles	\$ 80,778	\$ 70,585	87.4
39221	Transportation Equip-Accessor	\$ 42,500	\$ 3,607	8.5
39400	Tools, Shop Equip	\$ 10,970	\$ 11,111	101.3
39693	Ditchers and Trenchers	\$ 63,775	\$ 51,725	81.1
39695	Welders - Large	\$ 3,391	\$ 3,724	109.8
39985	Mainframe Hardware	\$ 450	\$ 187	41.6
39986	PC Hardware	\$ 7,297	\$ 5,859	80.3
39987	PC Software	\$ 1,574	\$ 1,483	94.2
98100	Main Extension Forfeiture	\$ (4,435)	\$ (3,364)	75.9
99100	Pub Works Reimbursement Gla	\$ (343,415)	\$ -	0.0 Deferred
99800	Retirements & Salvage	\$ 16	\$ -	0.0
	Total	\$ 1,422,287	\$ 1,354,291	95.2

Bowling Green Operations

36740	Transm Mains- Cathodic Protection	\$ 2,000	\$ _	0.0
36910	M&R Sta Sys Improv	\$ 7,220	\$ 3,676	50.9
36920	M&R Sta Public Improv	\$ 19,663	\$ 42,651	216.9
37610	Mains System Improv	\$ 402,018	\$ 647,112	161.0
37620	Mains- Public Improv	\$ 99,204	\$ 111,435	112.3
37630	Mains- Leakage	\$ 70,000	\$ 102,290	146.1
37640	Mains- Cathodic Protection	\$ 45,011	\$ 30,771	68.4
37800	M&R Sta Sys Improv	\$ -	\$ 40,492	#DIV/0!
37910	City Gate M&R Sta Equip Sys Imp	\$ -	\$ 32,368	#DIV/0!
38010	Services- Sys Imp	\$ 286,500	\$ 558,695	195.0
38020	Services- Public Improve	\$ · <u>-</u>	\$ 5,514	#DIV/0!
38030	Services- Leakage	\$ 174,000	\$ 72,239	41.5
38300	House Regs	\$ · <u>-</u>	\$ (371)	#DIV/0!
38700	Other Equipment	\$ 1,305	\$ 1,608	123.2
39000	Structures	\$ 1,750	\$ · -	0.0
39009	Improvements- Leased Glasgow WH	\$ 28,000	\$ 141	0.5
39150	Office Furniture	\$ 72,636	\$ -	0.0
39160	Office Machines	\$ 2,962	\$ 2,893	97.7
39170	Other Office Equipment	\$ 5,360	\$ -	0.0
39211	Transportation Equip-Vehicles	\$ 43,993	\$ 36,030	81.9
39221	Transportation Equip-Accessor	\$ 25,499	\$ 632	2.5
39400	Tools, Shop Equip	\$ 6,995	\$ 6,964	99.6
39693	Ditchers and Trenchers	\$ 7,632	\$ 7,058	92.5
39711	Communication Equip-Tele	\$ 2,000	\$ 1,797	89.9
39800	Miscellaneous Equip	\$ 2,290	\$ -	0.0
39985	Mainframe Hardware	\$ 443	\$ 187	42.2
39986	PC Hardware	\$ 7,297	\$ 5,816	79.7
39987	PC Software	\$ 1,574	\$ 1,467	93.2
98100	Main Extension Forfeiture	\$ (12,908)	\$ (11,871)	92.0
99100	Public Works Reimbursement	\$ (1)	\$ -	0.0
99800	Retirements	\$ 10	\$ -	0.0
	Total	\$ 1,302,453	\$ 1,699,592	130.5

Danville Operations

36710	Mains-Sys Imp	\$ 7,217	\$ 7,346	101.8
36740	Trans Mains-Cathodic Protection	\$ 14,000	\$ 5,848	41.8
36910	M&R Sta- Sys Imp	\$ 29,120	\$ -	0.0
37610	Mains- Sys Improve	\$ 710,691	\$ 379,221	53.4
37620	Mains- Public (Hwy) Relocat	\$ 173,613	\$ 110,421	63.6
37630	Mains- Leakage	\$ 88,040	\$ 63,210	71.8
37640	Mains- Cathodic Protection	\$ 30,000	\$ 19,259	64.2
37810	M&R Sta Equip Sys Improv	\$ -	\$ 3,298	#DIV/0!
37910	City Gate M&R Sta Eq-Sys Imp	\$ 64,151	\$ 66,930	104.3
38010	Services- Sys Imp	\$ 247,500	\$ 603,597	243.9
38030	Services- Leakage	\$ 48,750	\$ 54,766	112.3
38510	Ind M&R Equip Sys Imp	\$ 18,012	\$ 8,987	49.9
38700	Other Equipment	\$ 6,509	\$ 6,672	102.5
39009	Improvement-Leased Premises	\$ 9,452	\$ 1,555	16.5
39150	Office Furniture	\$ 103,364	\$ 99,634	96.4
39160	Office Machines	\$ 9,494	\$ 5,636	59.4
39211	Vehicles	\$ 78,414	\$ 33,922	43.3
39400	Tools, Shop Equip	\$ 8,193	\$ 8,371	102.2
39711	Communication Equip-Tele	\$ 1,468	\$ 533	36.3
39722	Communic Equip-Fixed Radios	\$ -	\$ 2,832	#DIV/0!
39986	P.C. Hardware	\$ 7,297	\$ 5,879	80.6
39987	P.C. Software	\$ 1,574	\$ 1,491	94.7
98100	Main Ext Forfeiture	\$ (6,855)	\$ (6,556)	95.6
99100	Public Works Reimbursement	\$ (141,150)	\$ •	0.0 Deferred
99800	Retirements & Salvage	\$ 20	\$ -	0.0
	Total	\$ 1,508,874	\$ 1,482,855	98.3
WI	KG Overheads	\$ -	\$ (65,926)	#DIV/0!
	Grand Total	\$ 9,323,533	\$ 9,864,309	105.8

Western Kentucky Gas Company Case No. 99-070

KPSC Data Request #2 Dated August 19, 1999 DR Item 19 a through e Witness: David H. Doggette

Data Request:

- 19. Provide the following information for each of the capital projects included in the response to Item 28 of the Commission's July 16, 1999 Order and the response Western will be providing for capital projects in the FY89-FY93 Period:
 - a. For each project included where the responses show a reference of "Deferred," explain why the project was deferred, when the project was next included in a capital projects budget, and when it was actually constructed.
 - b. For each project included where the responses show a budgeted amount and no expenditure amount, but was not referenced as deferred, explain why no expenditures were made on the project. Indicate when expenditures were made on those projects.
 - c. For each project included where the responses show expenditures but no budgeted amount, explain the situation that required capital expenditures where none were budgeted.
 - d. For each project included in the responses, prepare a schedule showing the month and year for the following dates:
 - (1) Budgeted project starting date.
 - (2) Budgeted project ending date.
 - (3) Actual project starting date.
 - (4) Actual project ending date.
 - e. Using the project information contained in the responses, prepare a summary by fiscal year that shows the following:
 - (1) The total number of capital projects.
 - (2) The number of capital projects that were completed ahead of schedule.
 - (3) The number of capital projects that were completed on schedule.
 - (4) The number of capital projects that were completed behind schedule.

Response:

a. In all cases, the term "deferred project" indicates that the current proposal is cancelled, the funds are not attached to that project and that the project no longer exists.

- b. In all cases, a project that shows a budgeted amount with no expenditure indicates that the project was approved in the annual budget and was not started. The project is not carried over into the next budget.
- c. The budget process occurs prior to the budget year. Therefore, unforeseen projects can come to fruition during the budget year. These will be unbudgeted projects that require capital expenditures.
- d. Western is not required to maintain records for the budgeted project starting date, budgeted project ending date, actual project starting date, or actual project ending date. Therefore this information is not available.
- e. 1) The list of capital projects was provided in Item 28 of the Commission's July 16,1999 Order.
 - 2-4) Schedule information for capital projects is not recorded and therefore is not available.

Western Kentucky Gas Company Case No. 99-070 KPSC Data Request #2 Dated August 19, 1999 DR Item 20 Witness: David H. Doggette

Data Request:

20. Refer to the responses to Items 28 and 29 of the Commission's July 16, 1999 Order. The response to Item 28 indicates Western's historic capital projects completion percentage ranged between 80.2 percent and 112.4 percent. Given this historic information, explain in detail why it is reasonable to assume that all capital projects included in the forecasted test year capital budget will be completed by the end of the forecasted test year.

Response:

It is reasonable to assume that all capital projects included in the forecasted test year capital budget will be completed by the end of the forecasted test year because the column labeled "Completion Percentage" does not represent the percentage of work performed on each individual project. All projects were completed in the Fiscal Year in which they were budgeted. The "Completion Percentage" refers to the variance of expended funds compared to budgeted amounts. Please refer to KPSC DR1-29.

Western Kentucky Gas Company Case No. 99-070 KPSC Data Request #2 Dated August 19, 1999 DR Item 21

Witness: Rebecca M. Buchanan

Data Request:

- 21. Refer to the response to Item 35 of the Commission's July 16, 1999 Order. The response provides the link between the capital budget projects shown in Volume 3 of 10, Tab 1, Exhibit DHD-1 with Volume 10 of 10, Tab 2, Schedule B-2.2. However, this link applies only to the grand totals from Exhibit DHD-1. A link between the additions to a particular plant account cannot readily be established.
- a. For pages 1 through 4 of 6 of Exhibit DHD-1, provide a summary for each page listing the additions by plant account number, rather than budget categories. Retain the column titles showing the expenditure classifications for each page. Also show how the amounts for retirements and public works reimbursements are allocated to the particular plant accounts.
- **b.** For any asset account shown on Schedule B-2.2, for either the base period or forecasted period, explain in detail why the addition shown does not match the plant account summary provided in response to part (a) above.

Response:

21a.) Please refer to Exhibit DHD-1 shown in Volume 3 of 10, Tab 1. On each of the pages 1 through 4 of 6, the second column titled "Acct #" provides the plant account number for each addition.

With regard to retirements (more accurately described as cost of abandonment, as explained by Mr. Doggette in his response to KPSC DR set 1, item #35c, dated July 16, 1999) and public works reimbursements, Exhibit DHD-1 does not provide the associated plant accounts. However, workpapers WP B-2 B 09 and WP B-2 F 09, found in Volume 10, Tab 15 of the filing, do apply the "retirements" and public works reimbursements to the detail plant accounts. For the fiscal years 2000 and 2001, line 41 of Exhibit DHD-1 "Retirements" and line 72 of Exhibit DHD-1 "Public Works Reimbursements" are

included in account 376 Mains. For fiscal year 1999, the account distribution for lines 41 and 72 is provided on the attachment titled "Fiscal Year 1999 Capital Budget – Retirements/Salvage & Removal and Public Works Reimbursements."

21b.) There are several reasons why the additions shown on Schedule B-2.2 will not match those shown in Exhibit DHD-1. Please refer to Western's response to KPSC DR set 1, item 35a, 43 and 44. In reading these responses, you will find that the capital budget additions on DHD-1 make up only part of the additions that finally flow through the workpapers to Schedule B-2.2. Western's response to KPSC DR set 1, items 43 and 44 explains the source of each component of the Western Division 09 base year and fiscal year capital additions. Also, as explained in the response to KPSC DR set 1, items 35a, an allocated portion (16.657%) of the Division 02 General Office capital budget additions are included in Schedule B-2.2. These are not shown on DHD-1.

Another fact to keep in mind is that for the Base Period, it is the net additions, retirements and transfers on Schedule B-2.2, pages 1-3 of 6 that tie back to the budgeted additions in the supporting workpapers and documentation.

If the focus of Staff's request is the budgeted capital additions shown in DHD-1, and how these additions are assigned to the specific asset accounts, there are slight variations in the account assignments between DHD-1 and workpapers WP B-2 B 09 & WP B-2 F 09, and eventually Schedule B-2.2. These variations are mainly attributed to the line items 41 "retirements" and 72 "public works reimbursements" on Exhibit DHD-1 not being assigned to the asset accounts on this exhibit (see response to 21a above). Another difference is that for fiscal years 2000 and 2001, the additions for the asset accounts 399.86 "PC Hardware" and 399.87 "PC Software" were entered on the wrong lines of workpaper WP B-2 F 09. These were mistakenly entered on the next lower line respectively as 399.87 "PC Software" and 399.88 "Application Software." This mistake caused depreciation expense to be understated by approximately \$2,000, which is immaterial. Finally, there were slight variations in how inflation and overhead rates were applied and to how line 79 "Forfeitures" (asset account 376 Mains) was handled on DHD-1 as compared to on the workpapers WP B-2 B 09 & WP B-2 F 09.

If "retirements" and "public works reimbursements" are properly assigned on DHD-1, then the remaining percentage variation in the account assignment for the budgeted capital additions averages 2 % in fiscal year 1999, 0% in fiscal year 2000 and 2% in fiscal year 2001.

(\$96,099)

(\$286,678)

(\$190,579)

Western Kentucky Gas Company KPSC Case No. 99-070 Fiscal Year 1999 Capital Budget Retirements/Salvage & Removal and Public Works Reimbursements

20

Total

RETIR	EMENTS /	SALVAGE & REMOVAL:	1999	50.425%	1999
	Account #	Description	w/o OH	ОН	incl. OH
1	351.20	Compression Station Equipment	\$300	\$151	\$451
2	352.02	Well Equipment	25,900	13,060	38,960
3	367.00	Mains - Steel	1,280	645	1,925
4	376.00	Mains - Cathodic Protection	100	50	150
5	376.00	Mains - Steel	26,960	13,595	40,555
6	376.00	Mains - Plastic	11,897	5,999	17,896
7	378.00	Meas. & Reg. Sta. Equipment General	3,200	1,614	4,814
8	379.30	Meas. & Reg. Sta. Equipment Town Border	502	253	755
9	380.00	Services	197,386	99,532	296,918
10	381.00	Meters	7,770	3,918	11,688
11	382.00	Meter Installation	41,284	20,817	62,101
12	383.00	Regulators Service	100	50	150
13	385.10	Ind. Meas. & Reg. Sta. Equipment	2,800	1,412	4,212
14	390.09	Improvements - Leased Premises	1	1	2
15		Total	\$319,480	\$161,098	\$480,578
PUBL	IC WORKS	REIMBURSEMENTS:			
	Account#	Description	Amount		
16	376.00	Mains - Cathodic Protection	(\$90,148)	(45,457)	(135,605)
17	376.00	Mains - Steel	(63,830)	(32,186)	(96,016)
18	376.00	Mains - Plastic	(10,201)	(5,144)	(15,345)
19	385.10	Industrial Measuring and Reg. Sta. Equip.	(26,400)	(13,312)	(39,712)

Western Kentucky Gas Company Case No. 99-070 KPSC Data Request #2 Dated August 19, 1999 DR Item 22

Witness: Rebecca M. Buchanan

Data Request:

22. For each of the estimated months contained in the base period and for the entire forecasted period, explain in detail how it was determined when the particular amount of plant addition would be recognized in the plant account. Also, provide a schedule showing by month the amount of plant addition by plant account number.

Response:

22.) The workpapers used to apply the budgeted annual plant additions to the monthly forecasts by plant account are found in Volume 10, tab 15. They are Workpapers WP B-2 B 09, WP B-2 B 02, WP B-2 F 09, and WP B-2 F 02. A revised page 4 of WP B-2 B 09 was provided in the response to KPSC data request set 1, Item #35a. issued July 16, 1999.

With regard to the base period estimated months April – September, 1999, for Western Division 09 plant additions, please refer to workpaper WP B-2 B 09, as revised. The first step was to determine the projected plant balances at the end of the base period, September 30, 1999. This was done by taking the beginning balance at September 30, 1998, which is shown in the first currency column of the workpaper. Next, all the budgeted plant additions for the fiscal year were added to the beginning balances to arrive at the projected base year ending balances at September 30 1999. On pages 3 of 4 and 4 of 4 of WP B-2 B 09, the budgeted plant additions columns are shown, as well as the column containing the projected base year ending balances.

The plant additions contained in the column titled "service prog. WKG adds April 1999" were added entirely in the month of April 1999. The difference between the March 1999 plant balance and the projected September 1999 plant balance, excluding the "service prog. WKG adds April 1999", was determined to be the amount of budgeted

additions that remained to be completed by the end of the base year. This amount was applied evenly to each of the six remaining months in the base period.

For the General Office Division 02 plant additions in the base period estimated months April – September, 1999, please refer to workpaper WP B-2 B 02. Again, the first step was to determine the projected plant balances at the end of the base period, September 30, 1999. The fiscal year budgeted additions were added to the base period beginning plant balances to determine the projected ending balances. Then the difference between the March 1999 balances and the projected September 1999 balances was spread evenly among the six remaining months in the base period, as this was the amount of budgeted additions that remained to be completed by the end of the base year.

With regard to the test period, for Western Division 09 plant additions, please refer to workpaper WP B-2 F 09. The starting point was the projected plant balances at the end of the base period, September 30, 1999. One twelfth of the fiscal year 2000 budgeted plant additions was added each month from October 1999 through September 2000, which is the fiscal year end. One twelfth of the fiscal year 2001 plant additions was added each month from November – December 2000, which is the end of the test period. On pages 3 and 4 of WP B-2 F 09, the budgeted plant additions columns are shown for the fiscal year 2000 and fiscal year 2001.

Finally, for the General Office Division 02 plant additions in the test period, please refer to workpaper WP B-2 F 02. Again, the starting point was the projected plant balances at the end of the base period, September 30, 1999. One twelfth of the fiscal year 2000 budgeted plant additions was added each month from October 1999 through September 2000, which is the fiscal year end. One twelfth of the fiscal year 2001 plant additions was added each month from November – December 2000, which is the end of the test period.

Attached, please find the schedules titled "Budgeted Plant Additions by Month – Div 09" and titled "Budgeted Plant Additions by Month – Div 02".

Western Kentucky Gas Company
Budgeted Plant Additions by Month - Western Div. 09
response to KPSC DR set 2, Item #22
April 1999 - December 2000

Line	Acct.	Account Title	Budget	Budget	Budget	Budget lif-99	Budget	Budget Sen-99	Budget Oct-99	Budget Nov-99
	20.	Account Tide	S.	\$	\$	9	\$	€	\$	69
-	Account 10	Account 101-1000 Gas Plant in Service -								
7		Intangible Plant	,	•	•	(,	(•	c
ო •	301.00	Organization	0	0	0	9	0 0	o c	0 0	0
4 u	302.00	Franchises & Consents				5				
ာဖေ		Total Intangible Plant	0	0	0	0	0	0	0	0
~ α		Natural Gas Production Plant								
ာ တ	325.20	Producing Leaseholds	0	0	0	0	0	0	0	0
9	325.40	Rights of Ways	0	0	0	0	0	0	0	0
£	331.00	Production Gas Wells Equipment	0	0	0	0	0	0	0	0
12	332.10	Field Lines	0	0	0	0	0	0	0	0
13	332.20	Tributary Lines	0	0	0	0	0	0	0	0
14	334.00	Field Meas. & Reg. Sta. Equip	0	0	0	0	0	0	0 (0 (
15	336.00	Purification Equipment	0	0	0	0	0	٥	5	0
16		Total Natural Gas Production Plant	0	0	0	0	0	0	0	0
8		·								
6	;	Storage Plant	•	•	(Ċ	•	•	c	c
2	350.10	Land	0 (0 (0	5 6	o 6	9 0	o c	-
5	350.20	Rights of Way	0 (0 8	5	<u>-</u>	o y	ם מ	o c	-
75	351.20	Compression Station Equipment	eg (£ '	င္တ	g (င္က ဇ	g ^ဇ	o 6	.
8 3	351.30	Meas. & Reg. Sta. Structures	-	0	-	o c	9 0	o c	o c	
4 2	9.1.60	Orner Structures	0 66	0 66	0 046)	0 046)	2 0/8)	(3046)		•
8 8	10.255	Well Construction	(3,946)	(3,946)	7.336	7.336	7 336	7.336	o c	· c
9 5	352.02	ven Equipment	000.	000,	900	000.	3		· c	0
, a	353 11	Storage Dights	• •	o c		· c		0	0	0
2 0	353.10	Field I ines	7 226	7 226	7 226	7.226	7.226	7.226	4.441	4,441
8	353.20	Tributary Lines	1.689	1,689	1,689	1,689	1,689	1,689	1,038	1,038
3	354.00	Compressor Station Equipment	0	0	0	0	0	0	0	0
32	355.00	Meas & Reg. Equipment	0	0	0	0	0	0	0	0
8	356.00	Purification Equipment	0	0	0	0	0	0	0	0
8 8		ě	000 01		000	000	7000	12 200	6.478	8.478
සි		l otal Storage Plant	12,389	12,389	12,389	12,389	12,309	606,21	, ,	ř
3 2										
38		Transmission Plant								
39	365.10	Land	0	0	0	0	0	0	0	0
4	365.20	Rights of Way	0	0	0	0	0	0	0	0
4	366.20	Structures & Improvements	3,021	3,021	3,021	3,021	3,021	3,021	0 (0 0
45	366.30	Other Structues	0	0	0	0	9	2	0 0	0 0
£3	367.00	Mains	15,231	15,231	15,231	15,231	15,231	15,231	1,350	1,336
4	369.10	Meas. & Reg. Equipment	6,332	6,332	6,332	6,332	266,0	0,332	100,1	20,1
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		Total Transmission Plant	24,583	24,583	24,583	24,583	24,583	24,583	8,394	8,394
47		i								
& 4	9	Distribution Plant	Ş	Ś	Ś	F	(45)	(86)	c	c
4 n	3/4.10	Land 10wn Border	₹) °	हें व	} •	()	<u> </u>	g) c	0	0
8 2	0.4.50	Carlo Curei	•		o c	· c	o c	· c	· c	
5 6	275 40	Churchine & Immovements T B	•		· c	· c	· c			0
7 6	375.00	Standards & Improvements 1.b.	•		o c	· c	o c	0		0
3 2	375.03	buccares & Improvements Outer	•	o c	o c	· c	0	0		0
, ¥	375.20	I and Rinble	0	0	•	0	0	0	0	0
3 4	376.00	Maine	430 225	430 225	430.225	430.225	430.225	430.225	351,860	351,860
2, 9	378.10	Meas, & Reg. Sta. Equipment General	38,123	38,123	38,123	38,123	38,123	38,123	25,126	25,126
; 8 8	379.30	Meas & Reg. Sta. Equipment T.b.	25,750	25,750	25,750	25,750	25,750	25,750	12,588	12,588
,										

Western Kentucky Gas Company Budgeted Plant Additions by Month - Western Div. 09 response to KPSC DR set 2, Item #22 April 1999 - December 2000

S Line	Acct.	Account Title	Budget Apr-99	Budget Mav-99	Budget Jun-99	Budget Jul-99	Budget Aug-99	Budget Sep-99	Budget Oct-99	Budget Nov-99
			es.	65	es	69		s	69	s
26	380,00	Services	308.175	308.175	308,175	308,175	308,175	308,175	236,024	236,024
8	381.00	meters	186,962	186,962	186,962	186,962	186,962	186,962	61,856	61,856
61	381.20	V & P Guages	0	0	0	0	0	0	0	0
62	382.00	Meter Installations	70,537	70,537	70,537	70,537	70,537	70,537	61,804	61,804
ន	383.00	Regulators Service	30,203	30,203	30,203	30,203	30,203	30,203	13,716	13,716
2	383.20	Regulators Relief	0	0	0	•	0	0	0	0
65	384.00	House Reg. Installations	637	637	637	637	637	637	290	290
99	385.10	Ind. Meas. & Reg. Sta. Equipment	17,384	17,384	17,384	17,384	17,384	17,384	17,058	17,058
29										
8		Total Distribution Plant	1,107,962	1,107,962	1,107,962	1,107,962	1,107,962	1,107,962	780,321	780,321
9		i								
2	:	General Plant	,	,	,	1	4	•	•	,
7	389.10	Land	0	0	0	0	0	0	0	0
72	390.02	Structures & Improvements	134,459	0	0	0	0	0	0	0
23	390.03	Improvements	0	0	0	0	0	0	0	0
7	390.04	Air Conditioning Equipment	0	0	0	0	0	0	0	0
75	390.05	Total Energy	0	0	0	0	0	0	0	0
92	390.09	Improvement to leased Premises	2,833	2,833	2,833	2,833	2,833	2,833	1,288	1,288
11	391.00	Office Fumiture & Equipment	283,914	699	699	699	699	699	193	193
78	391.83	Office Machines	0	0	0	0	0	0	0	0
2	392.10	Transportation Equipment	2,536	2,536	2,536	2,536	2,536	2,536	0	0
8	392.20	Trailers	0	0	0	0	0	0	0	0
8	n/a	n/a	0	0	0	0	0	0	0	0
82	394.77	Tools & Work Equipment	1,647	1,647	1,647	1,647	1,647	1,647	515	515
83	396.93	Ditchers	3,765	3,765	3,765	3,765	3,765	3,765	0	0
2	396.94	Backhoes	0	0	0	0	0	0	0	0
82	396.95	Welders	0	0	0	0	0	0	0	0
88	397.00	Communication Equipment - Phones	294,048	11,720	11,720	11,720	11,720	11,720	5,150	5,150
87	397.20	Communication Equip Fixed Radios	0	0	0	0	0	0	773	773
88	397.21	Communication Equipment - Mobile R	1,699	1,699	1,699	1,699	1,699	1,699	0	0
89	397.22	Communication Equip Telemetering	0	0	0	0	0	0	0	0
8	398.00	Miscellaneous Equipment	0	0	0	0	0	0	0	0
9	399.00	Other Tangible Property	0	0	0	0	0	0	0	0
85	399.84	Other Tangible Property - CPU	0	0	0	0	0	0	0	0
8	399.85	Other Tangible Property - MF Hardwa	(1,233)	(1,233)	(1,233)	(1,233)	(1,233)	(1,233)	0	0
8	399.86	Other Tangible Property - PC Hardwar	2,273,509	10,191	10,191	10,191	10,191	10,191	0	0
95	399.87	Other Tang. Property - P.C. Software	105,170	1,502	1,502	1,502	1,502	1,502	4,632	4,632
96	399.88	Other Tang. Property - Application Sof	9,654,218	438,743	438,743	438,743	438,743	438,743	1,288	1,288
26	399.89	Other Tang. Property - System Softwa	0	0	0	0	0	0	0	0
86	39x.xx1	Server Hardware	695,971	0	0	0	0	0	0	0
66	39x.xx2	Server Software	228,311	0	0	0	0	0	0	0
6	39x.xx3	Network Cost	332,234	0	0	0	0	0	0	0
5	39x.xx4	Start Up Cost	5,696,831	0	0	0	0	0	0	0
102	999.00	Cushion Gas	0	0	0	0	0	0	0	0
103								. !	:	•
\$ 5		Total General Plant	19,709,913	474,073	474,073	474,073	474,073	474,073	13,838	13,838
5 5		Total Gas Diant in Service	20 854 848	1 619 008	1 619 008	1 619 008	1 619 008	1 619 008	808 031	808 031
3		" Cast lain il Col Mar	20,000,01	20,010,1	200,010,1	200,010,1	200,010,1	000'010'1	.00'000	100,000

Western Kentucky Gas Company
Budgeted Plant Additions by Month - Westem Div. 09
response to KPSC DR set 2, Item #22
April 1999 - December 2000

April	999 - Dec	April 1999 - December 2000												ľ	
Line	Acct.		Beg Test Yr. Budget	Budget	Budget	Budget	Budget	Budget	Budget	Budget	Budget	Budget	Budget		Test Yr end Budget
2	ġ	Account Title	Dec-99	Jan-00	Feb-00	Mar-00	Apr-00 S	May-00	Jun-00	3m-00	Aug-00	Sep-00	00 <u>4</u>	00-A0A	nec-no •
-	Account 1	Account 101-1000 Gas Plant in Service -	•	•	,	•	٠	,	•	•					
7	;	Intangible Plant	•	•	•	•	•	ć	c	c	c	c	c	c	c
ი ∢	307.00	Organization Franchises & Consents	-	0	0	0	0	- 0	0	0	0	0	0	0	. 0
co co	20.700			, 								,		,	'
9 ~		Total Intangible Plant	0	0	0	0	0	0	0	0	0	0	0	0	0
80		Natural Gas Production Plant													
6	325.20	Producing Leaseholds	0	0	0	0	0	0 (0 (0 (0 (0 0	0 0	0 0	0 0
6	325.40	Rights of Ways	0	0 (0 (0 (0 0	0 0	0 0	0 0	0 0	5	-	-	> 0
=	331.00		0	0	0 (0 (0 (0 0	0 0	0 0	0 0	5 6	-	o c	> 0
12	332.10		0 0	0 0	0 0	0 0	0 0	0 0	o c	-	o c	o c	- 0	-	-
5 5	332.20	Indutary Lines	0	> c	-	o c	o c	0		0	0	0	0	0	0
<u> </u>	336.00		0	0	0	0	0	0	0	0	0	0	0	0	0
<u>6</u>										,	,	,		,	•
†		Total Natural Gas Production Plant	0	0	0	0	0	0	0	0	0	0	0	0	0
ō 5		Storage Plant													
2 2	350.10	Land	0	0	0	0	0	0	0	0	0	0	0	0	0
7	350.20	Rights of Way	0	0	0	0	0	0	0	0	0	0	0	0	0
22	351.20	Compression Station Equipment	0	0	0	0	0	0	0	0	0	0	0	0	0
23	351.30		0	0	0	0	0	0	0	0	0	0	0	0	0
54	351.40	Other Structures	0	0	0	0	0	0	0	0	0	0	0	0 (0 (
52	352.01	Well Construction	0	0	0	0	0	0	0	0	0 (0 (0 (0 (-
56	352.02		0 1	0	0 (0 (0 (0 0	0 0	0 0	0 0	5	5 6	>	-
27	352.10		0 (5	-	-	-		-	> 0	> 0	-	5 6	-	.
78	352.11	Storage Rights	0 ; ;	0 ;		•	> ;	•	· ;	•	•	7	9	7	9
53	353.10	Field Lines	4,441	144,4	44.4	4,44 1030	44.4 1.038	1 038	444	4 6	4 6	1038	1 047		1.047
3 5	333.20		950'	9 -	9	9 0	<u> </u>	2	-	9	9 0	9		0	0
5 8	304.00		.	o c	,		.	•		• •	· c	· c			
3 8	356.00	Meas & Reg. Equipment Purification Equipment	0	0	0	0	0	0	0	0	0	0	0	0	0
뚕									1					i	
33		Total Storage Plant	5,478	5,478	5,478	5,478	5,478	5,478	5,478	5,478	5,478	5,478	676'6	67¢'¢	676'6
3 %															
88		Transmission Plant													,
38	365.10		0	0	0	0	0	0	0 (0 (0 (0 0	0 0	0 0	0 (
9 :	365.20		0 (0 (0 0	0 (> 0	o c	5 6	5 6	> 0	o c	> C	.	
£ ;	366.20	Stuctures & improvements	-	-	-	o c	9 6	o c	0	0	0	0	0	0	0
‡ 4 5 6	367.00		7.356	7.356	7.356	7.356	7.356	7,356	7,356	7,356	7,356	7,356	7,425	7,425	7,425
4	369.10		1,037	1,037	1,037	1,037	1,037	1,037	1,037	1,037	1,037	1,037	1,047	1,047	1,047
45									, , ,			700	į	6	0 430
9 7		Total Transmission Plant	8,394	8,394	8,394	8,394	8,394	8,394	8,394	8,394	8,394	8,394	8,472	8,472	8,472
£ 4		Distribution Plant													
49	374.10		0	0	0	0 (0 (0	0 0	0 0	0 0	0 0	0 0	0 0	0 0
다 2	374.30		0	0 0	0 0	0 0	0 0	0	-	9 0	o c	-	o c	o c	o c
<u>ر</u> د	374.20		-	-	> 0	o c	> <		o c	•	• •	o c	· c	, c	0
2 22	375.02	Structures & Improvements 1.b.	• •	0	0	0	0	0	0	0	0	0	0	0	0
75	375.03		0	0	0	0	0	0	0	0	0	0	0	0	0
55	375.20		0	0	0	0	0	0	0	0	0	0	0	0	0
26	376.00		(,	351,860	351,860	351,860	351,860	351,860	351,860	351,860	351,860	351,860	355,127	355,127	355,127
22	378.10	Meas. & Reg. Sta. Equipment Genera	3 25,126	25,126	25,126	25,126	25,126	25,126	25,126	25,126	25,126	25,126 12,588	25,359	25,359	25,359
ž	3/9.30			12,588	12,388	12,300	000,21	000'71	14,000	200,21	700,4	7,7	, ,	,	}

Westem Kentucky Gas Company Budgeted Plant Additions by Month - Westem Div. 09 response to KPSC DR set 2, Item #22 April 1999 - December 2000

April 1	399 - Dece	April 1999 - December 2000												٦	Test Yr end
			Beg Test Yr.					1	100	to chi. C	to but	Budget	Budget	Budget	Budget
Line	Acct.		Budget	Budget	Budget	Budget	Budget	May-00	Pugget	oo-jiil	Aug-00	Sep-00		Nov-00	Dec-00
ġ	No.	Account Title	Dec-99	Jan-00	and a	Mai-Oo		S 4	5	5	S	65	s	s	69
			•	A .	A	900		236,024	236,024	236,024	236 024	236.024	238,215	238,215	238,215
29	380.00	Services	236,024	236,024	236,024	230,024	470,062	61 856	61.856	61.856	61.856	61,856		62,430	62,430
9	381.00	meters	61,856	928,19	968,19	000,10	00,0	5	5	2	0	0	0	0	0
61	381.20	V & P Guages	3	9	2	2	200	2007	61 804	61 804	61 804	61.804	62,378	62,378	62,378
62	382.00	Meter Installations	61,804	61,804	61,804	40,100	10,04	13 716	13.716	13.716	13,716	13.716	13,844	13,844	13,844
83	383.00	Regulators Service	13,716	13,716	13,/16	13,/16	2 (2	0,'5	2	2	:	C	0	0	0
2	383.20	Regulators Relief	0	0	0	> ;	ָ י	0 6	9	2	Ş	900	200	292	292
92	384.00	House Reg. Installations	290	290	290	290	290	290	290	067	087	77.050	17 247	47 247	17 217
99	385.10	Ind. Meas. & Reg. Sta. Equipment	17,058	17,058	17,058	17,058	17,058	17,058	17,058	17,058	17,058	8Cn/7L	/171/	11,5,11	1 3,1
29				0	100	100 001	700,004	780 321	780.321	780 321	780.321	780.321	787,567	787,567	787,567
8		Total Distribution Plant	780,321	128'08/	180,321	126,087		70,007	170,001	000					
3															
2	:	General Plant	c	-	c	c	C	0	0	0	0	0	0	0	0
7	389.10	Land	0	•		o c	· c	0	0	0	0	0	0	0	0
75	390.02	Structures & Improvements	- 0	> 0	0 0		, ,	0	0	0	0	0	0	0	0
73	390.03	Improvements	> 0	•	0	•		· c		0	0	0	0	0	0
74	390.04	Air Conditioning Equipment	O (-	-	-	o c	0			0	0	0	0	0
75	390.05	Total Energy	0	o 6	0 00	7 20 0	1 200	1 288	1 288	1 288	1.288	1.288	1,299	1,299	1,299
92	390.09	Improvement to leased Premises	1,288	1,288	887'1	1,280	007	103	5 5	193	193	193	195	195	195
11	391.00	Office Furniture & Equipment	193	193	581	SE C	200	2	2	2	·	0	0	0	0
78	391.83	Office Machines	0	0	o (o (.		•	•		· c	C	0	0
79	392.10	Transportation Equipment	0	0	o (o (9 0	0	•	o c	0	-	0	0	0
8	392.20	Trailers	0	0	o (> 0	-	9	•			c	0	0	0
8	n/a	n/a	0	0	0	0 !	٠ :	ָר בּי	2 4	, t	7,7	71.0	520	520	520
85	394.77	Tools & Work Equipment	515	515	515	515	515	66	<u> </u>	200	2 0	3	9 0	0	0
83	396.93	Ditchers	0	0	0	o (o (9 0	0				· c	0	0
8	396.94	Backhoes	0	0	•	0 (0 0	5 6		o c	o c	o c		0	0
82	396.95	Welders	0	0	0	0	ָ י	ָּיִ כ		4	1 1 1 1	7 150	5 198	5 198	5.198
88	397.00	Communication Equipment - Phones	5,150	5,150	5,150	5,150	5,150	5,150	001,0	0,130	o, 130	2 2	780	780	780
87	397.20	Communication Equip Fixed Radios	773	773	773	773	773	1/3	5	3	2	2	3 -	2	0
88	397.21	Communication Equipment - Mobile R	0	0	0	0	0	- 0	-			•	• •		0
68	397.22	Communication Equip Telemetering	0	0	0	0	0	o (-	o 0	•	o c	•	· c	0
06	398.00	Miscellaneous Equipment	0	0	0	0	0	o '	o (9	0	•		· c	· c
6	399.00	Other Tangible Property	0	0	0	0	0	0	0 (9 (9 0	•	•	•	· c
65	399.84	Other Tangible Property - CPU	0	0	0	0	0	0	0 (0 0	9 0	9	•	· c	· c
8	399.85		0	0	0	0	0	Э.	o (-	0 0	9			
46	399.86			0	0	0	0	0	0	0 00	0 00	0 60	4 675	4 675	4 675
5	399.87		•	4,632	4,632	4,632	4,632	4,632	4,632	4,632		4,032	600,	200,	1 299
96	399.88		1,288	1,288	1,288	1,288	1,288	1,288	1,288	1,288	2,	907.	667'	3	0
26	399.89			0	0	0	0	0	0 (> (-	9 0	0 0	• •	o c
8	39x xx1		0	0	0	0	0	0	0	o (0 (o (0	•	· c
8	30, 70/		0	0	0	0	0	0	0	0	o (o (5 6	•	
5 5	30, 20,		0	0	0	0	0	0	0	0	o (> (5 6	> 0	
5	30, 204		0	0	0	0	0	0	0	0	0	o (5 (-	•
5 5	999 00		0	0	0	0	٥	٥	٥	٥		0			
<u> </u>	9			1	1		•		6		13 030	13 838	13 967	13.967	13.967
\$		Total General Plant	13,838	13,838	13,838	13,838	13,838	13,838	13,838	13,030			20,5	20,0	
105			1000	808 034	808 031	808 031	808.031	808.031	808,031	808,031	808,031	808,031	815,534	815,534	815,534
106		Total Gas Plant in Service	10000	1000	72,200										

Western Kentucky Gas Company Budgeted Plant Additions by Month - General Office Div. 02 response to KPSC DR set 2, Item #22 April 1999 - December 2000

							40	0		α
Line	Acct.		Budget Apr. 99	Budget Mav-99	Fundget	agona 196-Inf	Aug-99	Sep-99	Oct-99	Nov-99
Ö	Š	Account line	S S	50 69	9	s	6	9	€	es.
,		General Plant **	•					•	1	Ċ
۰ ،	280 10	puel	0	0	0	0	0	0	0	>
u (2000	Standards & Improvements	0	0	0	0	0	0	0	0
· ·	390.02	Succides & Improvements		c	0	0	0	0	0	0
4	390.03	Improvements	•			c	_	0	0	0
Ŋ	390.04	Air Conditioning Equipment	0	-	5 (0			· c	· c
œ	390.05	Total Energy	0	0	0	0	9	0 1	0	0 0
۸ د	390.09	Improvement to leased Premises	10,353	10,353	10,353	10,353	10,353	10,353	3,903	3,903
- α	391.00	Office Furniture & Fauitment	38,115	38,115	38,115	38,115	38,115	38,115	14,338	14,338
0 0	20.00	Constant Office Equipment		0	0	0	0	0	0	0
» ·	291.02	General Onice Equipment	920	920	920	920	920	920	347	347
2 :	391.03	1	-	-	c	0	0	0	0	0
Ξ:	392.00	Fransportation Equipment		o c	0	0	0	0	0	0
12	392.20	Irailers	•	•			c	c	0	0
13	393.00	Stores Equipment	o	> (> 0	•	o c	· c	· c	c
4	394.77	Tools & Work Equipment	0	0	5	o (> (0 0	.	• •
5	396.93	Ditchers	0	0	0	0	o ·	> (۰ د	.
5 4	396 94	Backhoes	0	0	0	0	0	0	0	o '
<u>;</u>	206.94	Welders	0	0	0	0	0	0	0	0
> 9	307.00	Verders Communication Equipment - Phones	1 295	1.295	1,295	1,295	1,295	1,295	488	488
<u>.</u>	397.00	Communication Equipment 1 money		0		0	0	0	0	0
2 :	397.20	Committee Equip 1 Act Marie Dadios		c	0	0	0	0	0	0
20	397.21			o c		0	0	0	0	0
7	397.22	Communication Equip I elemetering	ם ככ	ع0ه	200	500	209	209	4	79
55	398.00	Miscellaneous Edulpment	607	8	3			C	0	0
23	399.00	Other Tangible Property)	-		•	o C		0	0
54	399.84	Other Tangible Property - CPU	0	o	•	0 0				· c
25	399.85	Other Tangible Property - MF Hardware	0	0	0	0	O	9	0 00	1
3 8	399.86	Other Tangible Property - PC Hardware	33,764	33,764	33,764	33,764	33,764	33,764	12,729	62/21
3 6	300.87	Other Tand Property - P.C. Software	12,409	12,409	12,409	12,409	12,409	12,409	4,678	4,678
i 6	300.88	Other Tang Property - Application Software	3.340.027	3,340,027	3,340,027	3,340,027	3,340,027	3,340,027	937,187	937,187
9 6	399.89	Other Tang. Property - System Software	0	0	0	0	0	0	0	0
i 8 i		\$00 E 000 E	3 437 091	3 437 091	3.437.091	3,437,091	3,437,091	3,437,091	973,750	973,750
31		lotal General Flant	100,100	10.1						

^{**} General Office Div 02 General Plant will be allocated to Western at 16.657% KY residual factor.

Western Kentucky Gas Company Budgeted Plant Additions by Month - General Office Div. 02 response to KPSC DR set 2, Item #22 April 1999 - December 2000

April	April 1999 - December 2000	Del 2000													
			og Toet Vr												Test Yr End
Ei.	Acct.	į	- 1 cs C	2	God de	Mar-00	Apr-00	May-00	Jun-00	Jul-00	Aug-00	Sep-00	Oct-00	Nov-00	Dec-00
ġ	SO.	Account Title	SG-SS	0al-00	9	5	6	S	€	s	es	₩.	s	€9	49
			.	•	•	•	,	,							
-		General Plant **	•	ď	c	c	c	c	c	0	0	0	0	0	0
7	389.10	Land	,	-	•				c	0	0	0	0	0	0
ო	390.02	Structures & Improvements	0	0	o '	o (o (o c		· c	c	C	0	0
~	390.03	Improvements	0	0	0	0	>	>	.	o (.	•		•	c
۱ ۱	20.00	Air Conditioning Equipment	0	0	0	0	0	0	0	9	0	>	> (> 0	
n	590.04		•	c	c	0	0	0	0	0	0	0	0	0	5
9	390.05	Total Energy	0 00	2	3 003	3 003	3 903	3.903	3.903	3.903	3,903	3,903	3,894	3,894	3,894
7	390.09	Improvement to leased Premises	3,903	5,00	20,00	200,0	14 338	14 338	14 338	14 338	14,338	14,338	14,305	14,305	14,305
œ	391.00	Office Furniture & Equipment	14,338	14,338	6,5,5	2) -	5	c f	0	0	0	0	0	0
o	391.82	General Office Equipment	0	o !	> !	ָ פַּ	7	7	27.5	247	347	347	346	346	346
9	391.83	Office Machines	347	347	347	347	, t	ţ	ì	ţ	}		C	0	0
=	392.00	Transportation Equipment	0	0	0	0	0	o (- (9 0	> <		, c		0
: 2	392 20	Trailers	0	0	0	0	0	o	o (0	0	•	o c	· c	C
1	303 00	Stores Fourinment	0	0	0	0	0	0	0	Э,	o (> (0		
2 ;	9 60	Hotels of Mariamont	C	0	0	0	0	0	0	0	0	5	o	> (o (
4	394.77	TOOIS & WOLK Equipment		· c	C	0	0	0	0	0	0	0	0	0	ο ·
15	396.93	Ditchers	o (•	, c		· c	0	٥	0	٥	0	0	0	0
16	396.94	Backhoes	> (> <	0	o c		· c		0	0	0	0	0	0
11	396.95	Welders	O :	9	9	9	0 0	8	488	488	488	488	487	487	487
8	397.00	Communication Equipment - Phones	488	488	488	004	0	ę	9 0	2	2	C	0	0	0
19	397.20	Communication Equip Fixed Radios	0	0	0	0	-	>	> c	•	o c	· c		0	0
20	397.21	Communication Equipment - Mobile Radios	0	0	0	0	o (-	5 (•	•	· c	· c	C	0
. 2	397 22	Communication Equip Telemetering	0	0	0	0	0	>	-	> f	9	9 6	70	20	62
; ;	398 00	Miscellaneous Equipment	79	79	79	79	79	79	Ð.	6.	2 (n (2	2	
1 5	300 00	Other Tangible Property	0	0	0	0	0	0	0	0 '	> (0	> 0	•	• •
3 2	200.00	Other Tangible Property - CPII	0	0	0	0	0	0	0	0	0	o	o (0	•
* ;	10.000	Outer Tangible Topology C. C.	c	C	0	0	0	0	0	0	0	0	9	ָּ כ	5
22	399.85	Other langible Property - INF Hardware	12 720	12 720	12 729	12 729	12.729	12.729	12,729	12,729	12,729	12,729	12,701	12,701	12,701
8	399.86	Other Langible Property - P.C. Harowale	12,729	12,123	4 570	4.678	4.678	4 678	4 678	4.678	4,678	4,678	4,668	4,668	4,668
27	399.87	Other Tang. Property - P.C. Software	4,678	4,078	4,0/0	4,070	787 780	037.187	937 187	937.187	937,187	937,187	706,270	706,270	706,270
58	399.88	Other Tang. Property - Application Software	937,187	/8L'/56	937,187	937,107	101,108	201.				0	0	0	0
58	399.89	Other Tang. Property - System Software	0			اد			,	,					
30		Total Constant Direct	973 750	973 750	973.750	973,750	973,750	973,750	973,750	973,750	973,750	973,750	742,750	742,750	742,750
31		total General Plant	2010	2012											
	** Genera	al Office Div 02 General Plant will be allocated to We	este												

** General Office Div 02 General Plant will be allocated to Weste

Western Kentucky Gas Company Case No. 99-070 KPSC Data Request #2 Dated August 19, 1999 DR Item 23

Witness: Rebecca M. Buchanan

Data Request:

- 23. Refer to the response to Item 37 of the Commission's July 16, 1999 Order.
- a. Provide a detailed explanation as to how the accumulated depreciation amounts were allocated to the individual 300 series account numbers, for both the base and forecasted test periods. Include all assumptions, the basis for the allocations, calculations, and supporting workpapers used to determine the amounts. This should be done for both the original Schedule B-3 filed, as well as the revision included in the response to Item 37.
- b. Provide a schedule showing Western's utility plant in service, accumulated depreciation, and proposed depreciation expense adjustment by classes of assets, for both the base and forecasted test periods. If any class of asset appears to be over-depreciated, include a detailed explanation for what has occurred or is occurring within that plant classification.
- c. Explain in detail the nature of the errors made by Western when originally preparing Schedule B-3.

Response:

23a.) The allocation problem in the original base period was the result of a misallocation of reserve balances to asset accounts in an unknown previous period being continually rolled forward. The time of the original misallocation was prior to 1996. All parties preparing these earlier allocations are no longer in the active employment of the Company. The allocation has prior to now been primarily used for internal reporting purposes. Supporting workpapers for the original reserve balance by detail asset account at September 30, 1998 (beginning of the Base Year), for both Western Division 09 and for Atmos Shared Services Division 02, are attached and titled "FY 98 Accrual Worksheet". Monthly reserve accruals were added to the beginning balance to determine

monthly accumulated balances for the base and test periods. The monthly balances have been provided in the filing under the Workpaper tab 15 of Volume 10, as workpapers <u>WP B-3.1 B 09</u>, <u>WP B-3.1 B 02</u>, <u>WP B-3.1 F 09</u>, and <u>WP B-3.1 F 02</u>. Schedule B-3, as it's title indicates, shows the "Jurisdictional Accumulated Depreciation and Amortization, 13 Month Avg." for the base period and the forecasted period. The note at the bottom of Schedule B-3, page 6 of 6, explains that "All General Plant amounts include Western Kentucky Gas general plant 100%, plus an allocation of General Office general plant at 16.657% KY residual factor."

With regard to revised Schedule B-3, filed as the response to Item 37 of the Commission's July 16, 1999 data request, the Accumulated Reserve balance by major asset category (i.e., intangible, production, storage, transmission, distribution and general plant) is unchanged from that as originally filed. As explained in the response to DR #37, Western maintains the accumulated depreciation balances at this major asset category level, and not at the individual 300 account level. This should not to be confused with the calculation of the monthly reserve accrual, which is done at the detail level. In the revised Schedule B-3, the individual accumulated depreciation balances within each major category were interpolated as of September 30, 1998. The major category accumulated depreciation balance was spread among the individual accounts within that specific category pro-rata, according to the related plant investment balance as compared to the total investment for that asset category at September 30, 1998. For example, at September 30, 1998, the total accumulated reserve balance for storage plant was spread among the individual storage accounts based on the individual storage plant investment as compared to the to total storage plant investment at September 30, 1998. The worksheet used to determine the spread at September 30, 1998 is attached, and titled "9/98 Allocated Reserve Balance".

Once the beginning base period balances were determined at September 30, 1998, the monthly reserve accruals were added each month to create the monthly accumulated balances for the base and test periods. These monthly balances and the 13 month average accumulated balances for Western Division 09 are attached and marked "workpaper WP B-3.1 B 09 REVISED" and "workpaper WP B-3.1 F09 REVISED". Recall that in order to reconcile the 13 month average on Schedule B-3 to the workpapers, an allocation of

General Office Division 02 general plant accumulated depreciation at the 16.657% KY residual factor must be included. The Division 02 accumulated depreciation is unchanged from the original filing. The workpapers supporting the Div. 02 amounts, were included in the original filing, under the Workpaper tab 15 of Volume 10, as workpapers <u>WP B-3 B 02</u>, <u>WP B-3 F 02</u>, <u>WP B-3.1 B 02</u>, and <u>WP B-3.1 F 02</u>. These have not been revised.

Schedule incorporates the detail accumulated reserve balances that were provided in revised Schedule B-3 as response to Item 37 of the Commission's July 16, 1999 data request. The only information that has changed on this schedule, as compared to the original filed in Volume 10, under tab 2, is the detail within column (E) titled "13 month average Reserve". The Plant Investment column and the depreciation expense column, (D) and (F), have not changed from the original filing. Within column (E), the totals by major asset category are unchanged from the original filing – only the detail within each category has been shifted, as explained in response to 23a. above.

23c.) See response 23a.

Western Kentucky Gas Div. 09-000

ATMOS COMPANY (WKG)

FY 98 ACCRUAL WORKSHEET RESERVE

	; g	BALANCE 9-30-97	PROVISION	YEAR TO DATE ADJUSTMENTS	BALANCE 9-30-98
	96	BALANCE 9-30-97	PROVISION S	ADJUSTMENTS	BALANCE 9-30-98
	dad		w		
	RATE	€0-	٠	es.	₩.
	ďΡ				
			1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		
1 3500010 LAND	0.00%	00.00	0.00	00.00	0.00
2 3650010 LAND	0.00%	00.00	00.00	0.00	00.0
4 3740010 LAND	0.00%	00.00	00.00	00.00	0.00
5 3740030 LAND OTHER	\$00.0	0.00	00.00	0.00	0.00
6 3890010 LAND	\$00.0	00.00	00.00	0.00	0.00
7 3250020 N.G. PRODUCING LEASEHOLDS	0.00%	0.00	0.00	0.00	0.00
8 3010000 INTANGIBLE PLANT	AMORT	0.00	0.00	0.00	0.00
9 3020000 FRANCHISES & CONSENTS	AMORT	119,852.69	0.00	0.00	119,852.69
16 3310000 N.G. PROD. GAS WELLS ROUIP.	1.53%	3,492.47	0.00	0.00	3,492.47
17 3320010 N.G. PRODUCTION FIRED LINES	1.44%	47,162.67	0.00	0.00	47,162.67
18 3320020 N.G. PROD. TRIBUTARY LINES	1.44%	528,218.00	0.00	0.00	528,218.00
19 3340000 N.G. PROD. FIELD M. & R. ST. EQ.	1.54%	198,468.81	0.00	0.00	199,468.81
20 3360000 N.G. PROD. PURIFICATION RQUIP.	0.00%	0.00	0.00	0.00	0.00
21 3510020 STORAGE COMP. STA. RQUIP.	2.86%	2,902,713.45	3,400.95	0.00	2,906,114.40
22 3510030 STORAGE M. & R. STA. STRUCT.	2.86%	1,645.14	661.76	0.00	2,306.90
23 3510040 STORAGE OTHER STRUCTURES	2.86%	10,223.86	4,134.25	0.00	14,358.11
24 3520001 STORAGE WELL CONSTRUCTION	4.86%	165,802.82	105,598.08	00.0	271,400.90
25 3520002 STORAGE WELL EQUIPMENT	4.86%	46,457.91	26,049.46	0.00	72,506.37
26 3520010 STORAGE LEASEHOLDS	2.93%	12,818.46	4,842.22	00.0	17,660.68
	2.93%	3,588.34	1,600.20	00.00	5,188.54
3530010 STORAGE	3.59%	13,994.44	6,408.17	00.00	20,402.61
	3.59%	16,421.52	7,519.55	00.00	23,941.07
	4.18%	37,935.91	19,674.65	00.00	57,610.56
	4.04%	23,338.81	11,521.68	00.00	34,860.49
	3.76%	17,845.12	9,021.36	00.00	26,866.48
	1.56%	273.11	513.57	00.00	786.68
	1.56%	1,321,772.03	1,079.09	00.00	1,322,851.12
3670000 TRANSMISSION MAINS	2.43%	12,411,582.60	464,369.65	00.00	12,875,952.25
	2.79%	126,097.40	81,082.37	(13,522.59)	193,657.18
	2.74%	6,574.03	2,914.70	00.00	9,488.73
	2.74%	417.73	205.98	00.00	623.71
39 3750020 DISTRIBUTION LAND RIGHTS	2.74%	2,879.32	1,276.59	00.00	4,155.91
40 3780010 DIST. MRAS & REG. EQUIP. GEN.	3.33%	26,547,769.50	60,805.10	00.00	26,608,573.60
	3.38%	106,582.73	55,799.89	00.00	162,382.62
42 3800000 DISTRIBUTION SERVICES	3.50%	2,533,430.58	1,433,878.39	0.00	3,967,308.97
43 3910000 DISTRIBUTION METERS	3.24%	1,049,211.39	567,593.97	00.00	1,616,805.36
44 3810020 DIST. V & P GUAGES	3.24%	7,693.98	3,644.10	0.00	11,338.08
45 3820000 DIST. METER INSTALLATIONS	3.91%	640,392.46	401,684.55	00.0	1,042,077.01
46 3830000 DIST. REGULATORS SERVICE	3.13%	207,446.05	108,236.48	(91,811.41)	223,871.12
	3.13%	31,247.76	15,072.34	0.00	46,320.10
	3.00%	10,291.27	4,628.29	00.00	14,919.56
49 3850010 DIST. IND. MEAS. & REG. STA. EQ.	3.41%	157,480.40	94,867.97	0.00	252,348.37

Western Kentucky Gas Div. 09-000

ATMOS COMPANY (WKG)

FY 98 ACCRUAL WORKSHEET

		֡			
		1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	YEAR TO DATE	
	DRP	BALANCE 9-30-97	PROVISION	ADJUSTMENTS	BALANCE 9-30-98
	RATE	€	₩	es-	€03-
	ф				
			1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	
50 3760000 DISTRIBUTION MAINS	3.50%	28,820,869.55	2,354,858.65	(411,840.31)	30,763,887.89
51 3900003 STRUCTURES AND IMPROVEMENTS	2.12%	1,515.04	1,359.14	0.00	2,874.18
2 3970022 TELEMETERING EQUIPMENT	7.05%	16,179.27	8,086.00	00.00	24,264.27
3 3900005 TOTAL ENERGY PLANT	0.00%	00.0	00.00	00.00	0.00
54 3910000 OFFICE FURNITURE & EQUIPMENT	3.87%	454,282.11	61,202.02	(9,460.84)	506,023.29
55 3918300 OFFICE MACHINES	3.87%	43,505.51	7,743.09	00.00	51,249.60
56 3920010 TRANSPORTATION EQUIPMENT	8.86%	3,114,972.59	457,542.84 +	(655,060.72)	2,917,454.71
57 3920020 TRAILERS	8.86%	89,709.99	14,795.08	00.00	104,505.07
58 3940077 TOOLS AND EQUIPMENT	4.478	1,237,041.28	135,803.35	(431.04)	1,372,413.59
59 3969577 WELDERS	4.478	47,816.29	1,898.44 +	00.00	49,714.73
60 3969377 DITCHERS	4.47%	623,514.31	26,508.79 *	00.00	650,023.10
61 3969477 BACKHOES	4.478	451,282.30	13,708.35 *	00.00	464,990.65
62 3970000 TELEPHONE EQUIPMENT	7.05%	486,006.97	52,372.69	00.00	538,379.66
63 3970020 FIXED RADIOS	7.05%	3,769.26	1,268.31	00.00	5,037.57
64 3970021 MOBILE RADIOS	7.05%	13,710.23	4,090.63	00.00	17,800.86
65 3900002 STRUCTURES AND IMPROVEMENTS	2.12%	106,724.31	3,888.22	00.00	110,612.53
66 3990000 MISCELLANEOUS EQUIPMENT	12.09%	14,292.08	4,482.13	00.00	18,774.21
67 3998500 MAINFRAME HARDWARE	10.04%	347,127.74	15,016.99 *	00.00	362,144.73
68 3998600 PC HARDWARE	20.60%	203,342.34	85,904.33 +	425.25	289, 671.92
69 3998700 PC SOFTWARE	20.60%	126,413.59	32,784.12 *	176.33	159,374.04
70 3998800 APPLICATION SOFTWARE	8.22\$	19,992.25	10,418.25 +	00.0	30,410.50
71 3250040 LAND RIGHTS N.G. PLANT	900.0	6,069.04	00.00	00.00	6,069.04
72 3500020 LAND RIGHTS STORAGE PLANT	0.92%	4,274.19	43.07	00.00	4,317.26
73 3650020 LAND RIGHTS TRANS.	0.92%	278,951.22	3,711.46	00.0	282,662.68
74 3740020 LAND RIGHTS DISTRIBUTION PLANT	0.85%	11,100.61	362.93	00.00	11,463.54
3900009 IMPROVEMENTS TO LEASED PREMISES	AMORT	564,100.18	0.00	00.00	564,100.18
3900004 AIR CONDITIONING EQUIPMENT	3.87%	2,344.07	378.16	00.0	2,722.23
9999117 CUSHION GAS	0.00%	00.00	0.00	0.00	0.00
)T	TOTALS	86,400,027.08	6,796,311.40	(1,181,525.33)	92,014,813.15

ATMOS GENERAL OFFICE 02-000 FY'98 ACCRUAL WORKSHEET

			RESERVE - YEAR TO DATE	AR TO DATE	
	DEP RATE %	BALANCE 9-30-97 \$	PROVISION \$	ADJUSTMENTS \$	BALANCE 9-30-98 \$
3900009 IMPROVEMENTS TO LEASED PREMISE		\$830,032.11	\$448,081.69	\$0.00	\$1,278,113.80
3910000 OFFICE FURNITURE & EQUIPMENT	4.89%	1,253,005.62	169,846.36	(6,452.16)	1,416,399.82
3918200 OFFICE FURNITURE & EQUIPMENT	11.37%	61,062.81	10,710.64	0.00	71,773.45
3918300 OFFICE MACHINES	2.22%	920,373.89	25,150.75	(931.35)	944,593.29
3920000 TRANSPORTATION EQUIPMENT	28.96%	20,326.51	5,469.23	0.00	25,795.74
3940077 TOOLS AND WORK EQUIPMENT	10.00%	43,678.86	(3,569.03)	(1,004.72)	39,105.11
3970000 TELEPHONE EQUIPMENT	7.12%	563,586.50	57,355.95	0.00	620,942.45
3980000 MISCELLANEOUS EQUIPMENT	5.36%	122,025.56	34,115.00	0.00	156,140.56
3989900 MISC. EQ. INSERTERS	2.36%	0.00	00.0	00.00	00.0
3990000 OTHER TANGIBLE PROPERTY	15.75%	5,588.32	00.00	00.00	5,588.32
3998400 MAINFRAME CPU	26.26%	339,960.96	287,669.14	0.00	627,630.10
3998500 MAINFRAME HARDWARE	15.76%	652,273.61	235,589.27	(688,187.92)	199,674.96
3998600 PC HARDWARE	16.83%	1,641,003.18	479,497.66	(425.25)	2,120,075.59
3998700 PC SOFTWARE	17.73%	614,634.78	132,171.73	0.00	746,806.51
3998800 APPLICATION SOFTWARE	8.22%	7,060,660.30	1,299,416.83	0.00	8,360,077.13
3998900 SYSTEM SOFTWARE	22.16%	2,327,394.42	274,309.23	(387,743.64)	2,213,960.01

\$18,826,676.84

(\$1,084,745.04)

\$3,455,814.45

\$16,455,607.43

TOTALS

17

Weste		rve Balance ∋as Company - Division 09	Investment Balance		Sep-98
Line	Acct.		Actual	Pro-Rata	Allocated
No.	No.	Account Title	Sep-98	Percentage	Reserve Balance
			\$		
1	Account 101	-1000 Gas Plant in Service -			
2		Intangible Plant			
3	301	Organization	8,330		0
4	302	Franchises & Consents	119,853		119,853
5					
6		Total Intangible Plant	128,182		119,853
7					
8		Natural Gas Production Plant			
9	325.2	Producing Leaseholds	2,353		0
10	325.4	Rights of Ways	6,069	0.73%	5,744
11	331	Production Gas Wells Equipment	3,492	0.42%	3,305
12	332.1	Field Lines	47,163	5.70%	44,635
13	332.2	Tributary Lines	528,218	63.81%	499,905
14	334	Field Meas. & Reg. Sta. Equip	198,469	23.98%	187,831
15	336	Purification Equipment	44,369	5.36%	41,991
16					
17		Total Natural Gas Production Plant	830,133	100.00%	783,411
18					
19		Storage Plant			
20	350.1	Land	261,127		0
21	350.2	Rights of Way	4,682	0.10%	3,501
22	351.2	Compression Station Equipment	121,265	2.62%	90,694
23	351.3	Meas. & Reg. Sta. Structures	23,138	0.50%	17,305
24	351.4	Other Structures	144,554	3.13%	108,112
25	352.01	Well Construction	2,172,800	47.00%	1,625,039
26	352.02	Well Equipment	535,976	11.59%	400,857
27	352.1	Leaseholds	178,530	3.86%	133,523
28	352.11	Storage Rights	54,614	1.18%	40,846
29	353.1	Field Lines	178,501	3.86%	133,501
30	353.2	Tributary Lines	209,458	4.53%	156,654
31	354	Compressor Station Equipment	470,685	10.18%	352,026
32	355	Meas & Reg. Equipment	288,851	6.25%	216,032
33	356	Purification Equipment	239,930	5.19%	179,444
34					
35		Total Storage Plant	4,884,111	100.00%	3,457,534
36			•		
37					
38		Transmission Plant			
39	365.1	Land	26,951		0
40	365.2	Rights of Way	403,419	1.77%	259,870
41	366.2	Structures & Improvements	32,921	0.14%	21,207
42	366.3	Other Structues	69,172	0.30%	44,559
43	367	Mains	19,301,056	84.72%	12,433,129
44	369.1	Meas. & Reg. Equipment	2,976,155	13.06%	1,917,145
45					
46		Total Transmission Plant	22,809,675	100.00%	14,675,910
47					

Weste		rve Balance Gas Company - Division 09	Investment Balance		Sep-98
Line No.	Acct. No.	Account Title	Actual Sep-98	Pro-Rata Percentage	Allocated Reserve Balance
			\$		
48	074.4	Distribution Plant			
49 50	374.1	Land Town Border	61,710		0
50 51	374.3	Land Other	2,784	0.000	0
52	374.2	Right of Way	44,872	0.03%	19,224
53	375.1 375.02	Structures & Improvements T.B.	106,376 0	0.07%	45,573
54	375.02	Structures & Improvements Other Improvements	7,518	0.00% 0.00%	0
55	375.2	Land Rights	46,591	0.03%	3,221 19,960
56	376	Mains	68,571,270	45.38%	29,377,006
57	378.1	Meas. & Reg. Sta. Equipment General	1,881,560	1.25%	806,090
58	379.3	Meas & Reg. Sta. Equipment T.b.	1,650,884	1.09%	707,265
59	380	Services	40,476,572	26.79%	17,340,797
60	381	meters	18,009,962	11.92%	7,715,750
61	381.2	V & P Guages	109,524	0.07%	46,922
62	382	Meter Installations	13,197,359	8.73%	5,653,955
63	383	Regulators Service	3,428,992	2.27%	1,469,034
64	383.2	Regulators Relief	481,545	0.32%	206,301
65	384	House Reg. Installations	159,969	0.11%	68,533
66	385.1	Ind. Meas. & Reg. Sta. Equipment	2,931,580	1.94%	1,255,935
67		- , ,			
68		Total Distribution Plant	151,169,066	100.00%	64,735,565
69					, ,
70		General Plant			
71	389.1	Land	44,728		0
72	390.02	Structures & Improvements	182,162	1.10%	90,386
73	390.03	Improvements	64,111	0.39%	31,811
74	390.04	Air Conditioning Equipment	9,771	0.06%	4,848
75	390.05	Total Energy	0	0.00%	0
76	390.09	Improvement to leased Premises	1,377,286	8.29%	683,386
77	391	Office Furniture & Equipment	1,576,086	9.49%	782,028
78	391.83	Office Machines	200,479	1.21%	99,474
79	392.1	Transportation Equipment	6,044,074	36.38%	2,998,969
80	392.2	Trailers	165,970	1.00%	82,352
81	n/a	n/a	0	0.00%	0
82 83	394.77	Tools & Work Equipment Ditchers	3,064,139	18.45%	1,520,375
84	396.93 396.94	Backhoes	853,615 706,023	5.14% 4.25%	423,549 350,317
85	396.95	Welders	92,413	0.56%	45,854
86	397	Communication Equipment - Phones	750,060	4.52%	372,167
87	397.2	Communication Equip Fixed Radios	21,697	0.13%	10.766
88	397.21	Communication Equipment - Mobile Radios	58,023	0.35%	28,790
89	397.22	Communication Equip Telemetering	114,695	0.69%	56,910
90	398	Miscellaneous Equipment	37,073	0.22%	18,395
91	399	Other Tangible Property	0	0.00%	0
92	399.84	Other Tangible Property - CPU	0	0.00%	0
93	399.85	Other Tangible Property - MF Hardware	397,278	2.39%	197,123
94	399.86	Other Tangible Property - PC Hardware	504,426	3.04%	250,288
95	399.87	Other Tang. Property - P.C. Software	185,511	1.12%	92,047
96	399.88	Other Tang. Property - Application Software	206,994	1.25%	102,707
97	399.89	Other Tang. Property - System Software	0		0
98	39x.xx1	Server Hardware	0		0
99	39x.xx2	Server Software	0		0
100	39x.xx3	Network Cost	0		0
101	39x.xx4	Start Up Cost	0		0
102	999	Cushion Gas	1,694,833		0
103 104 105		Total General Plant	18,351,445	100.00%	8,242,541
106		Total Gas Plant in Service	198,172,612		92,014,814

page 1of 2

workpaper wpB-3.1 B 09 REVISED

Western Kentucky Gas Company
Computation of 13 Month Average Reserve Balances
workpaper WP B-3.1 B 09, Base Period, Div. 09 Western Only - REVISED

Base Period October 1, 1998 - Sept. 30, 1999

response to KPSC DR set #2, Item #23a

Western Kentucky Gas Company
Computation of 13 Month Average Reserve Balances
workpaper WP B-3.1 B 09, Base Period, Div. 09 Western Only - REVISED

Base Period October 1, 1998 - Sept. 30, 1999

Line No.	Acct. No.	Account Title	Actual Sep-98	Actual Oct-98	Actual Nov-98	Actual Dec-98	Actual	Actual Feb-99	Actual Mar-99	Budget Anr-99	Budget Mav-99	Budget	Budget Int.99	Budget	Budget	13 Mo. Avg
55	375.20	Land Rights	19.960	20.100	20.238	20.385	20.524	20 664	20.804	20.876	20 948	21 021	21.093	21 165	21 237	20 694
	376.00	Mains	29.377.006	29.582.822	29.785.996	30.001.462	30 207 278	30.294.354	30 482 717	30 682 921	30 883 124	34 083 328	31 283 531	31 483 735	31 683 939	20,55
	378.10	Meas. & Reg. Sta. Equipment General	806.090	811 737	817.312	823 225	828 872	834 520	840 167	845.407	850 647	855 887	861 127	866 367	871 607	830,450
	379.30	Meas & Reg. Sta. TB - City Gate	707,265	712.220	717.111	722 299	727.254	730.475	735 430	739 976	744 522	749 067	753 613	758 159	762,705	735 392
	380.00	Services	17.340.797	17 462 287	17.582.218	17 709 404	17 830 894	17 717 846	17 758 527	17 881 801	18 005 075	18 128 348	18 251 622	18 374 895	18 498 169	17 887 837
	381.00	meters	7,715,750	7 769.807	7.823.170	7 879 761	7 933 818	7 635 811	7 689 868	7 733 418	7 776 968	7 820 519	7 864 069	7 907 520	7 951 170	7 807 827
61	381.20	V & P Guages	46,922	47.251	47.575	47.919	48.248	48.577	48 905	49 166	49.427	49 688	676 67	50.210	50.470	48 793
	382.00	Meter Installations	5,653,955	5,693,567	5.732,670	5.774.139	5.813.751	5.787.592	5.824,911	5.873.844	5 922 776	5.971.709	6 020 642	6.069.575	6 118 508	5 865 972
	383.00	House Regulators Service	1,469,034	1,479,326	1,489,486	1,500,260	1,510,553	1.520.845	1.531,137	1,538,929	1,546,721	1.554.513	1.562.304	1.570.096	1.577.888	1.527.007
	383.20	Regulators Relief	206.301	207.747	209.173	210.686	212 132	213.577	215.023	216.081	217 140	218 198	219 257	220.315	221 374	214 385
	384.00	House Reg. Installations	68.533	69,013	69.487	066.69	70.470	70.950	71.430	71 753	22.025	72,132	22,272	73.041	73.363	71 171
	385.10	Ind. Meas. & Reg. Sta. Equipment	1,255,935	1,264,734	1,273,420	1,282,632	1,291,431	1,300,230	1,309,029	1,317,061	1,325,093	1,333,126	1.341,158	1.349.190	1.357.222	1.307.712
29																
89		Total Distribution Plant	64,735,565	65,189,002	65,636,619	66,111,312	66,564,749	66,244,192	66,597,073	67,040,565	67,484,057	67,927,548	68,371,040	68,814,532	69,258,024	66,921,098
69																
20		General Plant														
	389.10	Land	0	0	0	0	0	0	C	C	C	C	c	C	-	c
	390.02	Structues & Improvements	90.386	90 708	91.030	91.352	91 674	91 996	92.318	92 858	93.399	03 940	94 481	95 02	05.563	92 671
	390.03	Improvements	31 811	32 093	32,375	32,657	32 939	33 224	33 504	33 448	33 303	33 337	33 281	33,225	33,470	32.058
74 3	390.04	Air Conditioning Foreignment	4 848	4 880	4 912	V 944	7 976 A 976	5,00	100,00	25,740	5 402	5,55	5.165	33,223	33,170	32,336
	390.05	Total Energy	2	90	, i	F	6,5	90,	,	- 6	3	5	5	96.4	7776	600,0
75	300.00	Improvement to forced Denmises	000 000	000	001	001100	0 00	0 000	0 000	0 00	0 00 101	0 000	0,000	0 170	0 1 000	0 6
	204.00	Control Office Time of Times	000,000	000,000	504,130	064,130	084,130	780,812	780,498	792,202	c06'/6/	803,609	809,312	CL0,CL8	820,73	(22,789
. 02	201.00	Centeral Onice rum & Equipment	/82,028	111,787	/92,360	/97,443	802,526	806,145	811,228	817,127	823,026	828,926	834,825	840,724	846,624	813,084
	20.00	Cinice Machines - Cupiers & Typewriters	99,4/4	621,001	9///001	724,101	102,078	102,729	103,380	104,022	104,664	105,307	105,949	106,591	107,233	103,366
	332.10	Transportation Equipment	2,998,969	3,035,745	3,072,523	3,109,300	3,146,077	3,169,337	3,206,114	3,258,510	3,310,906	3,363,301	3,415,697	3,468,093	3,520,489	3,236,543
9 5	92.20		82,352	83,361	84,371	85,381	86,391	87,401	88,411	89,852	91,293	92,734	94,175	95,616	92,056	89,107
	1 2 2	103	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7.4.00	l bols & Work Equipment	1,520,375	1,531,765	1,543,162	1,554,552	1,565,949	1,573,039	1,584,429	1,595,870	1,607,311	1,618,753	1,630,194	1,641,635	1,653,076	1,586,162
	390.93	Uitchers	423,549	425,758	427,960	430,169	432,371	412,914	415,123	419,218	423,312	427,407	431,501	435,595	439,690	426,505
	396.94	Hackhoes	350,317	351,459	352,601	353,743	354,885	356,027	357,169	361,287	365,405	369,522	373,640	377,758	381,876	361,976
	396.95	Welders	45,854	46,012	46,170	46,328	46,486	46,644	46,802	47,332	47,863	48,393	48,924	49,454	49,985	47,403
	397.00	Communication Equipment - Phones	372,167	381,375	381,375	385,979	390,583	392,842	397,446	403,392	409,337	415,283	421,229	427,175	433,121	400,870
	397.20	Communication Equip Fixed Radios	10,766	10,893	11,020	11,147	11,274	11,401	11,528	11,656	11,784	11,912	12,040	12,168	12,295	11,529
	397.21	Communication Equipment - Mobile Radios	28,790	29,161	29,532	29,903	30,274	30,645	31,016	31,359	31,702	32,045	32,388	32,731	33,074	30,971
	397.22	Communication Equip Telemetering	56,910	57,415	57,919	58,424	58,929	59,434	59,939	60,782	61,624	62,467	63,310	64,153	64,996	60,485
	398.00	Miscellaneous Equipment	18,395	19,143	19,143	19,517	19,891	20,265	20,639	21,012	21,385	21,758	22,131	22,504	22,877	20,666
	399.00	Other Tangible Property	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	399.84	Other Tangible Property - MF CPU	0	0	0	0	0	0	0	0	0	0	0	0	0	0
93 36	399.85	Other Tangible Property - MF Hardware	197,123	199,044	208,364	210,285	212,206	214,127	216,048	219,613	223,178	226,743	230,308	233,873	237,438	217,565
	399.86	Other Tangible Property - PC Hardware	250,288	257,206	264,124	271,042	277,960	284,878	291,796	338,627	385,457	432,288	479,119	525,950	572,780	356,270
	399.87	Other Tang. Property - P.C. Software	92,047	92,478	92,909	93,340	93,771	94,202	94,633	102,527	110,420	118,314	126,207	134,101	141,994	106,688
	339.88	Other Tang. Property - Application Software	102,707	104,097	105,487	106,877	108,267	109,657	111,047	180,473	249,898	319,324	388,750	458,175	527,601	220,951
	399.89	Other Tang. Property - MF System Software	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	39x.xx1	Server Hardware	0	0	0	0	0	0	0	7,650	15,301	22,951	30,601	38,252	45,902	12,358
	39x.xx2	Server Software	0	0	0	0	0	0	0	2,510	5,019	7,529	10,039	12,548	15,058	4,054
_	39x.xx3	Network Cost	0	0	0	0	0	0	0	3,652	7,304	10,956	14,608	18,260	21,912	5,899
	39x.xx4	Start Up Cost	0	0	0	0	0	0	0	36,504	73,007	109,511	146,014	182,518	219,021	28,967
	00.666	Cushion Gas	0	0	0	0	0	0	0	0	0	0	0	0	0	0
103							:								,	
\$ 5		Total General Plant	8,242,541	8,323,216	8,402,251	8,477,948	8,553,645	8,682,723	8,764,107	9,036,552	9,308,997	9,581,442	9,853,887	10,126,332	10,398,777	9,057,878
5 5						!										
g E		Total Plant	92,014,814	92,613,386	93,204,498	93,819,348	94,412,942	94,285,923	94,784,648	95,564,631	96,344,615	97,124,598	97,904,581	98,684,565	99,464,548	95,401,777

workpaper wpB-3.1 F 09 REVISED

Western Kentucky Gas Company
Computation of 13 Month Average Reserve Balances
workpaper WP B-3.1 F 09, Forecasted Test Period, Div. 09 Western Only - REVISED
13 Month Avg. - Forecasted Period ended December 31, 2000

response to KPSC DR set #2, Item # 23a.

\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	00 Ap	oo kuu						25	200	
119,863 119,864 113,280 113,280 113,512 113,745 113,977 113,280 113,280 113,512 113,745 113,977 113,280 113,280 113,512 113,745 113,977 113,280 113,280 113,282 140,081 1140,196 1140,191 1140,196 1140,191 1140,196 1140,191 1140,196 1140,191 1140,196 1140,191 1140,196 1140,191 1140,196 1140,191 1140,196 1140,191 1140,196 119,280 1142,883 1142,988 1142,889 113,720,284 113,720,289 119,240 119,240 119,1200 119,200 119,240 1	.	ss.	ss.	••	ss.	6 4	∽		s	€9
Producing bearings	0 0 119,853 119,853	0 119,853	0 119,853	0 119,853	0 119,853	0 119,853	0 119,853	0 119,853	0 119,853	0 119,853
Production Plant 0	119,853 119,853	119,853	119,853	119,853	119,853	119,853	119,853	119,853	119,853	119,853
Production (easeholds)										
Signate Plant Signate Plant Signate of Mayers Signate of M			0	0	0	0	0	0	0	0
Production Case Weisis Equipment 3,372 3			5,744	5,744	5,744	5,744	5,744	5,744	5,744	5,744
Feeld Mease & Reg. Sta. Equip 45,484 41,991 41,99			3,372	3,372	3,372	3,372	3,372	3,372	3,372	3,372
Field Mass. & Rep. Sta. Equip 191,651 204,413 20		45,484	45,484	45,484	45,484	45,484	45,484	45,484	45,484	45,484
Purification Equipment			509,413	191651	509,413 191,651	191 651	509,413	509,413	509,413	509,413
Total Natural Gas Production Plant	_	41,991	41,991	41,991	41,991	41,991	41,991	41,991	41,991	41,991
Storage Plant	797,655 797,655	797,655	797,655	797,655	797,655	797,655	797,655	797,655	797,655	797,655
Bayes of Way 3,555 3,556										
State		0	0	0	0	0	0	0	0	0
Mease & Reg. Equipment 19,007 20,008 37,008 30,008 13,008 10,008		3,573	3,577	3,580	3,584	3,587	3,591	3,595	3,598	3,577
Other Structures Well Construction Well Equipment Vest Equi	95,624 95,620	35,016 18 318	35,212 18 356	95,405 18 393	90,504 18.430	96,799 18,467	96,995 18 505	18,191	97,387	30,212 18 356
Well Construction 1,757,435 1,762,242 1,777,156 1, 1,771,156	-	-	114,675	114,907	115,140	115,372	115,605	115,837	116,070	114,675
Well Equipment 444,529 445,638 447,148 448,489 Leaseholds 40,061 140,106 140,151 140,195 Storage Rights 42,396 142,683 142,988 143,036 Field Lines 142,398 142,988 143,036 Tributary Lines 166,261 166,518 166,776 167,034 Compressor Station Equipment 230,619 231,144 231,610 232,106 Meas & Reg. Equipment 190,720 190,980 191,240 191,500 Purification Equipment 264,609 264,808 265,108 265,407 Rights of Way 264,609 264,808 265,108 265,407 Stoructures & Improvements 21,707 21,746 21,784 21,822 Other Stuctures 45,908 46,908 46,148 18,444 Mears & Reg. Equipment 2,020,651 2,026,343 2,032,034 2,037,726 Total Production Plant - LPG 15,372,944 15,399,623 15,426,313 15,452,997 1 <td< td=""><td>+</td><td>_</td><td>1,786,876</td><td>1,791,783</td><td>1,796,690</td><td>1,801,597</td><td>1,806,504</td><td>1,811,411</td><td>1,816,318</td><td>1,786,876</td></td<>	+	_	1,786,876	1,791,783	1,796,690	1,801,597	1,806,504	1,811,411	1,816,318	1,786,876
Storage Rights		441,078	442,387	443,697	445,007	446,317	447,627	448,937	450,246	442,387
Field Lines Field	140,195 140,240	140,285	140,329	140,374	140,419	140,463	140,508	140,552	140,597	140,329
Tributary Lines Compressor Station Equipment Compressor Station Equipment Sand States Stat	•	143.872	144.166	144 461	144 755	145,050	145.344	45,702	145 934	144 166
Compressor Station Equipment 376,619 377,212 377,804 378,396 Meas & Reg. Equipment 190,720 190,980 191,240 191,500 Transmission Equipment Transmission Plant Land 0 0 0 0 0 Rights of Way 284,509 264,808 265,108 265,407 26,407 Shortcures & Improvements 21,707 21,746 21,784 21,822 0 Other Structures 45,908 45,908 46,068 265,407 1,822 Mains Mains 13,000,168 13,040,744 13,061,319 13,081,894 1 Meas. & Reg. Equipment 2,020,651 2,026,343 2,032,034 2,037,726 15,452,997 1 Land Town Border 0 0 0 0 0 0 0 Land Other 19,701 19,789 15,426,313 15,452,997 1 1 Land Other 0 0 0 0 0		167,549	167,806	168,064	168,321	168,579	168,836	169,094	169,352	167,806
Meas & Reg. Equipment 220,619 221,114 221,610 222,106 Purification Equipment 190,720 190,980 191,240 191,500 Transmission Plant Land Rights of Way 284,509 264,808 265,108 265,407 Shructures & Improvements 21,707 21,746 21,784 21,822 Other Structures & Ingrovements 13,020,168 13,040,744 13,061,319 13,081,894 Meas. & Reg. Equipment 2,020,631 2,026,343 2,032,034 2,037,726 Land Town Border 0 0 0 0 0 Land Town Border 0 0 0 0 0 Land Other 0 0 0 0 0 0 Land Other 19,791 19,783 19,829 19,889 Structures & Improvements 18,791 19,783 19,889 Structures & Ingrediate 19,791 19,783 19,889 Structures & Ingrediate 19,791 19,783 19,889 Structures & Ingrediate 19,791 19,783 19,889		379,581	380,173	380,765	381,358	381,950	382,542	383,134	383,727	380,173
Transmission Plant	•	233,098	233,594	234,090	234,585	235,081	235,577	236,073	236,569	233,594
Transmission Plant	191,500 191,760	192,020	192,280	192,540	192,800	193,060	193,320	193,579	193,839	192,280
Transmission Plant 0 0 0 0 0 0 1 0	3,737,636 3,746,350	3,755,064	3,763,778	3,772,491	3,781,205	3,789,919	3,798,633	3,807,347	3,816,061	3,763,778
Rights of Way 264,509 264,108 265,108 265,407 Structures & Improvements 21,707 21,746 21,784 21,822 Other Structures 45,908 45,908 46,068 46,148 Mains 13,020,168 13,040,744 13,061,319 13,081,894 13, Meass. & Reg. Equipment 2,020,651 2,026,343 2,032,034 2,037,726 2, Total Production Plant - LPG 15,372,944 15,399,628 15,426,313 15,452,997 15, Land Town Border 0 0 0 0 0 0 Right of Way 19,701 19,763 19,889 19,889 19,889 Structures & Improvements TB 19,703 10,704,705 19,704 19,703 19,704		•	ć	<	•	•	¢	c	¢	•
Structures Any Programments 21,707 21,746 203,140 203,401 21,822 21,707 21,746 203,140 203,401 21,822 21,707 21,746 45,988 46,088 46,148 46,148 45,908 45,908 45,908 46,088 46,148 13,020,168 13,020,168 13,040,744 13,061,319 13,081,894 13, 104al Production Plant LPG 15,372,944 15,399,628 15,426,313 15,452,997 15, 12and Other 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0	0 250	0 305	0 356	0 220	0 252	0 267	0 257	268 400	0 305
Other Structues As 508 As 668 As 66		21.898	21 936	21 974	22.013	20,702	22,089	201,601	22 165	21 936
Mains 13,020,168 13,040,744 13,061,319 13,081,894 13,11 Meass. & Reg. Equipment 2,020,651 2,026,343 2,032,034 2,037,726 2,0 Total Production Plant - LPG 15,372,944 15,399,628 15,426,313 15,452,997 15,4 Land Town Border 0 0 0 0 0 0 Right of Way 19,701 19,763 19,889 19,889 19,889		46,308	46,388	46,468	46,549	46,629	46,709	46,789	46,869	46,388
Total Production Plant - LPG 15,372,944 15,399,628 15,426,313 15,452,997 15,4 Distribution Plant 0<	3,081,894 13,102,470 2,037,726 2,043,418	13,123,045 2,049,109	13,143,620 1: 2,054,801	13,164,196 2,060,493	13,184,771 2,066,185	13,205,346 2,071,876	13,225,922 2,077,568	13,246,497 2,083,260	13,267,073 2,088,951	13,143,620 2,054,801
Distribution Plant 0 0 0 0 Land Town Border 0 0 0 0 Land Other 0 0 0 0 Sight of Way 19,701 19,785 19,889 Shinchrote & Innovaments TB 48 DS 48 DS	5,452,997 15,479,682	15,506,366	15,533,051	15,559,735	15,586,420	15,613,104	15,639,789	15,666,473	15,693,158	15,533,051
Land Other 0 0 0 0 0 0 0 8 1 1 1 1 1 1 1 1 1 1 1 1	0	0	0	0	0	0	0	0	0	0
Right of Way 19,701 19,763 19,826 19,889 Shrinkinge & Innoversaments T.B. AB 050 AB 242 AB 45 AB 527		0	0	0	0	0	0	0	0	0
		20,015	20,077	20,140	20,203	20,266	20,329	20,392	20,454	20,077
Stuckness & improvements 0ther 0 · 40,009 40,242 40,413 40,307	48,58/ 48,76U 0 0	48,933 0	49,106 0	49,279	49,452	49,625	49,798	49,970	50,143	49,106 0
Improvements 3,478 3,490 3,503 3,515	3,515 3,527	3,539	3,551	3,564	3,576	3,588	3,600	3,613	3,625	3,551

Westem Kentucky Gas Company
Computation of 13 Month Average Reserve Balances
workpaper WP B-3.1 F 09, Forecasted Test Period, Div. 09 Westem Only - REVISED
13 Month Avg. - Forecasted Period ended December 31, 2000

375.20 Land Kignis 376.00 Mains 376.00 Mains 378.10 Meas. & Reg. Sta. Equipment General 379.30 Meas & Reg. Sta. Equipment T.b. 380.00 Services 381.00 meters 381.00 meters 382.00 Meter Installations 382.00 Meter Installations 383.00 Regulators Service 383.00 Regulators Relief 384.00 House Reg. Installations 385.01 Ind. Meas. & Reg. Sta. Equipment	21,556 32,319,036 889,818	21,632 32,468,505 894,723	21,707	21,783	21,859	21,935	010,22	22,086	22,162	72,237	22,313	72.389	45	1
	32,319,036 889,818	32,468,505 894,723		***	32 016 011		*******						C04,22	22,010
	889,818	894,723	32,617,974	32,767,443	10,010,00	33,066,380	33,215,849	33,365,318	33,514,787	33,664,255	33,813,724	33,963,193	34,112,662	33,215,849
			899,627	904,531	909,436	914,340	919,245	924,149	929,053	933,958	938,862	943,766	948,671	919,245
380.00 Services 381.00 meters 381.02 V & P Cauges 382.00 Meter installations 383.00 Regulators Service 383.02 Regulators Relief 384.00 House Reg. Installations 385.01 Ind. Meas. & Reg. Sta. Equipment	778,160	782,266	786,372	790,478	794,584	798,689	802,795	806,901	811,007	815,113	819,219	823,325	827,431	802,795
381.00 meters 381.02 V & P Gauges 381.02 V Meter installations 382.00 Meter installations 383.00 Regulators Service 383.02 Regulators Relief 384.00 House Reg. installations 385.01 Ind. Meas. & Reg. Sta. Equipment	18,884,933	19,147,069	19,409,206	19,671,342	19,933,479	20,195,615	20,457,751	20,719,888	20,982,024	21,244,161	21,506,297	21,768,433	22,030,570	20,457,751
381.02 V & P Gauges 382.00 Meter installations 383.00 Regulators Service 383.02 Regulators Relief 384.00 House Reg. Installations 385.01 Ind. Meas. & Reg. Sta. Equipment	8,104,773	8,158,922	8,213,071	8,267,220	8,321,368	8,375,517	8,429,666	8,483,815	8,537,964	8,592,112	8,646,261	8,700,410	8,754,559	8,429,666
382.00 Meter installations 383.00 Regulators Service 383.02 Regulators Relief 384.00 House Reg. Installations 385.01 Ind. Meas. & Reg. Sta. Equipment	51,357	51,663	51,969	52,275	52,581	52,886	53,192	53,498	53,804	54,109	54,415	54,721	55,027	53,192
383.00 Regulators Sarvice 383.02 Regulators Relief 384.00 House Reg. Installations 385.01 Ind. Meas. & Reg. Sta. Equipment	6,256,606	6,293,735	6,330,865	6,367,994	6,405,124	6,442,253	6,479,383	6,516,512	6,553,641	6,590,771	6,627,900	6,665,030	6,702,159	6,479,383
383.02 Regulators Relief 384.00 House Reg. Installations 385.01 Ind. Meas. & Reg. Sta. Equipment	1 606 353	1,615,220	1.624.088	1,632,955	1,641,823	1,650,691	1,659,558	1,668,426	1.677.293	1,686,161	1.695.028	1,703,896	1,712,764	1,659,558
384.00 House Reg. Installations 385.01 Ind. Meas. & Reg. Sta. Equipment	225 142	226 285	227 429	228 573	229 716	230 860	232.004	233.147	234.291	235 435	236.578	237 722	238.866	232.004
385.01 Ind. Meas. & Reg. Sta. Equipment	74 596	75.063	75 531	75 998	76.465	76 933	77 400	77 867	78.334	78 802	79.269	79 736	80.204	77.400
	1,383,583	1,390,889	1,398,196	1,405,502	1,412,809	1,420,115	1,427,421	1,434,728	1,442,034	1,449,341	1,456,647	1,463,953	1,471,260	1,427,421
•														
ı	70,667,160	71,197,468	71,727,777	72,258,085	72,788,393	73,318,701	73,849,009	74,379,317	74,909,625	75,439,933	75,970,242	76,500,550	77,030,858	73,849,009
General Plant														
	0	0	0	0	0	0	0	0	0	0	0	0	0	
390.02 Structures & Improvements	97,241	97,800	98,360	98,919	99,479	100,038	100,597	101,157	101,716	102,275	102,835	103,394	103,953	100,597
390.03 Improvements	33,510	33,623	33,736	33,849	33,963	34,076	34,189	34,302	34,416	34,529	34,642	34,755	34,869	34,189
390.04 Air Conditioning Equipment	5,321	5,338	5,356	5,373	5,390	5,407	5,425	5,442	5,459	5,477	5,494	5,511	5,528	5,425
390.05 Total Energy	0	0	0	0	0	0	0	0	0	0	0	0	0	
390.09 Improvement to leased Premises	838,180	844,037	849,895	855,753	861,611	867,469	873,326	879,184	885,042	890,900	896,758	902,615	908,473	873,32
	864,641	875,590	886,539	897,488	908,436	919,385	930,334	941,283	952,231	963,180	974,129	985,078	996,026	930,334
391.83 Office Furn - Copiers & Typewriters	109,172	110,350	111,528	112,706	113,884	115,062	116,239	117,417	118,595	119,773	120,951	122,128	123,306	116,239
392.00 Transportation Equipment	3,654,365	3,699,293	3,744,221	3,789,148	3,834,076	3,879,004	3,923,931	3,968,859	4,013,786	4,058,714	4,103,642	4,148,569	4,193,497	3,923,931
	100,733	101,966	103,200	104,434	105,668	106,901	108,135	109,369	110,602	111,836	113,070	114,303	115,537	108,135
	0	0	0	0	0	0	0	0	0	0	0	0	0	_
	1,687,405	1,695,812	1,704,219	1,712,625	1,721,032	1,729,438	1,737,845	1,746,251	1,754,658	1,763,065	1,771,471	1,779,878	1,788,284	1,737,845
	449,229	451,214	453,198	455,183	457,168	459,152	461,137	463,122	465,106	467,091	469,076	471,060	473,045	461,137
	389,766	391,407	393,049	394,690	396,332	397,973	399,615	401,256	402,898	404,539	406,181	407,822	409,464	399,615
	51,017	51,232	51,447	51,662	51,877	52,092	52,306	52,521	52,736	52,951	53,166	53,381	53,596	52,306
	452,696	457,675	462,654	467,632	472,611	477,590	482,569	487,547	492,526	497,505	502,484	507,462	512,441	482,56
	12,705	12,830	12,954	13,078	13,203	13,327	13,452	13,576	13,700	13,825	13,949	14,074	14,198	13,452
	34,277	34,573	34,869	35,165	35,461	35/58	36,054	36,350	36,646	36,942	37,239	37,53	1,831	30,034
	67,017	6/,515	68,013	68,511	600'69	/05/69	500,07	70,503	100,17	71,499	/86,L/	72,495	72,993	00,00
	23,998	24,336	24,674	25,012	25,350	25,688	26,026	26,354	26,702	27,040	27,378	21,72	28,053	70,02
	0 (0 (5 (5	o (o (-	-	o (0 0	> 0	-	-	
) ; ·	0 00	0 100	7	0 00	0.000	0 000	0 50	2 20	0 10 010	0 770	0 00	0 207	11
399.00 Other Langible Property - Mr Hardware	247,409	247,803	248,197	248,591	246,985	249,379	249,73	701,102	196,062	230,333	646,162	201,/43	232,137	243,113
399.00 Other rangible Property - P.C. Hardware	718,458	762,104	805,739	849,373	420,011	330,040	390,262	1,023,917	404,000	601,111,1	1,134,624	1,135,450	342,036	300,202
	128,239	162,834	107,429	172,024	610'0/1	181,214	600,000	904,08	184,889	199,394	504,109	500,004	6/6/617	00,001
399.88 Other Lang. Property - Application Software	775,383	901,076	1,026,769	1,152,462	1,278,155	1,403,848	1,529,541	1,655,233	1,780,926	1,906,619	2,032,312	2,158,005	2,283,698	1,529,541
399.89 Other Lang. Property - System Software	0	0	O ::	0 ;	0 !	0	0 00	0	0	0 00	0	0	0 00	
39x.xx1 Server Hardware	70,766	79,053	87,341	95,629	103,917	112,205	120,493	128,781	13/,068	145,356	153,544	161,932	077,071	120,493
39x.xx2 Server Software	23,214	25,933	28,652	31,371	34,090	36,808	39,527	42,246	44,965	47,684	50,402	53,121	55,840	39,527
39x.xx3 Network Cost	33,781	37,738	41,694	45,650	49,607	53,563	57,519	61,4/6	65,432	69,388	73,345	//,301	81,25/	(C')C
39x.xx4 Start Up Cost	337,658	377,203	416,749	456,294	495,840	535,385	574,931	614,476	654,022	693,567	733,113	772,658	812,204	5/4,931
999.00 Cushion Gas	0	0	0	0	0	0	0	0	0	0	0	0	0	9
Total General Plant	11,236,192	11,548,337	11,860,481	12,172,625	12,484,770	12,796,914	13,109,059	13,421,203	13,733,348	14,045,492	14,357,637	14,669,781	14,981,926	13,109,059
- 12 (a) - 1	100 100	400 700 440	000 604	404 520 054	405 446 700	033 700 307	407 477 404	100 000 000	100 000 100	100 005 057	440 602 000	111 561 550	140 400 544	107 179 404

Jurisdictional Depreciation Expense, Accum. Reserve & Accrual Rates by Account Base Period Ended September 30, 1999

Data: _X_ Base Period ___ Forecasted Period
Type of Filing: ___ Original ___ Updated _X_ Revised
Workpaper Reference No(s).: Sched. B-3 & wp B-3.2

FR 10(10)(b)3.2 Schedule B-3.2 Page 1 of 6 Witness:

			Total Com	pany Adjusted Juris	sdiction	Annual
Line	Acct.		13 month a	verage	12 Month	Accrual
No.	No.	Account Titles	Investment	Reserve	Expense	Rate
(A)	(B)	(C)	(D)	(E)	(F)	(G)
1		Intangible Plant				
2	301.00	Organization	8,330	0	0	Amort
3	302.00	Franchises & Consents	119,853	119,853	0	Amort
4						
5		Total Intangible Plant	128,182	119,853	0	
6						
7		Natural Gas Production Plant				
8	325.20	Producing Leaseholds	2,353	0	0	0.00%
9	325.40	Rights of Ways	6,069	5,744	0	0.00%
10	331.00	Production Gas Wells Equipment	3,492	3,331	51	1.53%
11	332.10	Field Lines	47,163	44,969	648	1.44%
12	332.20	Tributary Lines	528,218	503,644	7,260	1.44%
13	334.00	Field Meas. & Reg. Sta. Equip	198,469	189,289	2,917	1.54%
14		Purification Equipment	44,369	42,133	0	0.00%
15		. ,				
16		Total Natural Gas Production Plant	830,133	789,110	10,877	
17						
18		Storage Plant				
19	350.10	Land	261,127	0	0	0.00%
20	350.20	Rights of Way	4,682	3,524	41	0.92%
21	351.20	Compression Station Equipment	121,402	92,856	3,314	2.86%
22	351.30	Meas. & Reg. Sta. Structues	23,138	17,718	632	2.86%
23	351.40	Other Structures	144,554	110,688	3,946	2.86%
24	352.01	Well Construction	2,180,995	1,675,569	101,174	4.86%
25	352.20	Well Equipment	547,827	413,450	25,413	4.86%
26	352.10	Leaseholds	178,530	136,738	4,993	2.93%
27	352.11	Storage Rights	54,614	41,830	1,527	2.93%
28	353.10	Field Lines	190,173	137,146	6,517	3.59%
29	353.20	Tributary Lines	212,186	160,825	7,271	3.59%
30	354.00	Compressor Station Equipment	470,685	362,087	18,779	4.18%
31	355.00	Meas & Reg. Equipment	288,851	222,097	11,139	4.04%
32		Purification Equipment	239,930	184,301	8,611	3.76%
33		• •	·		· · · · · · · · · · · · · · · · · · ·	
34			4,918,694	3,558,829	193,356	

Jurisdictional Depreciation Expense, Accum. Reserve & Accrual Rates by Account Base Period Ended September 30, 1999

Data: _X_ Base Period ___ Forecasted Period
Type of Filing: ___ Original ___ Updated _X_ Revised
Workpaper Reference No(s).: Sched. B-3 & wp B-3.2

FR 10(10)(b)3.2 Schedule B-3.2 Page 2 of 6 Witness:

			Total Com	pany Adjusted Juris	sdiction	Annual
Line	Acct.		13 month a	verage	12 Month	Accrual
No.	No.	Account Titles	Investment	Reserve	Expense	Rate
(A)_	(B)	(C)	(D)	(E)	(F)	(G)
		Transmission Plant				······································
1	365.10	Land	26,951	0	0	0.00%
2	365.20	Rights of Way	403,419	261,725	3,543	0.92%
3	366.20	Structures & Improvements	23,859	21,496	355	1.56%
4	366.30	Other Structues	69,172	45,246	1,030	1.56%
5	367.00	Mains	19,310,530	12,670,085	447,895	2.43%
6	369.10	Meas. & Reg. Equipment	2,962,806	1,956,457	78,901	2.79%
7		- , ,				•
8		Total Production Plant - LPG	22,796,738	14,955,009	531,724	
9			, ,	,,	551,121	
10		Distribution Plant				
11	374.10	Land Town Border	61,836	0	0	0.00%
12	374.30	Land Other	2,784	0	0	0.00%
13	374.20	Right of Way	44,872	19,415	364	0.85%
14	375.10	Structures & Improvements T.B.	106,376	46,541	2,782	2.74%
15	375.02	Structures & Improvements Other	0	0	0	2.749
16	375.03	Improvements	7,518	3,339	197	2.749
17	375.20	Land Rights	46,591	20,694	1,219	2.74%
18	376.00	Mains	69,803,621	30,525,555	2,331,964	3.50%
19	375.10	Meas. & Reg. Sta. Equipment General	1,967,476	839,459	62,536	3.33%
20	379.30	Meas & Reg. Sta. Equipment T.b.	1,691,528	735,392	54,572	3.38%
21	380.00	Services	42,077,687	17,887,837	1,405,710	3.50%
22	381.00	meters	18,132,215	7,807,827	560,753	3.249
23	381.02	V & P Gauges	109,524	48,793	3,387	3.249
24	382.00	Meter Installations	13,621,909	5,865,972	508,383	3.919
25	383.00	Regulators Service	3,477,781	1,527,007	103,902	3.139
26		Regulators Relief	481,545	214,385	14,387	3.139
27		House Reg. Installations	160,998	71,171	4,610	3.009
28		Ind. Meas. & Reg. Sta. Equipment	2,970,314	1,307,712	96,679	3.419
29		•••				
30			154,764,573	66,921,098	5,151,445	

Jurisdictional Depreciation Expense, Accum. Reserve & Accrual Rates by Account Base Period Ended September 30, 1999

Data: _X_ Base Period ___ Forecasted Period

Type of Filing: ___ Original ___ Updated _X_ Revised

Workpaper Reference No(s): Sched_B-3 & wp B-3 2

FR 10(10)(b)3.2 Schedule B-3.2 Page 3 of 6

Workpaper Reference No(s).: Sched. B-3 & wp B-3.2			Schedule B-3.2				
No. A			Total Company Adjusted Jurisdiction			Annual	
_ine	Acct.	A	13 month a		12 Month	Accrual	
No.	No.	Account Titles	Investment	Reserve	Expense	Rate	
(A)	(B)	(C)	(D)	(E)	(F)	(G)	
		General Plant					
1	389.10	Land	44,728	0	0	0.00%	
2	390.02	Structures & Improvements	244,220	92,671	4,942	2.12%	
3	390.03	Improvements	64,111	32,958	1,297	2.129	
4	390.04	Air Conditioning Equipment	9,771	5,039	361	3.87%	
5	390.05	Total Energy	0	0	0	0.00%	
6	390.09	Improvement to leased Premises	2,389,182	1,008,493	65,948	5.00%	
7	391.00	General Office Equipment	2,296,800	1,063,548	63,055	3.87%	
8		General Office Equipment	15,691	12,847	0	0.00%	
9		Office Furn - Copiers & Typewriters	389,359	262,804	7,406	3.87%	
10		Transportation Equipment	6,048,032	3,241,760	510,694	8.86%	
11		Trailers	165,970	89,107	14,036	8.86%	
12	393.00	n/a	0	0	0	0.00%	
13		Tools & Work Equipment	3,071,424	1,593,002	130,768	4.479	
14		Ditchers	845,786	426,505	36,086	4.479	
15	396.94	Backhoes	706,023	361,976	30,123	4.47%	
16		Welders	92,413	47,403	3,943	4.479	
17		Communication Equipment - Phones	1,032,385	509,103	60,419	7.05%	
18		Communication Equip Fixed Radios	21,697	11,529	1,460	7.05%	
19		Communication Equipment - Mobile Radios	60,768	30,971	4,089	7.05%	
20		Communication Equip Telemetering	114,695	60,485	7,718	7.05%	
21		Miscellaneous Equipment	145,042	49,584	4,278	12.099	
22		Other Tangible Property	10,271	62,799	0	0.009	
23		Other Tangible Property - CPU	182,472	128,503	Ö	0.009	
24		Other Tangible Property - MF Hardware	596,748	266,176	38,481	10.049	
25		Other Tangible Property - PC Hardware	2,194,113	810,384	307,819	20.609	
26		Other Tang. Property - P.C. Software	410,794	244,532	47,674	20.609	
27		Other Tang. Property - Application Software	9,044,627	1,868,224	405,562	8.229	
28		Other Tang. Property - System Software	466,628	404,490	0	0.00	
29		Server Hardware	321,217	12,358	43,813	14.299	
30		2 Server Software	105,374	4,054	14,373	14.299	
31		Network Cost	153,339	5,899	20,915	14.299	
32		Start Up Cost	2,629,307	58,967	209,056	8.33%	
33		Cushion Gas	1,694,833	0	0	0.00	
34	222.00		1,557,566			3.00	
35		Total General Plant	35,567,821	12,766,173	2,034,315		
36		. 5.5 5.16.61 16.16	00,007,021	12,100,110	2,007,010		
37		Total Plant	219,006,142	99,110,071	7,921,717		
					.,,.		

Jurisdictional Depreciation Expense, Accum. Reserve & Accrual Rates by Account Forecasted Period ended December 31, 2000

Data: ___ Base Period _X_ Forecasted Period
Type of Filing: ___ Original ___ Updated _X_ Revised
Workpaper Reference No(s).: Sched. B-3 & wp B-3.2

FR 10(10)(b)3.2 Schedule B-3.2 Page 4 of 6 Witness:

Line	Acct.		Total Com	Total Company Adjusted Jurisdiction		
			13 Month Avg.		12 Month	Accrual
No.	No.	Account Titles	Investment	Reserve	Expense	Rate
(A)	(B)	(C)	(D)	(E)	(F)	(G)
1		Intangible Plant				
2	301.00	Organization	8,330	0	0	Amort
3	302.00	Franchises & Consents	119,853	119,853	0	Amort
4						
5		Total Intangible Plant	128,182	119,853	0	
6						
7		Natural Gas Production Plant				
8	325.20	Producing Leaseholds	2,353	0	0	0.00%
9	325.40	Rights of Ways	6,069	5,744	0	0.00%
10	331.00	Production Gas Wells Equipment	3,492	3,372	0	0.00%
11	332.10	Field Lines	47,163	45,484	0	0.00%
12	332.20	Tributary Lines	528,218	509,413	0	0.00%
13	334.00	Field Meas. & Reg. Sta. Equip	198,469	191,651	0	0.00%
14	336.00	Purification Equipment	44,369	41,991	0	0.00%
15						
16		Total Natural Gas Production Plant	830,133	797,655	0	
17						
18		Storage Plant				
19	350.10	Land	261,127	0	0	0.00%
20	350.20	Rights of Way	4,682	3,577	41	0.92%
21	351.20	Compression Station Equipment	121,774	96,212	2,243	1.93%
22	351.30	Meas. & Reg. Sta. Structues	23,138	18,356	426	1.93%
23	351.40	Other Structures	144,554	114,675	2,663	1.93%
24	352.01	Well Construction	2,172,800	1,786,876	56,204	2.71%
25	352.20	Well Equipment	579,991	442,387	15,003	2.71%
26	352.10	Leaseholds	178,530	140,329	511	0.30%
27	352.11	Storage Rights	54,614	43,346	954	1.83%
28	353.10	Field Lines	261,841	144,166	3,374	1.35%
29	353.20	Tributary Lines	228,934	167,806	2,950	1.35%
30	354.00	Compressor Station Equipment	470,685	380,173	6,784	1.51%
31	355.00	Meas & Reg. Equipment	288,851	233,594	5,680	2.06%
32	356.00	Purification Equipment	239,930	192,280	2,977	1.30%
33						
34		Total Storage Plant	5,031,452	3,763,778	99,810	

Jurisdictional Depreciation Expense, Accum. Reserve & Accrual Rates by Account Forecasted Period ended December 31, 2000

Data: ____ Base Period _X_ Forecasted Period
Type of Filing: ____ Original ___ Updated _X_ Revised
Workpaper Reference No(s).: Sched. B-3 & wp B-3.2

FR 10(10)(b)3.2 Schedule B-3.2 Page 5 of 6 Witness:

Line			Total Company Adjusted Jurisdiction			Annual
LIIIO	Acct.		13 Month Avg.		12 Month	Accrual
No.	No.	Account Titles	Investment	Reserve	Expense	Rate
(A)	(B)	(C)	(D)	(E)	(F)	(G)
		Transmission Plant				
1	365.10	Land	26,951	0	0	0.00%
2	365.20	Rights of Way	403,419	266,305	3,427	0.89%
3	366.20	Structures & Improvements	32,921	21,936	437	1.39%
4	366.30	Other Structues	69,172	46,388	918	1.39%
5	367.00	Mains	19,441,293	13,143,620	235,670	1.27%
6	369.10	Meas. & Reg. Equipment	2,995,622	2,054,801	65,193	2.28%
7						
8		Total Production Plant - LPG	22,969,379	15,533,051	305,644	
9			, ,	. ,	,.	
10		Distribution Plant				
11	374.10	Land Town Border	61,710	0	0	0.00%
12	374.30	Land Other	2,784	0	0	0.00%
13	374.20	Right of Way	44,872	20,077	720	1.68%
14	375.10	Structures & Improvements T.B.	106,376	49,106	1,980	1.95%
15	375.02	Structures & Improvements Other	0	0	0	1.95%
16	375.03	Improvements	7,518	3,551	140	1.95%
17	375.20	Land Rights	46,591	22,010	867	1.95%
18	376.00	Mains	75,047,099	33,215,849	1,712,016	2.39%
19	375.10	Meas, & Reg. Sta. Equipment General	2,363,549	919,245	56,175	2.49%
20	379.30	Meas & Reg. Sta. Equipment T.b.	1,917,181	802,795	47,030	2.57%
21	380.00	Services	45,854,769	20,457,751	3,002,511	6.86%
22	381.00	meters	19,396,585	8,429,666	620,220	3.35%
23	381.02	V & P Gauges	109,524	53,192	3,502	3.35%
24	382.00	Meter Installations	14,560,567	6,479,383	425,281	3.06%
25	383.00	Regulators Service	3,733,713	1,659,558	101,569	2.85%
26	383.02	Regulators Relief	481,545	232,004	13,100	2.85%
27	384.00	House Reg. Installations	166,402	77,400	5,353	3.37%
28	385.01	Ind. Meas. & Reg. Sta. Equipment	3,211,613	1,427,421	83,688	2.73%
29	000.01	ma. mood. a rog. ota. Equipment	0,211,010	1,121,121	30,300	2.7070
30		Distribution Plant	167,112,395	73,849,009	6,074,149	

Jurisdictional Depreciation Expense, Accum. Reserve & Accrual Rates by Account Forecasted Period ended December 31, 2000

Data: ____ Base Period _X_ Forecasted Period
Type of Filing: ___ Original ___ Updated _X_ Revised
Workpaper Reference No(s).: Sched, B-3 & wp B-3.2

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Workpaper Reference No(s).: Sched. B-3 & wp B-3.2			Witness: Total Company Adjusted Jurisdiction Annual			
				Total Company Adjusted Jurisdiction		
Line	Acct.		13 Mont		12 Month	Accrual
No.	No.	Account Titles	Investment	Reserve	Expense	Rate
(A)	(B)	(C)	(D)	(E)	(F)	(G)
1		General Plant				
2	389.10	Land	44,728	0	0	0.00%
3	390.02	Structures & Improvements	316,621	100,597	6,407	2.12%
4	390.03	Improvements	64,111	34,189	1,297	2.12%
5	390.04	Air Conditioning Equipment	9,771	5,425	198	2.12%
6	390.05	Total Energy	0	0	0	0.00%
7	390.09	Improvement to leased Premises	2,504,775	1,220,766	67,095	5.00%
8	391.00	General Office Equipment	2,550,590	1,219,510	125,407	7.05%
9	391.82	General Office Equipment	16,898	15,146	, .	
10	391.83	Office Furn - Copiers & Typewriters	405,141	281,098	13,491	7.05%
11	392.00	Transportation Equipment	6,054,009	3,933,006	514,601	8.92%
12	382.02	Trailers	165,970	108,135	14,131	8.92%
13	393.00	Stores Equipment	0	0	0	0.00%
14	394.77	Tools & Work Equipment	3,082,589	1,745,524	96,289	3.28%
15	396.93	Ditchers	853,615	461,137	22,732	2.79%
16	396.94	Backhoes	706,023	399,615	18,802	2.79%
17	396.95	Welders	92,413	52,306	2,461	2.79%
18	397.00	Communication Equipment - Phones	1,293,379	603,212	57,027	5.21%
19	397.20	Communication Equip Fixed Radios	28,653	13,452	1,425	5.21%
20	397.21	Communication Equipment - Mobile Radios	68,220	36,054	3,393	5.21%
21	397.22	Communication Equip Telemetering	114,695	70,005	5,704	5.219
22	398.00	Miscellaneous Equipment	153,632	62,394	3,871	10.94%
23	399.00	Other Tangible Property	11,061	3,824	0	0.00%
24	399.84	Other Tangible Property - CPU	196,508	190,242	0	0.00%
25	399.85	Other Tangible Property - MF Hardware	607,494	338,053	4,512	1.199
26	399.86	Other Tangible Property - PC Hardware	3,551,824	1,527,719	499,802	18.519
27	399.87	Other Tang, Property - P.C. Softward	546,060	365,551	52,631	15.85%
28	399.88	Other Tang. Property - Application Software	20,278,490	3,714,353	1,439,687	12.50%
29	399.89	Other Tang. Property - System Software	502,523	553,715	0	0.00%
30	39x.xx1	Server Hardware	695,971	120,493	94,929	14.299
31	39x.xx2	Server Software	228,311	39,527	31,141	14.29%
32	39x.xx3	Network Cost	332,234	57,519	45,316	14.29%
33	39x.xx4	Start Up Cost	5,696,831	574,931	452,954	8.33%
34	999.00	Cushion Gas	1,694,833	0	. 0	0.009
35						
36		Total General Plant	52,867,971	17,847,497	3,575,303	
37						
38		Total Plant	248,939,511	111,910,842	10,054,907	

Western Kentucky Gas Company Case No. 99-070 KPSC Data Request #2 Dated August 19, 1999 DR Item 24

Witness: Gruber

Data Request:

Refer to the response to Item 39(a) of the Commission's July 16, 1999 Order.

- a. For each of the consultants listed in the response, provide a description of the areas of the rate case on which the consultant worked.
- b. Describe the nature of the employee expenses that total \$13,274.
- c. Describe the nature of the labor expense of \$452.
- d. Provide a description of the services received from the Lukens Consulting Group, Inc. for the period April through June 1999.
- e. Concerning the work performed by Utility and Economic Consulting, Inc., explain why entries for the following dates were determined to be related to this rate case: October 20, 1998 (entire day); November 20, 1998; December 18, 1998; December 23, 1998; March 1, 1999; and April 20, 1999.
- f. Explain why the invoice from the law firm of Ward & Anderson, P.C. was included as a rate case expense.

Response:

a. C.H. Guernsey & Company: Dr. Donald Murry – Dr. Murry is a witness who prepared testimony related to the appropriate rate of return on equity He prepared the analyses described in his testimony and developed the recommended cost of capital in this proceeding.

Lukens Consulting Group, Inc.: Daniel Ives – Mr. Ives is a witness who prepared testimony related to the proposed premises charge. He prepared the incremental cost study presented in his testimony and developed the specific proposal in this filing associated with ensuring the economic feasibility of new residential growth.

Deloitte & Touche: Deloitte & Touche prepared the depreciation study filed in this case.

Utility & Economic Consulting. Inc.: Mr. Jim Sharpe – Mr. Sharpe is providing general consulting services throughout the rate case. He has consulted during the planning and development of this case, provided tariff and regulatory research, rate design support, and reviewed draft testimony.

Applied Energy Consulting: Mr. Michael Marks – Mr. Marks is a witness who prepared testimony related to WKG CARES, WKG's low-income Demand Side Management program, and the proposed DSM surcharge.

b. Transportation \$11,226.65 Lodging \$1186.04 Meals \$391.12 Miscellaneous \$469.91 Total \$13,273.72

These costs were incurred during the development of the extensive filing requirements in this case. These costs were generally associated with on-site case preparation and meetings in Owensboro by Atmos Shared Services personnel. In some cases, personnel from Owensboro traveled to Dallas to research and prepare of various filing requirements.

- c. The \$452.05 labor expense reflects overtime associated with the final compilation of the rate case filing binders.
- d. During the months of March through May, and invoiced April through June, Lukens (Mr. Ives, et al) continued work on the incremental cost study, research related to the case, premises charge development and testimony to be presented by Mr. Ives in this case.
- e. As indicated in the response to a. above, Mr. Sharpe has consulted with Western during the planning and development of this case. His engagement with Western began in October 1998.
- f. Ward and Anderson assisted Western in providing legal research on certain matters in preparation for the filing of this case.

Western Kentucky Gas Company Case No. 99-070 KPSC Data Request #2 Dated August 19, 1999 DR Item 25 Witness Potty Adams

Witness: Betty Adams

Data Request:

Refer to the response to Item 43(c) of the Commission's July 16, 1999 Order.

- a. Explain why there was a balance remaining in Western's FY 1998 overhead Account 1070.
- b. Explain why it was appropriate to apply the remaining overhead balance from FY 1998 to FY 1999 capital expenditures.
- c. Does Western anticipate that there will be a remaining balance in its overhead accounts for FY 1999? Explain the response.
- d. For each of the 10 previous fiscal years, indicate whether Western had a balance remaining in its overhead accounts, and describe how any remaining balance was cleared.

Response:

- a. Historically our overhead account seldom clears on an annual basis. This would follow the same pattern, that not all projects started in a fiscal year are completed in that year.
- b. In an effort to clear overhead amounts annually, the percentage is adjusted for the new fiscal year. The only other method would have been to expense the remaining overhead dollars at the end of the fiscal year.
- c. No. With our new business process changes which included a Fixed Assets package, the overhead amounts will be allocated on the same procedure as prior years with the exception of being able to distribute the remaining amounts (either debit or credit) equally over all project spending in the same fiscal year.
- d. For the last 8 fiscal years, there has been a balance remaining in the overhead account. This balance is carried forward and applied to capital expenditures in the next fiscal year.

Western Kentucky Gas Company Case No. 99-070 KPSC Data Request #2 Dated August 19, 1999 DR Item 26 Witness: Rebecca M. Buchanan

Data Request:

26. Refer to the response to Item 45(c) of the Commission's July 16, 1999 Order. Explain what Western means by "recapitalized" and why the Division 09 annual reserve computation will be expensed.

Response:

26.) Certain assets, back hoes for example, are used directly for capital construction projects. The depreciation is added to the cost of operating the piece of equipment. The amount is spread over the hours worked by the custodian of the equipment/vehicle. If the custodian's hours are charged 50% to an O&M account and 25% to capital and 25% to other, then the cost of operating the unit (depreciation, gasoline, repairs, etc.) follows the same spread.

This is not to be confused with the depreciation reserve. All of the reserve computation is credited to accumulated depreciation. What is being referenced in the response to Item 45c. of the Commission's July 16, 1999 data request is the <u>debit side</u> of the depreciation entry. Western has determined that 95.45% of depreciation will be debited to depreciation expense, and the remaining 4.55% will be capitalized, as explained above. The calculation of this percentage was shown in response to Item 45d. of the Commissions July 16, 1999 data request.

Western Kentucky Gas Company Case No. 99-070 KPSC Data Request #2 Dated August 19, 1999 DR Item 27 Witness: Betty Adams

Data Request:

Refer to the response to Item 46 of the Commission's July 16, 1999 Order. Explain why the PSC Assessment is considered by Western to be a prepayment. Also explain why Western believes it should be allowed to earn a return on its PSC Assessment.

Response:

The annual assessment is billed on July 1st of each year based on revenues for the previous calendar year. The period that the assessment covers as stated on the statement is July 1, 199x until June 30, 199x, and is due in full by July 10th, which would leave a prepaid balance at the end of every fiscal year. This is a cost of doing business and we should therefore be allowed to earn a return on this, like we are allowed to earn a return on franchise fees.

Western Kentucky Gas Company Case No. 99-070 KPSC Data Request #2 Dated August 19, 1999 DR Item 28 Witness: Betty Adams

Data Request:

Refer to the response to Item 46 of the Commission's July 16, 1999 Order. For each of the items listed below, describe the nature of the item and explain why Western believes it should be allowed to earn a return on the item.

- a. Division 09 Alliance Gas.
- b. Division 09 Tennessee Alliance Gas.
- c. Division 02 American Gas Cooling Center.
- d. Division 02 Southern Gas Association.
- e. Division 02 American Gas Association.
- f. Division 02 Nation Bank of Texas.
- g. Division 02 Int. of Gas Tech.

Response:

Refer to AG Data Request #235 for a description of the referenced items above. Prepaid expenses are appropriate to include in rate base because they are items of cost free capital that are prepaid by the Company for the benefit of the customers such as through these organizations we receive education, training and information of activities within our same type of industry. Prepaids should be afforded rate base treated similar to Customer Advances for Construction or Deferred Taxes, except that the latter two items are cost free capital prepaid by the customer, and thus they are excluded from Rate Base.

Western Kentucky Gas Company Case No. 99-070 KPSC Data Request #2 Dated August 19, 1999 DR Item 29

Witness: Donald A. Murry

Data Request:

Refer to Schedule DAM-5 of the Direct Testimony of Donald A. Murray. Provide the time period used to obtain the figures in the last three columns of the chart.

Response:

The Standard & Poor Earnings Guide forecasts are for five years. The Value Line forecasts are for the period from 1996-98 to 2002-2004.

Western Kentucky Gas Company Case No. 99-070 KPSC Data Request #2 Dated August 19, 1999 DR Item 30 Witness: Donald A. Murry

Data Request:

Refer to Schedule DAM-10 of the Direct Testimony of Donald A. Murray. This chart uses two separate estimates for Earnings Per Share ("EPS") growth rates. Explain why the Value Line EPS estimates are used to calculate the High cost of capital and the Standard & Poor's ("S&P") EPS estimates are used to calculate the Low cost of capital, as opposed to using the exact method for calculating cost of capital used in Schedule DAM-9. (If the exact method were to be used, Schedule DAM-10 would have a High and Low cost of capital calculation using the Value Line EPS growth rate estimates and a separate but similar calculation using the S&P EPS growth rate estimates).

Response:

C)

Staff's question is not an accurate depiction of Dr. Murry's method used in Schedule DAM-10. The highest yield and the highest earnings per share estimates, regardless of the source of the estimate, are added to produce the highest cost of capital estimate. For example, note the difference in the calculation for Northwest Natural Gas and Washington Gas Light.

Western Kentucky Gas Company Case No. 99-070 KPSC Data Request #2 Dated August 19, 1999 DR Item 31 Witness: Donald A. Murry

Data Request:

Refer to Schedule DAM-15 of the Direct Testimony of Donald A. Murray. Explain why the figures comparing Discounted Cash Flow ("DCF") results for dividend and earnings growth do not come from sets of calculations consistent across time. In other words, explain why DCF results for Dividend growth rates come from Schedules DAM-6 and DAM-7 and why DCF results for Earnings growth rates come from Schedules DAM-10 and FSM-11, [sic].

Response:

133

As noted, Schedule DAM-15 illustrates the differences between cost of equity DCF estimates using dividend growth rates and earnings growth rates. As the schedule illustrates, the dividend growth rates and earnings per share growth rates in a DCF calculation of the cost of capital for a gas distribution company may produce widely differing results in today's equity markets. Dr. Murry discusses the importance of this distinction in his testimony. Please see the Prepared Direct Testimony of Donald A. Murry, page 15, line 4 through page 16, line 9.

Western Kentucky Gas Company Case No. 99-070

KPSC Data Request #2 Dated August 19, 1999

DR Item 32

Witness: Donald A. Murry

Data Request:

Refer to Schedule DAM-16 of the Direct Testimony of Donald A. Murray.

- a. Explain the time period used for this table.
- b. Explain the source or derivation of the figures in column (1), Market Total Returns.
- c. Explain why Western used Long Term Corporate Bonds Return as a risk free rate in column (2), as opposed to a federal government bond rate.
- d. Explain why it is appropriate to use 6.10 percent in the calculation of the Cost of Equity in Schedule DAM-16, but not appropriate in the similar calculation in Schedule DAM-17.
- e. Explain why the Equity Risk Premium in column (3) is different from that used in column (3) in Schedule DAM-17.
- f. Explain why Western uses the Long Term Bond return of 6.10 percent in the calculation of the Risk Premium, but uses the Aaa Corporate Bond Return to calculate the Cost of Equity.

Response:

- a. Time series from 1926 to 1998 and data for 1999.
- b. Please see Response to AG DR1-12.
- c. The long-term corporate bond rate is used as the cost of long-term debt historically. It is not a risk free rate, and it was not used as such.
- d. Schedules DAM-16 and DAM-17 depict different CAPM methodologies. Since 6.10 percent is an historical cost of long-term debt, it would have been a misrepresentation of the cost of long-term debt to use it in the analysis shown in DAM-17.
- e. Schedules DAM-16 and DAM-17 depict different CAPM methodologies. The Equity Risk Premium in DAM-16 is an historical measure, and it would be inappropriate for use in the analysis depicted in DAM-17.
- f. The 6.10 percent is the historical cost of long-term debt and that is the appropriate number to use in the methodology in DAM-16. The current Aaa bond rate is 6.62 percent, which is different from the historical number.

Western Kentucky Gas Company Case No. 99-070

KPSC Data Request #2 Dated August 19, 1999 DR Item 33

Witness: Donald A. Murry

Data Request:

Refer to Schedule DAM-17 of the Direct Testimony of Donald A. Murray.

- a. Explain the time period used for this table. If it is not the same as the time period used in Schedule DAM-16, provide an explanation for why a different time period was used.
- b. Explain the source of the Risk Free Return figure in column (1).
- c. Explain the source and derivation of the Equity Risk Premium figures in column (3).
- d. Comparing the Equity Risk Premiums in columns (3) of both Schedules DAM-16 and DAM-17, the difference between these sets of figures (1.20%) is greater than the difference between the Risk Free Returns, column (2) in Schedule DAM-16 (6.10 percent) and column (1) in Schedule DAM-17 (5.81 percent). This implies that a different Market Total Return figure is used in Schedule DAM-17 than that used in Schedule DAM-16. The implied Market Total Return in Schedule DAM-17 is 13.81 [sic] percent compared to 15.30 percent in Schedule DAM-16. If not explained previously, explain this apparent difference in usage of Market Total Returns.
- e. Explain the source and derivation of the Size Premium, column (5). Also, explain why similar adjustments are made for some companies, and not others.

Response:

- a. Time series for 1926 to 1998 and data for 1999.
- b. The Risk Free Return is from the Federal Reserve Statistical Release H.15 of April 12, 1999 under the heading "Treasury Constant Maturities: Composite Over 10 Years," for March 1999.
- c. The Source of the Equity Risk Premium is Column 3 in Ibbotson Associates SBBI 1999 Yearbook, Table 8.1 Please see the Response to AG1-11.
- d. Please see the Response to Staff DR2-32e.
- e. Please see the Response to Staff DR2-33c. The reason that the size adjustments are different is because the Moody's Companies have different market capitalizations. The source is also Ibbotson Associates 1998 SBBI Yearbook.

Western Kentucky Gas Company Case No. 99-070

KPSC Data Request #2 Dated August 19, 1999

DR Item 34 Witness: Donald A. Murry

Data Request:

Refer to the Direct Testimony of Donald A. Murray. At page 19 of the testimony, Dr. Murray discusses the reasons for making an adjustment to the historical CAPM calculation to account for Atmos' small size relative to other companies.

- a. Explain why a size premium was added to all of the companies.
- b. If investors attribute additional risk to relatively smaller companies and everything else being equal, shouldn't the Cost of Equity calculations be higher in Schedule DAM-17 than in Schedule DAM-16? Explain why the Cost of Equity declines with Western's size adjustment.
- c. How common is the use of a size premium in other regulatory jurisdictions?

Response:

3

- a. All of the companies were of a size that the size bias in the Ibbotson Associates data required such an adjustment. (Please see the Response to DR Item 2-33e).
- b. The Schedules DAM-16 and DAM-17 illustrate the results of two different CAPM methodologies. (Please see the responses to DR Item 32 and DR Item 33). The data possessing the bias for size were only used in the method depicted in DAM-17.
- c. Dr. Murry does not know how many regulatory jurisdictions adjust for the presence of the size bias in the Ibbotson Associates data and many regulatory jurisdictions may have ignored it. Dr. Murry, however, has submitted testimony in a number of jurisdictions during the period after Ibbotson Associates published acknowledgment of the presence of bias in its data series because of the size of the companies. Dr. Murry has never had a commission fail to accept his testimony that used the size adjustment in accordance with the recommended procedure by Ibbotson Associates.

Western Kentucky Gas Company Case No. 99-070 KPSC Data Request #2 Dated August 19, 1999 DR Item 35 Witness: Donald A. Murry

Data Request:

Explain thoroughly. Refer to the response to Item 60(a) of the Commission's July 16, 1999 Order. In what ways should the Commission allow for the risk of short-term interest rate increase? By incrementally increasing the allowed return on equity? By adjusting the short-term interest cost?

Response:

As noted at page 6, lines 20-22 of Dr. Murry's Direct Testimony, short-term debt is an unstable component of the capital structure, and its inclusion in the capital structure of a utility for ratemaking purposes increases the risk that the company will not achieve its allowed return on common stock. The added risk is amplified, because short-term debt is usually not used by a utility as a source of permanent capital. As a low-cost component of the capital structure for ratemaking, it further increases the likelihood, or risk, that the company will not earn a return on common stock equal to the true cost of capital. Consequently, because of this additional risk shifted to the holders of common stock, it is appropriate to recognize the added risk through upward adjustments to the allowed return on common stock. In fact, an adjustment to the cost of short-term debt in a capital structure based on an increase in the market rates for short-term debt in the ratemaking process cannot compensate the common stockholders for the added risk in achieving the allowed return or the true cost of capital.

Western Kentucky Gas Company Case No. 99-070 KPSC Data Request #2 Dated August 19, 1999 DR Item 36

Witness: Donald A. Murry

Data Request:

Western not being a stand-alone company explains, in part, the proposal to use Atmos's capital structure as the capital structure to be used to determine Western's cost of capital. If it is beneficial to Western to be part of the Atmos system and have Atmos raise capital for Western's operations, explain why the issue of whether or not Western would have a higher cost of capital as a stand-alone company is relevant.

Response:

This question does not refer to any specific portion of Dr. Murry's Direct Testimony; consequently, the response may not be set in the appropriate context. Nevertheless, interpreting the question, it is Dr. Murry's opinion that the cost of capital necessary to support the assets that provide service to Western Kentucky's customers is the relevant cost of capital in this proceeding. Consequently, that is the predicate that underlies his Direct Testimony and any references to Western Kentucky throughout his testimony.

Western Kentucky Gas Company Case No. 99-070 KPSC Data Request #2 Dated August 19, 1999 DR Item 37 Witness: Smith

Data Request:

By utility and jurisdiction, identify all Atmos operating divisions that presently have: (1) WNA tariffs; (2) Premises Charges; or (3) Margin Loss Recovery Mechanisms.

Response:

- (1) WNA: United Cities Gas Tennessee, Georgia
- (2) Premises Charge: None
- (3) Margin Loss Recovery Mechanism: United Cities Gas Tennessee, Georgia, and South Carolina

Western Kentucky Gas Company Case No. 99-070 KPSC Data Request #2 Dated August 19, 1999 DR Item 38 Witness: Donald A. Murry

Data Request:

All other things being equal, explain whether reducing the volatility in revenues and earnings tends to lower the risk of a financial investment from the point of view of an investor.

Response:

In this answer, Dr. Murry has assumed that "volatility" is measured by the standard deviation about some expected values divided by the respective expected values. Assuming all things equal, and the only difference between two states are differences in the volatility in earnings and revenues, then it is Dr. Murry's opinion that this volatility is important to investors. Lowering "volatility" will be perceived by many, if not most, investors as a reduction in "risk," where risk is the probability of an investor not achieving his return objective. Furthermore, it is Dr. Murry's opinion that different investors will have different perceptions of the level of reduction in risk. For example, the reduction of "volatility" will be more important to short-term investors than to long-term investors. It is also Dr. Murry's opinion that many of the factors that are excluded by the assumption in the question, namely holding "All other things equal...," are more important to investors than the level of "volatility."

Western Kentucky Gas Company Case No. 99-070 KPSC Data Request #2 Dated August 19, 1999 DR Item 39 Witness: Donald A. Murry

Data Request:

Provide a definition and/or explanation that differentiates business risk from financial risk.

Response:

In his testimony, Dr. Murry has used the commonplace distinction between business risk and financial risk. Namely, "business risk" is the risk associated with conducting business. For example, in the case of a gas distribution company potential weather changes and labor disputes are business risks. "Financial risk" is the risk resulting from the financing decisions of the company's management, such as the prevailing capital structure.

Western Kentucky Gas Company Case No. 99-070 KPSC Data Request #2 Dated August 19, 1999 DR Item 40 Witness: Donald A. Murry

Data Request:

Refer to Schedule DAM-22 of the Direct Testimony of Donald A. Murray. Explain how Dr. Murray determined the recommended range on page 22 of his Direct Testimony using the variety of calculated returns on equity. Provide workpapers.

Response:

The recommended range in the cost of common stock was based on Dr. Murry's judgement and interpretation of the results of the various DCF and CAPM analyses and his evaluation of current market conditions and economic factors. Please see the attached workpapers.



Western Kentucky Gas Company Case No. 99-070 Cost of Capital Summary Thirteen Month Average as of December 31, 2000

	WEIGHTED Cost	(E) %	0.57%	3.25%	0.00%	6.15%	%26'6
Schedule J-1 Sheet 2 of 2 Witness:	Cost Rate	(D)	6.10%	8.06%	0.00%	12.25%	·
	Percent OF Total	(၁)	9.40%	40.36%	0.00%	50.24%	100.00%
	Amount	(B) \$000	88,941	382,005	0	475,564	946,510
usted Period Updated	Workpaper Reference	(Y)		£-J	45		
Data: Base Period X Forecasted Period Type of Filing: X Original Updated Workpaper Reference No(s).	CLASS of Capital		SHORT-TERM DEBT	LONG-TERM DEBT	PREFERRED STOCK	COMMON EQUITY	Total Capital
Data: E Type of Filin Workpaper F	Line No.		-	2	ო	4	

Western Kentucky Gas Company Case No. 99-070 AVERAGE ANNUALIZED LONG-TERM DEBT as of December 31, 2000

	Base PeriodXForecasted Period Filing:XOriginalUpdated per Reference No(s)			She	edule J-3 et 2 of 2 ness:
-		13 Mith Average		EFFECTIVE	COMPOSITE
Line		A mount	Interest	ANNUAL	Interest
No.	ISSUE	OUTSTANDING	Rate	Cost	Rate
	(A)	(B)	(C)	(D)	(E=D/B)
1	First Mortgage Bonds	\$17,000 ,000	9.40%	\$1,598,000	
2	First Mortgage Bonds	153,84 6	8.69%	13,369	
3	First Mortgage Bonds	19,42 3;077	10.43%	2,025,827	
4	First Mortgage Bonds	20,00 0,000	9.75%	1,950,000	
5	First Mortgage Bonds	9,40 3,077	11.32%	1,064,428	
6	First Mortgage Bonds	18,00 0,000	9.32%	1,677,600	
7	First Mortgage Bonds	20,00 0,000	8.77%	1,754,000	
8	First Mortgage Bonds	10,00 0,000	7.50%	750,000	
9	Unsecured Senior Note	5,846 ,154	11.20%	654,769	
10	Unsecured Senior Note	14,769,2 31	9.76%	1,441,477	
11	Unsecured Senior Note	13,384, 615	9.57%	1,280,908	
12	Unsecured Senior Note	6,61 5,385	7.95%	525,923	
13	Unsecured Senior Note	20,00 0,000	8.07%	1,614,000	•
14	Unsecured Senior Note	20,00 0,000	8.26%	1,652,000	
15	Unsecured Note	1,15 1,654	10.00%	115,165	
16	Unsecured Note	1,15 1,654	10.00%	115,165	
17	Debentures	150,000 ,000	6.75%	10,125,000	
18	Medium Term Notes	10,00 0,000	6.67%	667,000	
19	Medium Term Notes	10,000 ,000	6.27%	627,000	
20	Medium Term Notes	1,84 6,154	6.20%	114,462	
21	First Mortgage Bonds	1,742,674	7.90%	137,671	
22	Unsecured Notes	0	7.50%	0	
23	Unsecured Notes	38 3,654	7.50%	28,774	
24	Unsecured Notes	603,3 65	7.00%	42,236	•
25	Unsecured Notes	2 8,432	7.00%	1,990	
26	Unsecured Notes	115,423	6.00%	6,925	
28	Unsecured Notes	1,132,308	7.00%	79,262	
29	Unsecured Notes	1,112,212	6.99%	77,744	
30	Unsecured Notes	361, 538	7.00%	25,308	
31	Unsecured Notes	819,231	8.50%	69,635	
33	Senior Secured Note	6,96 0,896	7.45%	518,587	
	Total LONG-TERM DEBT	382,004, 580		30,754,224	
	Amortization of debt discount	394,837			

			8/27/99			
Atmos Energy Corporation Capital Structure Projection Test Year						
	12/31/99	01/31/00	05/29/00	03/31/00	04/30/00	05/31/00
Shareholders Equity:		٠				
	161,270	161,557	161,844	162,131	162.418	162.705
	324,529,532	326,248,655	327,967,777	329,686,900	331,406,023	333.125.146
	120,217,152	139,702,074	146,177,984	156,548,906	159,485,828	149,161,735
	444,907,954	466,112,286	474,307,606	486,397,937	491,054,269	482,449,586
	387,523,571	386,994,023	385,924,288	385,827,611	385,731,941	383,519,517
Total capitalization	832,431,524	853,106,309	860,231,894	872,225,549	876,786,210	865,969,103
	116,519,195	94,873,273	75,727,351	70,709,429	65,693,507	71,259,584
	948,950,719	947,979,582	935,959,244	942,934,977	942,479,717	937,228,688

Atmos Energy Corporation Capital Structure Projection Test Year

	0		2	က	4	4	ß	တ	œ	œ
	11/30/00		164,427	343,439,883	128,654,384	472,258,69	376,781,27	849,039,969	111,298,718	960,338,688
-	10/31/00		164,140	341,720,760	129,617,327	471,502,227	376,854,734	848,356,961	95,229,974	943,586,935
	00/02/60		163,853	340,001,637	129,342,405	469,507,895	379,454,283	848,962,178	93,843,896	942,806,074
	08/31/00		163,566	338,282,515	132,403,483	470,849,563	381,550,450	852,400,013	89,349,818	941,749,831
	02/31/00		163,279	336,563,392	144,005,580	480,732,250	382,890,775	863,623,025	84,878,740	948,501,766
	00/08/90		162,992	334,844,269	146,407,658	481,414,918	383,374,590	864,789,508	81,977,662	946,767,171
Atmos Consolidated		Shareholders Equity:	Common stock	Paid in capital	Retained earnings	Total equity	Long term debt	Total capitalization	Short term debt	Total

Capital.xls

Atmos Consolidated	13/31/00	13 MO.	13-MO.
Shareholders Equity:	00/16/21		STRUCTURE
Common stock	164,714	162,992	
Paid in capital	345,159,006	334,844,269	
Retained earnings	145,519,306	140,557,217	
Total equity	490,843,026	475,564,478	50.2% Equity
Long term debt	369,632,466	382,004,579	40.4% LT Debt
Total capitalization	860,475,492		
Short term debt	104,868,796	88,940,765	9.4% ST Debt
Total	965,344,289	946,509,822	100.0%

ATMOS ENERGY	/ CO	RP.	NYSE-	ATO F	ECENT PRICE	23	P/E RATIO	14.4	(Trailing Median:	: 13.9) F : 15.0) F	RELATIVE VE RATIO	0.89	DIV'D YLD	4.8	%	VALUI LINE		68
TIMELINESS 5 Lowered 3/19/99	High: Low:	11.5 8.2	12.0 9.8	12.5	15.3 10.5	15.9 12.7	21.2 15.2	20.3 15.9	23.0 16.1	31.0		32.3 24.8	33.0 23.0				Price	
SAFETY 3 Lowered 9/27/96	LEGEN	DS Ny Disite	nde a eh	\lnot		 	 	- N	 	├	 	 	<u>:</u>		↓	1		В0
TECHNICAL 3 Raised 2/20/98	divi	led by in	inds p sh terest Flate e Strength	·	 	<u> </u>	 	 }		 	 	ļ	 	 	ļ	-		- 60
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2002-04 PROJECTIONS	Options: No Shaded a	o rea indica	ates recess	ion	<u> </u>			<u> </u>	ļ	L		- NI		ļ				+ 40 + 32
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High 50 (+115%) <i>24</i> %				_			1	nh.	111111111						1	 	 	+ 20
Low 35 (+50%) 15%					141	·1111/1,4	l'											† 16
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to Seal 1000000000					 	 	1	i		 	 				% TO	T. RETUR	N 2/99	十,6
Institutional Decisions					 	 	-	!	 	 					,		YL ARITHL BEDEX	- 4
201998 301998 401998 to Buy 45 46 55	Percent shares	6.0					-	├		 	 	 	T		1 yr.	STOCK -13.1	-6.3	-
IN CAR 27 26 1	traded	4.0 — 2.0 —	301033	11. 636	urllu			10 de 2	ududit	la dia	ilinia ira				3 yr. 5 yr.	19.6 51.4	48.6 87.8	F
Atmos Energy's history da	ates bac	k to	1989	1990	1991	1992		P1994	1995	1996	1997	1998	1999	2000		E LINE PU		02-04
1906 and the Texas Panhan			37.46	38.46	33.04	32,46	31.94	32.67	28.08	30.19	30.59	27.90	23.90	30.15		es per sh		39.4
years, through various merge	rs, it be	came	2.48	2.68	2.38	2.63	2.39	219	2.55	2.80	2.85	3.38	3.40	3.90		low" per s		5.65
part of Pioneer Corporation,	and, in	1981,	.89	.98	.80	.97	1.19	.97	1.22	1.51	1.34	1.84	1.50	2.00		s per sh		3.0
Pioneer named its gas distrib			.75	.17	.80	.83	.86	.88	.92	.96	1.01	1.06	1.10	1.15		eci'd per		1.3
Energas. In 1983, Piones			2.37	2.77	2.97	3.18	2.67	3.29	4.05	4.84	4.13	4.44	2.75	2.70		ending pe		3.8
Energas as a separate subsid	alary and	015-	8.50	8.71	8.88	9.17	9.64	9.78	10.20	10.75	11.04	12.21	12.90	14.00		lue per sh		18.5
tributed the outstanding share to Pioneer shareholders. Ener	rase cha	mas I	9.14	9.15	10.17	10.48	14.38	15.30	15.52 15.0	16.02 15.1	29.64 17.9	30.40 15.4	31.00	31.50		n Shs Out		33.0
its name to Atmos in 1988. At	mos aco	nited	.90	.87	.92	.86	.87	1.26	1.00	.95	. 1.03	81	Bold fig	res are Line		'i P/E Rati P/E Ratio		14.00
Trans Louisiana Gas in 1986,	Western	Ken-	7.1%	6.7%	6.9%	6.0%	4.9%	4.7%	5.0%	4.2%	4.2%	3.7%	estin			'I Div'd Yi		3.1%
tucky Gas Utility in 1987, Gr			342.4	352.0	336.1	340.1	459.4	499.8	435.8	483.7	906.8	848.2	740	950		es (\$mill)		1300
1993, and United Cities Gas in	1997	- 1	8.1	9.0	7.9	10.0	17.0	14.7	18.8	23.9	39.2	65.3	50.0		Net Prof			100
CAPITAL STRUCTURE as of 12/31	/98		31.4%	32.2%	27.5%	32.7%	37.7%	35.5%	33.8%	35.7%	37.5%	36.5%	36.5%		Income			36.5%
Total Debt \$576.3 mil. Due in 5 Yr LT Debt \$390.4 mil. 😩 🔭 Interest	\$ \$195.0	mill.	2.4%	2.5%	2.4%	2.9%	3.7%	2.9%	4.3%	5.0%	4.3%	6.5%	6.7%		Net Profi		· · [7.6%
Lt Debt \$390.4 mid. 👙 Lt interest Incl. \$7.9 mill. capitalized leases.	\$25.0 mil	٠ [54.2%	51.7%	52.3%	49.7%	43.3%	48.0%	45.3%	41.5%	48.1%	51.8%	55.0%	57.0%	Long-Ter	m Debt R	stio	53.0%
(LT interest earned: 4.1); total intere	st	Ļ	45.8%	48.3%	47.7%	50.3%	56.7%	52.0%	54.7%	58.5%	51.9%	48.2%	45.0%			Equity R		47.0%
coverage: 3.5x) 💎 🖖 🐇	(50% of ((Tqp:	169.7	165.2	189.5	190.8	244.6	287.9	289.6	294.6	630.2	769.7	900	1		pital (\$mill)	1300
Leases, Uncapitalized Annual rent	als \$9 2 m	an I	194.8	194.9 8.1%	205.7 6.6%	219.4 7.9%	299.3 9.2%	327.4 7.2%	363.3 8.9%	413.6 10.6%	849.1 8.3%	917.9	950 7.0%		Net Plan	t (\$mili) n Total Ca		1173 9.0%
Pld Stock None		¯ ŀ	10.4%	11.2%	8.8%	10.4%	12.3%	9.8%	11.9%	13.9%	12.0%	14.9%	12.5%			n Shr. Equ		16.0%
ommon Stock 30,653,887 shs.	15001 -4.0		10.4%	11.2%	8.8%	10.4%	12.3%	9.8%	11.9%	13.9%	12.0%	14.9%	12.5%			n Com Eq	• 1	16.0%
ARKET CAP: \$700 million (Small	(50% of (Can)	API)	1.6%	2.4%	- :-	1.6%	5.6%	1.3%	2.9%	5.1%	3.9%	6.3%	4.0%			to Com E		9.0%
		1/98	84%	79%	100%	85%	54%	86%	76%	64%	67%	58%	69%			s to Net Pr		43%
(\$MILL) Cash Assets 6.0		14.7	BUSINE	SS: Atr	os Enerc	y Corpor	ration is	engaged	primarily	in the	dential:	23%, com	mercial:	31%, in	dustrial a	nd other	'98.de	orecia-
Other 137.7 1		86.4	distributi	on and	sale of n	atural ga	as throug	th five re	gulated i	natural	tion rate	3.3%.	Has 2,1	93 empi	loyees, S	36,949 ca	nommo	stock
Current Assets 143.7 1	07.4 -2	01.1							00,000 a		holders.	Officers a	and direc	tors own	approx.	1.2% of	commor	1 stock
		80.8 85.9							Louisian Gas (316		Texas A	'roxy). Ct \ddress: I	namman, PO∙Rov	650205	& PTESK Dallac	Jent Hoo TY 7526	KAT DES	r inc.:
Debt Due 182.5 1:		49.7							wn: 46%		972-934	9227. Inte	emet: wv	vw.atmos	energy.c	om.		
Other 68.1						hegs	ın 19	99. ór	1 8 8	our.		s is o						rely
Other 68.1 22 2313.2 22	24.1 3	16.4	Atmo)s Er	CLEA											: HPOT	CSS	
Other 68.1 27.2 27.2 40.0	24.1 3 01% 3	50%	Atmo						er 30		mana	aged	natu	ral ;	gas 1	utiliti	es t	hat
Other 68.1 Current Liab. 513.2 2 Current Liab. 513.2 2 Current Liab. 7272% 40 ANNUAL RATES Past Past I change (per sh) 10 Yrs. 5 Yrs.	24.1 3 01% 3 Est'd '9 to '02	50% 6-'98 '04	note. Earni	(Fiscings f	cal ye or the	ar en first	ds Se quart	ptemi er fell	er 30 over 2	th.) 25%	mana Value	aged : Line	natu trac	ral ks, a	gas is it h	utiliti as suc	es t cessf	hat ully
Other 68.1 Furrent Liab. 513.2 Dix. Chg. Cov. 2272% UNNUAL RATES Past 9 Past 10 Prs. 5 Prs. 10 Prs.	24.1 3 01% 3 Est'd 9 10 02- % 5.0	50% 6-'98 '04 '%	note. Earni comp	(Fisc ings f ared	cal ye or the to the	ar en first same	ds Se quart e peri	ptemi er fell od in	er 30 over 2 1998,	th.) 25% at-	mana Value compl	nged : Line leted f	natu trac	ral ks, a ajor a	gas is s it h acquis	utiliti as suc itions	es t cessf over	hat ully the
Other 68.1 current Liab. 543.2 2: Exc. Chg. Cov. 272% 4: Linning (per sh) 10 yrs. 5 yrs.	24.1 3 01% 3 Est'd 9 to 02 % 5.0 % 11.0 % 11.5	6-'98 -04 -74 -76 -76	note. Earni compa tribut	(Fiscings for ared table)	cal ye or the to the largel	ar en first same y to a	ds Se quart e peri verag	ptember fellod in e tem	er 30 over 2	th.) 25% at- ires	mana Value compl past	aged : Line	natu trac our m ars. A	ral ks, a ajor a s par	gas is it hacquist of i	utiliti as suc itions ts str	es t cessf over ategy	hat ully the for

that were 15% warmer than normal and 22% warmer than a year ago. Mother Nature took a huge bite out of the company's top line, as revenues plummeted nearly 30% versus the year-ago tally. As it appears that abnormal weather conditions. persisted during the second quarter, we. have slashed this year's share-net estimate by \$0.35, to \$1.60.

But the company has managed to keep costs under control. As a result of ATO's highly successful integration of United Cities Gas, along with the streamlining of other businesses, operation and maintenance expenses declined around 24% last year. Though we believe further restructuring efforts will continue to bolster the company's results over the long. term, they won't be sufficient to offset this year's unfavorable weather conditions. But assuming normal temperatures in fiscal

2000, we expect earnings to rebound

long-term growth, management pursues firms which can enhance ATO's economies of scale. With the unbundling of services in the natural gas industry, combined with an increasingly competitive environment, we believe that Atmos skill in acquiring companies could help foster solid top- and bottom-line gains in the coming years. (Our estimates and projections do not include the prospect of acquisitions, due to the various uncertainties associated with that strategy.)

Though untimely for the year ahead, this stock has decent total return potential over the 2002-2004 period. Income-conscious investors should note that it offers a healthy dividend, which has been increasing steadily over the years. But interested parties should be aware that Atmos shares (like all utilities issues) are susceptible to interest-rate changes.

Frederick L. Harris, III March 26, 1999

Fiscal year ends Sept. 30th. Next earnings

.265

QUARTERLY REVENUES (\$ mill.) A

191.1

362.6

288.6

250

320

1.15

1.14

1.25

1.35

23 23 24 24 25 25

Dec.31 Mar.31 Jun.30 Sep.30

93.6

143.7

137.3

145

180

62

d.10

.04

.05

.06 . d.10

.23

.24

.265

EARNINGS PER SHARE A.

Dec.31 Mar.31 Jun.30 Sep.30

QUARTERLY DIVIDENDS PAID 8-

Mar.31 July 30 Sep.30 Dec.31

68.5

119.9

127.0

134.8

160

d.25

d.32

d.13

· d.10

.25

.265

Full Fisca Year

483.7

906.8

848.2

740

950

Full Fisca Year

1.84

1.60

2.00

Full

Year

.97

1.02

1997

1999

2000

Fiscal Year Ends

1996

1997

1998

1999

2000

Cal-

endar

1995

1996

1997

1999

130.5

280.6

295.3

210.2

59

62

RA

.50 1.15

.69

265

290

10th of March, June, Sept., Dec. . Div. reinort due late April.

(b) Next div. meeting about May 10th. Goes ex about May 20th. Approximate div. pmt, dates:

(c) In millions, adjusted for stock splits.

(D) Years prior to 1994 are not comparable due

sharply.

to acquisition using pooling of interest method. (E) Atmos completed its merger with United Cities Gas Company in July, 1997.

Company's Financial Strength Stock's Price Stability
Price Growth Persistence Earnings Predictability

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AG	L RI	ESOI	JRC	ESN	YSE-AT	Ğ	P	ecent . Rice	19	P/E RATIO	13.6	Trailing: Median:	15.3) F 14.0) F	PE RATIO:	0.84	ALTD DAALD	5.7	%	VALU LINE		67
	NESS			High:	2:14.0	15.4	16.1 13.3	18.8 14.9	19.5 15.1	21.3 17.0	19.4 14.6	20.0	22.0 17.1	21.6 17.8	23.4 17.7	23.4 18.3				et Price	
SAFET	Υ .	2 New 7/2	7/90	Low:	10.8 NDS	11.9		7		17.0		14.5				10.0			2002	200	#
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20	12-04 PI	ROJECTI		Options:	No 12/95			7 -		1******		aller 1 1 1 1	112	11100111	44,17			ļ		-	#
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ligh .cw	30 ((+60%) (+5%)	16% 7%	"Hump	111010-1-1	- اللهما							764 -		• • • •	<u>.</u>	·				#
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Sell Da's(000)	49	40	41	shares	4.0 -	atteted		iii	Hant ale		. dda		ninnt an		111111			3 yr. 5 yr.	24.1 43.0	:48.6 87.8	F
983	16571	17280 1985	18921. 1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000		EUNEP		02-1
48.27	46.00		27.58	26.24	22.97	21.63	22.58	20.26	20.43	22.73	-23.59	19.32	-21.91	22.75	23.36	24.15	24.20	Revenu	es per si) A	2
1.60	1.87		1.52	1.84	1.90	1.93	2.04	- 2.07	2.31	2.25	~ 2.24	2.33	2.49	-242	2.53	2.70	2.90		low" per		4
.78	1.13		83	1.02	1.13	95	· 1.01	1.04	1.13	1.08	1.17	1.33	· 1.37	1.37	1.41	1.40	1.60		s per sh		
.48	.54	.63	.70	.80	.88	.94	.98	1.02	1.03	1.04	1.04 2.37	1.04 2.17	1.06 2.37	1.08 2.59	1.08	1.08 2.75	1.08 2.60		Deci'd per pending p		
2.43 6.37	2.95 6.92		7.59	3.59 7.89	2.86 8.72	2.65 8.83	2.73 8.97	2.95 9.42	2.74 9.70	9.90	10.19	10.12	10.56	10.99	2.00 2.11.42	11.70	12.30		ajne bet t perioariñ i		1
23.07	26.64		36.55	37.48	42.47	43.40	44.32	47.57	48.69	49.72	′50.86	55.02	55.70	56.60	· 57.30	58.00	58.50		n Shs Oi		- 6
5.7	4.7		11.8	- 11.5	11.1	13.7	14.2	:15.3	15.5	17.9	15.1	12.6	13.8	14.7	- 13.9	Bold figu			n'I P/E Re		1
.48	.44	.67	.80	.77	.92	1.04	1.05	.98	. 94	1.06	99	84	.86	.85	.73	Value			PE Rat		١.
0.9%	10.1%	8.4%	7.1%	6.8%	7.1%	·72%	6.8%	6.4%	5.9%	15.4%	5.9%	6.2%	.5.6%	6.4%	. 5.5%				n'i Div'd		4
		O mill.				938.7	1000.9	963.9	994.6	1130.3	1199.9	1063.0	1220.2	1287.6 76.6	1338.6 80.6	1285	1415 92.0		es (\$mill) es #		1
	\$660.0			st \$49.0 n		42.1 27.6%	45.6 31.7%	49.4 34.6%	55.4 31.6%	57.5 32.9%	63.2 35.2%	74.3 36.9%	75.6 38.6%	37.9%	32.5%	36.0%			fit (\$mill) Tax Rate		-36
otal in	erest co	verage: 2	.8x)			4.5%	4,6%	5.1%	5.6%	5.1%	5.3%	7.0%	6.2%	5.9%	6.0%	6.3%	6.5%		fit Margin		- 6
88565	Uncap	italized A	nnual ren	itals \$6.1	mā.	47.9%	50.2%	49.6%	40.2%	40.5%	49.0%	47.4%	46.2%	48.7%	47.5%	48.0%	47.5%		rm Debt	- :	48
		ty None				49.8%	47.8%	48.8%	58.1%	53.1%	45.8%	47.6%	48.9%	45.9%	47.1%	47.0%	47.5%		n Equity		18
fd Sto	ck \$74.:	3 mill.	ad Divid	: \$5.0 mil.		770.0	. 831.9	918.3	812.7 1217.9	'925.7 1281.3	1131.5 1297.4	1170.3 1350.3	1201.3 1415.4	1356.4	1388.4 1534.0	1450 1600	. 1520 1660	Net Plan	epital (\$m er (\$mill)	Ma) .	;
74.3 rr	ill. 8.179	K subsidia	uy obliga	ted mand	atority	979.1 7.8%	1049.6 7.6%	1141.6 7.6%	9.4%	8.6%	7.5%	8.2%	8.0%	7.3%	7.6%	7.5%	8.0%		on Total (Capil	8
xed ch		secs. (Di	vos are a	a lax-dedi	uctible	10.5%	11.0%	10.7%	11.4%	10.4%	11.0%	12.1%	11.7%	11.0%	11.1%	12.0%	12.5%		on Shr. E	• •	12
	- ,				:	10.6%	11.2%	10.8%	11.5%	10.8%	11.3%	12.5%	12.1%	11.3%	11.3%	12.0%			on Com t		13
		(57,524; 1 \$1.1 billi		2001	ľ	2%	2%	2%	1.0%	.4%	3.0%	4.6%	3.8%	32%	3.4%	20%	4.0%		d to Com	•	5
	NT POS		1997	1998 1	2/31/98	98%	98%	98%	91%	96%	75%	66%	71%	. 74%	72%	77%			ts to Net		6
(\$MII ash A	L)			3.6		BUSIN	ESS: AG	L Resou	rces, Inc. Gas Lin	is a hok ht Co., a	oung com	pany. Its ed distrib	pana- utor of						lential, 3: other, 3		
ther	•		87.9	294.0	354.8	natural	oas to	more tha	an 1.4 m	ullion cus	stomers	in Georg	ia and						nairman:		
	Assets ayable	. 2	92.7 65.1	297.6 51.1	354,8 71.0	souther	n Tenne	ssee. At	so enga	ged in n	onregulat	ed natur	al gas						Incorpo		
ebt D			29.5	76.5	1.13.0				. =	agement 998: gas					-9470. In		*		LGA30 com	1500. TO	-cp-s
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ook V		3.0				men	expe	cted.	The r	nain :	reasor	was	the	near	term.	The i	ıtility	, whil	le it w	rill gi	ve 1
iscal Year		TERLY REV Mar.31	ENUES (\$	MIL) A	Full Flacai Year					gas-1				its h	storic	role	as ga	s mei	rchant	t, will	CO
996	328.8	478.8	241.1	171.5	1220.2					L's 35 millio				unue	. Wol	wanst the	franc	supp!! hised	ies to dist	, wie ribute	or.
997	379.6	496.7	216.7	194.6	1287.6					from				won't	have	com	etitio	n, bu	t it w	vill be	s st
998	402.3	483.9	247.0	205.4	1338.6	profi	t. The	e defic	cit wa	ıs due	to c	ertain	ad-	regul	ated	by th	ie sta	ite as	s to p	prices	8
999	323.9	460 485	265 280	236.1	1285	verse	acco	untin	g iten	as and	d the	ill eff	ects	profit	s. Re	preser	iting	most	of AG	L's as	set

profit. The deficit was due to certain ad-1285 verse accounting items and the ill effects 1415 of much warmer weather on commodity gas sales. AGL says it can bow out of the Full Fiscal Year partnership on favorable terms, which we 1.37 expect it to do if it is faced with more fi-1.37 nancial surprises.

The utility, though not fully insulated from the effects of warmer-thannormal winters, won't have to fend off competition. Under Georgia's deregulation rules, AGL has set up a separate marketing subsidiary that goes head to head with other sellers to attract customers. This nonregulated business will replace the utility as the supplier of record

regulated by the state as to prices and profits. Representing most of AGL's assets, the gas system, applying its new rate design, now has a better chance of clearing its fixed costs; it should have a more predictable cash flow through the year to help service debt and fund capital spending The stock remains an income vehicle.

Due to the demands involved in developing nonregulated businesses, AGL may not be willing to up the dividend until rising profits hold the payout ratio below 70% for a year or two. So the next dividend hike may not come before 2001. The stock's lofty current yield takes this prospect into account. March 26, 1999 Gerald Holtzman

(A) Fiscal year ends September 30th.
(B) Diluted earnings per share. Next egs. report due early May. Excl. nonrecurring items: '84, \$0.37; '88, \$0.15; '95, d\$0.83.

.53 .45 .28

.41

Mar.31

.26

.265

.27

400

485

81

.88 .79

.42

.45

.26

.265

.27

.27

QUARTERLY DIVIDENDS PAID C.

280

.03

.40

.42

Jun.30 Sep.30 Dec.3

26

.265

.27

.27

d.02

EARNINGS PER SHARE A B F Dec.31 Mar.31 Jun.30

250

Sep.30

d.04

d.07

.19

265 .27

Year

1.05

1.07

1.08

1.08

2000

Fiscal Year Ends

1996

1997

1998

1999

2000

endar

1995

1996

1997

1998

1999

(C) Next dividend meeting early May. Goes ex mid-May. Approx. div'd payment dates: March 1, June 1, Sept. 1, Dec. 1.

Dividend reinvestment plan available.

(D) Incl. def'ed chgs. '98: 134.2 mill., \$2.34/sh. (E) In millions, adjusted for stock splits.
(F) Quarters may not add to total due to change in shares outstanding.

Company's Financial Strength Stock's Price Stability Price Growth Persistence 100 15 **Earnings Predictability**

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IND	IAN	A EN	IER(GY NY	YSE-1EI	1. 1	: :	RECENT PRICE	20	P/E RATIO	14.8	(Trailing Median:	16.7) F	ELATIVE VE RATIO	0.92	NTD DIAD	4.9	%	LINE	4	73
TIMELI	NESS,	1 Lowered	12/25/98	High: Low:	8.1 6.1	10.9 7.9	12.4		15.0 13.3	18.6 14.1	17.5 13.1	18.1 · 13.2	· 22.0 17.0		26.4 19.6	24.6 19.1				Price 2003	Range 2004
SAFET		2 Lowered		LEGE	NDS 07 x Divida	ande n en	S72	**							-4-for	3					50
TECHN	ICAL (3 Lowered	1/22/99	Į - di	ivided by In elative Pric	iterest Rat	. 🚆	-	\vdash	3 (0)	<u> </u>	 		├─	 		\vdash	 		\vdash	+ 40
	50. (1.00	· . · ·	-	2-for-1 st 3-for-2 st	pia 2/89	a Succession	. 🐺	14	·										===		32 1 : 24
200	12-04 PF	OJECTIC	DNS nn'i Total	44or 3 st	pR 10/98.			7					ni lini	1111111		<u> </u>				-	+ 20
	Price	Gain	Return	Shaded	No area indic	etas moas	sion 38	1	19 (10 4) *(1.	1110014	Hilling	4,141			-	_	ļ		1		16
High Low	30 (25 (+50%) +25%)	14%			- 144	11-11-16-1	7						-	•						12
	r Decis M J J		· ·) et 1911	19.001	m.	- 133	3	*****					-					-		† *8
o Buy	0 0 0	0 0 0	0 0 0 F		-		3	-			111,00	******	•	•••.						-	† ⁶
Options . Io Sell	0.00	0.00	0 0 0		 		37.	12		 	 	 		 			_	¥. TO	T. RETUR	N 2/99	† <u> </u>
nstitu	tional i	Decisio	18	1	 		1	7						1	·					R ARTHL'	- 3
to Buy	201994	301998 51	401998 40	Percent				111		-	 			<u> </u>	- 1111		<u> </u>	1 yr.	-6.9	-6.3	44.5
lo Self Hidra(000)	; 33 30 7867	21 7900	53 7849	shares traded	2.0 -	ninim		Mint.	interfere		l.i.aatar	andli	11.11.11					3 yr. 5 yr.	21.7 60.8	48.6 87.8	F: -
1983	1984	1985	1986	1987	1988	1989	1990		1992	1993	1994	1995	1996	1997	1998	1999	2000	OVALU	E LINE PU	L; NC.	02-04
19.65	21.17	19.29	16.94	13.83	14.66	15.65	12.86	14.13	14.85	16.67	15.80	13.42	17.71	17.62	15.51	14.55	16.55		es per sh		19.75
1.17	1.60	1.54	1,41	1.44	1.78	1.91	1.61	1.69	1.77	1.84	2.12	2.14	2.52	2.60	2.59	2.60	2.80		iow" per s		3.35 1.95
.58 .39	.97 .43	.87 .48	.69 .52	.85 .53	.92 .56	.96 .61	95 85	.84 .69	.87 .72	.96 .74	1.15	1.10	1.40 83	1.43	1.33 .90	1.35	1.60 .97		s per sh ^e leci'd per s		1.08
1.00	1.12	1.48	1.61	1.38	1.62	1,77	157	1.74	2.13	1.90	1.90	1.83	222	239	2.20	2.15	245		ending pe		2.90
4.29	. 4.83	5.24	5.42	5.66	6.00	6.35	7.33	7.48	7.67	8.64	9.02	9.33	9.89	9.72	`10.16	10.55			lue per sh		43.25
21.17	21.49	21.76	21.89	21.93	22.02	22.02	27.45	27.56	27.69	29.95	30.08	30.08	29.97	30.11	30.06	- 30.00	29.95		n She Out		29.85 14.0
6.1 .52	4.7	7.1 .58	11.1 .75	12.3	7.8 65	9.1	10.7	14.1	16.0 .97	16.5	13.5 .89	13.2	12.9 .81	13.0	16.8	Bold fig Value			ri P/E Ratio P/E Ratio		14.0
10.9%	9.3%	7.8%	6.7%	.82 6.7%	7.8%	.69 6.9%	6.4%	5.8%	52%	4.7%	4.9%	5.6%	4.6%	4.6%	4.0%	estin			n Div'd Yi		4.0%
		CTURE &			17.	344.7	353.1	389.6	411.3	499.3	475.3	403.8	530.6	530.4	466.4	440	495	<u> </u>	s (Smill)	-	·· 590
•					è .	22.9	23.5	24.8	25.7	28.5	34.4	33.0	42.2	43.2	40.2	40.0		Net Prof			55.0
	5183.4	Omill. D		rs \$94.0 it \$13.0 m		33.2%	32.8%	32.3%	35.1%	35.7%	36.1%	36.8%	35.4%	33.4%	35.2%	34.0%		income i			34.0%
Long-te	om intere	st eamed	£ 5.6x	. •		6.6%	6.6%	6.4%	6.2% 39.3%	5.7% 38.9%	.7.2% 36.9%	8.2% 38.6%	8.0% 37.5%	8.2% 35.0%	8.6% 37.5%	9.1% 37.5%		Net Prof	nn Debt R		9.3% 35.0%
		erage: 4. alized Ar		info 61 7		43.1%	31.8%	41.6% 53.2%	55.5%	61.1%	63.1%	61.4%	62.5%	65.0%	62.5%	62.5%			Equity R		65.0%
		y None		· · · · ·		281.3	324.2	387.2	382.6	123.6	430.0	457.0	474.4	450.4	488.9	505			pital (\$mil		· · 610
M4 61~	k None		. :	·		336.7	391.3	417.9	:476.6	505.6	·533.0	555.3	586.8	589.7	609.7	630		Net Plan			.745
		29,919,6	72 shs.	₹:	7. :	10.2%	8.4%	8.2%	8.3%	8.4%	9.5%	8.9%	10.3%	11.0%	9.6%	2.5%			n Total Ca	•	10.5% 14.0%
MADVE	T CAD.	600 milli	Ion <i>1</i> 0			14.3%	10.6%	11.0%	11.1% 11.3%	11.0%	12.7% 12.7%	11.7%	14.2% 14.2%	14.8%	13.2%	12.5%			n Shr. Eq n Com Eq		14.0%
	VT POS		997		2/31/98	5.8%	3.4%	2.0%	2.0%	2.8%	42%	32%	5.8%	6.0%	4.4%	2.5%			to Com E		-5.5%
(\$MIL Cash A	L)	,				64%	71%	83%	83%	·75%	67%	73%	59%	60%	67%	71%	62%	All Div'd	s to Net P	rof	57%
Other	٠.		<u> </u>	9.3 43.2	94.8						olding co			Line Co	, Texas (Gas Trar	smission	Corp. (Sas costs	61% 0	rev's;
Current	Assets	1	61.1	52.5	94.9						h 488,77 Terre Ha			labor, 19	0%. '98 : nployees;	deprec.	rate: 3.9 hombold	% Esto	lplanta(xxxx & din	ge: 9 yr ectors o	s. Has
octs P	ayable		25.5	19.4	29.7						90). Fisca			of comm	1/98 non	Proxy).	Chairmar	1 & C.E.	O.: Lawre	nce A	Ferger.
Debt Du Other	18		59.1 53.5	43.8 63.0	66.6 74.7	114.8 1	VOIL R	sidential,	36%; 0	ommercia	d, 15%;	industrial	(sold	Pres. &	C.F.O.: N	liel C. B	lerbrook.	Incorp.:	Indiana.	Address	r 1630
urrent				126.2	171.0										eridian St						
	COV.	Past		t Est'd	402%	Indi	ana.	Energ	gy ha	Cog l	een l	18Vin	g a	ana c	Suprer Ene	ne Co	urt, b	nt it	1S & D	andin	g in
f change	(per sh)	10 Yrs.	5 Yrı	L. Ito'l	02-04	encir	ស្គ្រា ស្គ្រា	exten	ded w	arm s	pell i	n its s	serv-	nonre	gulat	ed sid	elines	-gy u :	ı capı		ь
Revenu Cash F	es low"	1.0% 5.0%		0% . 2 0% 4	2.5% 1.5%	ice ·	territe	orv.` c	ausin	g gas	: "usa	ge to) be	The	utili	ty c	ontin	ues	to h	ave	key
aming ividen	5	6.5° 5.0°	9.5	5% 6	5. <i>0</i> % (redu	ced. E	lecaus	e the	utilit	y does	not	have	stren	igths.	India	ına G	as obt	tains g	gas a'	t low
Book Va		5.59	6 4.0 6 4.5	5% 5	1.0% 5.0%	a we	ather	-norm	BUZAC Ichire	ion m	aer 10	nee 1	egu- have	prices	frons the	u set domi:	rerai nant 4	inter neros	state , Runn	pipe lier i	n its
Fiscal	QUART	RLY REV	NUES (\$	mill) ^	Full Fiscal	been	puni	shed.	In fis	scal 1	.998 (years	end.	servic	e ten	ritory,	The	utilit	y is e	expan	iding
Ends	Dec.31	Mar.31			Year	Sept	ember	· 30th), ten	perat	ures	were	14%	its cu	stome	r bas	e by 2	2.2%-2	2.5% a	year	and
	154.3 172.5	222.6 215.7	91.2 83.7	62.5 58.5	530.6 530.4	warn	ner t	han -r	orma	l (in	utilit	y deg	gree-	shoul	d rea	ch 50	00,000) hoo	kups	by 1	iscai
1998	170.3	163.3	70.8	62.0	466.4	days,	, cau	sing 6	Fisc	gs 10 al 19	811 p	uack tarted	off	dustr	ial ba	se. m	uiana ith se	veral	steel	and	auto
	125.2	175	75.0	64.8	440	mrt GG					r. caus		• • • • • •								

440 495 mal first-quarter comparison. The compa-Full Fiscal Year 1.40 1.43 1.35 1.60

65.0

Sep.30

d.21

d.11

d14

.206

.214

.221

.81

75.0

.10

.16

.09

.20

.206

.214

.221

EARNINGS PER SHARE AB

ny should see improved comparisons after the first quarter, but full-year share net is likely to be little better than flat. Indiana Energy's other recent problem is on the legal front. Indiana Gas and Citizens Gas and Coke formed a joint venture, ProLiance Energy, to provide gas supply and marketing services to the two utilities. But last October, a state appeals court ruled that the contracts between the utilities and ProLiance were improperly approved by the Utility Regulatory Commission. The decision has been stayed

even warmer than last year, causing a dis- plants in the territory that use natural gas. The utility has also improved its efficiency in recent years, resulting in a lowering of operating costs.

Indiana Energy is moving forward in nonregulated areas. The company has entered into joint ventures that provide various services to other energy suppliers, as well as to large-volume users. These businesses should account for a growing share of IEI's profits in coming years.

This untimely stock is suitable for patient, conservative investors. It offers a high current yield and worthwhile total return potential to 2002-2004. March 26, 1999 pending an expedited appeal to the Indi- Ben Sharav, CFA

(A) Fiscal year ends Sept. 30.
(B) Based on avg. shares. Excludes nonrecurring gains (charge): '87, \$0.15; '93, \$0.34 '97, (\$1.00). Next earnings report due late April.

175

.58

.48

.55

.199

.206

.214

.221

180

Dec.31 Mar.31 Jun.30

.87

.80 .77

.83

.95

.199

.206 .214

.221

QUARTERLY DIVIDENDS PAID C.

Mar.31 Jun.30 Sep.30 Dec.31

2000

Fiscal Year Ends

1996

1998

1999

2000

Cal-

endar

1995

1997

1998

1999

ex about May 18. Dividend payment dates: About March 1, June 1, Sept. 1, Dec. 1. Dividend reinvestment plan available.

(C) Next dividend meeting about April 24. Goes (D) Includes deferred charges. In '98: \$18.0 ex about May 18. Dividend payment dates: mill.,\$0.60/sh. (E) In millions, adjusted for stock splits.

Company's Financial Strength Stock's Price Stability 40 Price Growth Persistence Earnings Predictability

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LACLE	DE G/	SNYS	E-LG	:	er i v		RECENT PRICE	_21	PÆ RATIO	15.6	(Trailing Median:	15.4) R 14.0) P	ELATIVE VE RATIO	0.97	DIV'D	6.5	%	VALUI LINE	4	75
	3 Raised 10/2		w: -	15.9 13.5	17.0 14.0	18.0		20.5 - 16.9	24.9 20.0	25.6 18.3	23.1 18.4	24.9 20.0	28.6 20.3	27.9 22.4	27.0 20.8	1			Price 2003	
SAFETY "	New 7/27/90		GEND:	x Divide	nds p sh		*	 	 - '				-				 -	 -	 	+ 0
	3 Raised 11/20		divide Relati	id by Int ive Price	eresi Rate Strength	ुक्ते हर) T		٫	tor-1		- 7			<u> </u>					‡ \$
SETA .55 (1.0	0 = Marker) PROJECTION:	CODÚC	-1 split ons: No	3/94		(60)	1 T	-	 	[ļ		 				<u> </u>	ļ		Ŧ
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-1.97 2.7		2.95	44 .	2.51	2.47	. 213	2.37	_232	- 2.81	∴ 2.65	2.55	1 3.29	3.32	3.02	. 2.60	3.10		low" per s		.:
.65 1.70		1.87		1.57	1.45	1.08	1.28	1.17	1.61	1.42	1.27	7.1.87	1.84	1.58	1.35	a 1.80		per sh A		•
.65 ···.79	1 10 100			1.10	1.15	1.18	2.46	1.20 2.87	1.22 2.62	1.22	1.24 . 2.63	1.26 2.35	2.44	1.32 2.68	1.34			eci'd per s		
8.17 9.12		0.54 10.		1.44	11.74	-:11.75	11.83	11.79	12.19	12.44	13.05	13.72	14.26	14.57	2.55			ending pe lue per sh	_ [1
17.45 17.45		5.74 15.		5.68	15.59	15.59	15.59	15.59	15.59	15.67	17.42	17.56	17.56	17.63	17.70			Sha Out		1
.6.7 5.0	7.1	8.8 , 11	.0	.9.2	10.3	14.6	12.5	: 15.8	.135	16.4	15.5	11.9	12.5	15.5	Bold fig	res are		1 P/E Rati		
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0.1% 8.8%		6.7		7.6%	7.7%	7.5%	7.5%	6.5%	5.6%	5.3%	6.3%	5.6%	6.6%	5.4%			Avg Ann	1 Div'd Yie	<u> </u>	• 4
APTIALSTRU	CTURE as o	12/31/98.	•••	-	4922	470.8	438.1	: 418.2	501.0	523.9	.431.9	. 544.8	602.8	547.2	535			s (Smill) A	• • •	
otal Debt \$31	5.4 mill. Due	n 5 Yrs \$1	60.0 mi	aı, -	22.7 27.4%	16.9 28.5%	35.1%	18.3 31.2%	252 37.3%	22.2 36.0%	20.9 32.1%	32.8 35.9%	32.5 36.1%	27.9 35.6%	24.0 36.0%	-	Net Profi Income T	t (\$mill) :-		36
l Debt \$179.3 Tinterect con	mill. LT in ned: 3.6x; tota	terest \$13.	5 mill.	· 1.	4.6%	3.6%	4.6%	4.4%	5.0%	42%	4.8%	6.0%	5.4%	5.1%	45%		Net Profi		.	5
verage: 2.7x)		il illinguesi	٠.		38.7%	41.2%	46.9%	44.1%	45.3%	43.9%	40.2%	42.5%	38.0%	40.9%	42.0%			m Debt Ra	tio .	42
ene Hann	Hallmad C O			·L	60.6%	58.1%	52.5%	55.3%	53.1%	55.5%	59.3%	57.1%	61.6%	58.6%	57.5%	57.0%	Common	Equity Re	dio	<i>5</i> 7.
ension Liabili	italized \$.8 m tv None	u			302.0	314.9	351.1	332.4	357.6	351.1	383.5	422.2	406.8	438.0	450			itel (\$mill		٠. ٠
· • .			. .	ŀ	9.3%	316.3 7.3%	339.3 7.8%	367.3	390.8 9.1%	81%	434.3 7.1%	9.4%	467.6 9.7%	490.6 8.1%	510 7.0%		Net Plant			
d Stock \$2.0 ommon Stock	mil. Pfd (: 17,627,987 s) iv'd \$.1 mi	۵.		12.3%	9.1%	10.8%	9.8%	13.1%	11.3%		13.5%	12.9%	10.8%	20%			n Total Ca n Shr. Egu		13.
of 2/11/99		1.		- 1	12.4%	9.2%	.10.8%	9.9%	13.2%	11.3%	-	13.6%	12.9%	10.8%	9.5%			Com Eq	• 1	13.
	\$375 million				2.6%	NMF	.7%	NMF	3.3%	1.5%	.4%	4.5%	3.9%	1.8%	NII	3.0%	Retained	to Com E	9 .	5.
IRRENT POS (\$MILL)	ITION 199	1998	12/31/	/98 L	79%	110%	93%	103%	75%	86%	96%	67%	70%	83%	99%	76%	All Div'da	to Net Pr	of	6
ish Assets her	4.5 134.6		180								lity that o		gas acct	s. for 57	% of rev	Oper.	undergro	und gas	storage	Se
rrent Assets	139.		189	#*E							million), in arts of 8	other	esto po stichdrs. (ntage: Off. & dir	13.5 yrs. own les	. Has at sthan 19	XL 2,065 XL nl nom	empl.; 9 mon; Stu	1,715 00 no Bros	m
cts Payable	29.6	20.7	2.	، ا ،	counties.	. Had 6	15,907 cu	stomers	at 9/98.	Therms 8	old and	trans-"	(12/98 Pi	roxy). Chi	mn., C.1	E.O. and	Pres.: D	louglas H	. Yaege	x. k
bt Due	99.0	98.5	136	6.2							al, 67%;	-com-	MO. Add	ress: 720	Olive St	reet, St.	Louis, M	O 63101.	Tel.: 31	4-3
her Irrent Liab.	<u>55.8</u> 184.4		222	== -										emet add						_
k. Chg. Cov.	351%			4	ch are	-ear	wui :	COT	pos	t. A.	nega	uve :	MUSSI rates	on io	or a	n in	creas	e in	anı Mirri	au
NUAL RATE		Past Es		98	1999 .	(end	ls Se	ptem)	ber 3	10th).	The	De-	sure a	is to l	now t	hese 1	rocee	dings	will :	tu
thange (per sh) rvenues	10 Yrs.	5 Yrs. 1	10 02-0 4.0%	7 0	\mathbf{cembe}	er qu	arter '	will li	ikely 1	take t	he bla	ame -	out. ·C	ur er	eates	t cond	ern r	evolve	s arc	oui
ash Flow" imings	2.0% 1.0%	5.0% 5.5%	2.5% 4.0%	6 1	for th	ne fu	l-year	shor	tfall.	In the	is per	iod,	a filin	g fron	a less	than	a vea	r ago.	in w	hi
vidends	2.0% 2.5%	1.5%	2.0%		torios	ratu	1492 1492	Werr.	ieae's	serv.	ice te	end	ine i	regula	tory	boar	d re	comm	endec	1
ok Value		3.5%	3.0%		20%	warm	er ve	ear to	o Aeai	r. Suc	h tre	nds	auest	arg of	CL6847	es l'e	i a	tnan positi	ule ve t	no!
Don 21	ERLY REVENUE	S (\$ mill.) A	FIS	ical]	have	a tre	mende	ous ir	npact	on a	comp	any	thoug	h. in 1	this i	nstan	ce the	comi	oanv	w
96 155.0	Mar.31 Jun 246.6 86	.o sep.s		ear s	such a	as thi	s that	t lacks	s weat	ther n . Gas	ormal	iza-	grante	ed cut	s in (depre	ciation	ı rate	s and	d i
יו ררון מצ																				

volumes are substantially reduced. How-

Share net ought to recover in fiscal

2000, assuming, as we do, normal temperatures going forward. The com-

pany has done a decent job in keeping its

operating expenses under control. Customer growth, while below the national aver-

age, will probably help the bottom line a bit, as well. Too, Laclede's Gas Supply In-

centive Plan continues to perform well.

This program allows the utility and its

customers to share in gains and losses as-

sociated with the management of gas sup-

with the Missouri Public Service Com- Oscar Vidal

60.7 602.8 1997 264.0 84.2 1998 199.7 213.8 77.2 56.5 547.2 1999 149.7 240 85.0 60.3 535 2000 195 250 90.0 600 65.0 EARNINGS PER SHARE A B Full Fisca Year Dec.31 Mar.31 Jun.30 Sep.30 1.37 d.02 d.38 .92 .78 1.22 .04 d.34 1.04 1.20 d.05 d.19 d.05 d.35 1.35 .90 1.25 d.05 d.30 1.80 QUARTERLY DIVIDENDS PAID C.

.315

.325

.33

.325

.33

1999 .33 .335 .33 .335

(A) Fiscal year ends Sept. 30th.
(B) Based on average shares outstanding thru.
97, then diluted. Quarterly earnings may not add to total due to changes in shares outstand-

Mar.31 Jun.30 Sep.30

.31

.315

.325

1996

1997

1998

1999

Cal-

1995

1996

1997

1998

.31

.315 .325 .33

ing. Next earnings report due late Apr. (C) Next dividend meeting about May 28. Goes ex about Jun. 9. Approx. dividend payment dates: 1st of January, April, July, October.

1.24

1.30

Dividend reinvestmeit plan available.
(D) Incl. deferred charges. In '98: \$110.7 mill., \$6.28/sh. (E) In millions, adjusted for stock

ply purchases.

accounts may well find the issue's Safety
In January, Laclede filed a request rank of 1 (Highest) of particular appeal.

Company's Financial Strength Stock's Price Stability Price Growth Persistance 90 25 60 **Earnings Predictability**

costs. The commission has 11 months to

act on the latest filing. It is possible that

This equity's dividend is quite attractive at today's depressed stock price

levels. The quotation dipped understand-

ably following disappointing December quarter share income. As a result, the

yield significantly exceeds the gas distri-

bution industry mean. And we expect con-

tinued modest increases in payments in

coming years, considering Laclede's healthy balance sheet (from a utility

standpoint). Conservative, income-oriented

Laclede will settle before then.

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March 26, 1999

N.V	V. N	AT'L	GAS	NDQ.	-NWNG		F	ECENT PRICE	24	P/E RATIO	25.0	(Trailing Median	: 16.9 : 13.0	RELATIVE P/E RATIO	1.55	DIV'D YLD	5.1	%	VALUI LINE	3 4	80
TIMELI		1 Lowered		High:				22.3 16.5	22.7 17.2	25.8 19.0		22.8 18.3	25.9 20.8		30.8 24.3	27.0 22.1	<u> </u>		Target	Price	
SAFET		2 New 7/2		LEGE	NDS							10.0					ļ	<u> </u>	2002	2003	- B
TECHN	ICAL (3 Raised 3	/27/98	l di	.25 x Divid Ivided by I lelative Pric	nteresi Rati	.	 		├ -	 		 	 			· · · ·	 	<u> </u>	<u> </u>	∔ 6
	60 (1.00			3-for-2 s	pik 9/96	a suengun							3-for								‡ 5
200	12-04 PF	OJECTIC	NS nn'i Total	Options: Shaded	no area indic	zies reces	sion	-	├	 	 		-	! 	1. 41		 -	 ` 			4
	Price	Gain	Return		+	 	3 744	1	141114	1444	1 12		111111111111111111111111111111111111111	1	1	10-		-		┝╼┯	+ :
ligh .ow	30 (25	+25%) (+5%)	10% 6%	7.14		7141	نبهلاسا		7742					<u> </u>							‡ '
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ptions Set	100		0 0 0	ļ			277	ļ	:	ļ	<u> </u>			····					<u> </u>		1
		Decision		!				Ξ					ļ		- '	•		%10	T. RETUR	N 2/99 VL ARITH.	١.
_	201998	301998	401998	Percen	t 9.0 –		3/2											1 yr.	THIS STOCK	-6.3	
o Buy o Sell	44 33	52 28	47 31	shares traded				1	1.11	Lilit		1				1		3 yr.	28.4	48.6	Ŀ
983	8675 1984	9097	9157 1986	1987	1988	1989	1990	1991	1992	1993	1994	1995		1997	1998	1999	2000	5 yr.	32.5 E LINE PUE	87.8 Buc i	02-0
27.54	29.95	27.87	20.59	19.69	17.39	15.22	17.02	16.74	14.10	18.15	18.30	16.02	16.86	15.82	16.75	16.85	17.50			3, 1146.	20
2.07	23.33	2.45	20.33	2.38	2.79	2.85	3.22	2.57	17.10	3.74	3.50	3.41	3.86	3.72	3.00	3.60	4.10		es per sh low" per s	. I	4
1.07	1.23	1.40	1.16	1.20	1.33	1.58	1.62	.57	.74	1.74	1.63	1.61	1.97	1.76	1.02	1.50	2.00		s per sh A		2
.87	.92	.97	1.02	1.04	1.05	1.07	1.10	1.13	1.15	1.17	1.17	1.18	1.20	1.21	1.22	1.23	1.24	Div'ds D	ed'd per	th Be	1
1.87	2.46	2.54	2.19	2.17	2.82	3.36	3.85	3.58	3.73	3.61	4.23	3.02	3.70	5.07	3.70	4.00	3.60		ending pe		3
9.42	9.75 13.94	10.23	10.44 15.29	10.92 15.69	11.25	12.04	12.61 17.41	12.23 17.68	12.41 19.46	13.08	13.63	14.55 22.24	15.37 22.56	16.02 22.86	16.85 24.85	17.05 25.25	17.95 25.60		tue per sh n Shs Out		21 27
7.9	7.6	8.6	12.3	11.8	10.2	9.8	10.2	28.1	27.0	12.9	13.0	12.9	11.7	14.4	26.7	Bold fig			1 PVE Rati		1
.67	.71	.70	.83	.79	.85	.74	.76	1.79	1.64	.76	.85	.86	.73	.83	1.41	Value	Line		P/E Ratio	•	•
10.3%	9.8%	8.0%	7.1%	7.3%	7.7%	6.9%	6.7%	5.9%	5.7%	5.2%	5.5%	5.7%	5.2%	4.8%	4.5%	estin	ales .	Avg Ann	il Divid Li	eld	4.9
		CTURE :				260.9	296.3	295.9	274.4	358.7	368.3	356.3	380.3	361.8	416.7	425		Revenue		.]	
	\$347.0	.1 mill. D		rs \$230. t \$26.0 n		28.4	30.7	14.4	15.8	37.7	35.5	38.1	46.8	43.1	27.3	40.0		Net Prof			- 6
rcl. \$11	.9 mill. 7	1/4% debs	L due 3/1.			35.7% 10.9%	30.7% 10.4%	13.9%	30.6% 5.8%	37.0% 10.5%	36.6% 9.6%	36.8% 10.7%	36.9% 12.3%	32.9% 11.9%	36.0%	36.0% 9.4%		Income 1 Net Profi			36.0
		ihs, at \$19 verage: <i>2</i>				47.9%	46.1%	50.6%	46.1%	47.5%	47.9%	43.5%	41.4%	46.0%	44.0%	45.0%			nn Debt R	atio	45.0
1 (VAC) 111	161631 (A)	voiago. z	,			44.8%	47.0%	43.2%	43.9%	45.0%	45.1%	50.3%	52.8%	49.0%	51.5%	50.5%			Equity R		52.0
ension	Liabilit	y None			i	460.8	466.8	500.3	550.3	575.2	607.7	643.3	657.4	748.0	805	865			pital (\$mill)	11
id Sto	:k \$36.5	mill. P	id Div'd :	\$2.6 mill.		505.4	545.6	553.0	575.0	606.9	654.3	697.2	745.3	827.5	900	965		Net Plan			12
•			•			8.3%	9.0%	5.1% 5.8%	5.0% 5.3%	.8.5% 12.5%	·7.6%	7.7% 10.5%	8.9% 12.1%	7.4% 10.7%	5.0%	6.5% 8.5%			n Total Ca - Sha Ear		8.0 11.0
ommo	n Stock	24,804,0	98 shs.	•		11.8%	12.2%	5.5%	5.5%	13.2%	11.8%	10.9%	12.7%	11.0%	6.0%	8.5%			n Shr. Eq. n Com Ea		11.5
IARKE	T CAP \$	600 millik	on (Small	l Cap)		40%	4.1%	· NMF	NMF	4.4%	3.3%	3.0%	5.0%	3.6%	NMF	1.5%			to Com E		5.5
URREI (\$MIL	NT POS	TION 1	1996	1997 5	9/30/98	71%	71%	NMF	NMF	70%	74%	74%	63%	70%	120%	_83%	65%	Ali Diy'd	s to Net Pr	of	- 50
ash A	ssets	٠.,	8.2	6.7	6.5						(doing bu								Northwes		
ther urrent	Assets		90.1 98.3	98.0 104.7	62.4 68.9						90 commi and in so								rground s 12%; tran		
ccts P	ayable	(64.8	58.8	37.8						dand and								nmon shr		
ebt Du ther	18		76.1 11 28.0	105.3 32.1	85.1 32.0	Vancou	ver, WA	Service	area pop	ulation:	2.4 million	1 (77% is	OR).	R.L. Rid	gley. Pres	. & C.E	O.: R.G	. Reiten	Inc.: Ore	gon. A	ddres
urrent		10	58. 9 1	96.2	154.9						from Can			220 N.W							
	. Cov.			61%	240%	Nort	hwes	t Nat	ural !	hasn'	t beer	l hav	ing						rtain.		
	L RATES (persh)	Past 10 Yrs.	5 Yrs	t Estd	1 35-37 12-04	TL CE	.weak	ened	by the	e ill e	rofits effects	of ab	vear ove-						e ent nulate		
evenu Cash F	85	-3.59	6 0.5	i% . 3	3.5% 1.0%	norm	al-we	ather,	which	h redu	iced re	esiden	tial						nand		
arning	s ·	4.57 3.57	6 12.0)% ∢	1.5%	285 8	ales.	The s	as sy	stem	also 1	nade	cer-	haps,	move	utilit	y ear	nings	highe	r on	ba
ividena ook Va	is due	1.59 4.09	6 1.5	% 1 % 4	1.5%	tain	capit	al inv	estm	ents,	which	wer	en't	ance.							
al-		ERLY REV			Full						The alling								subpar		
		Jun.30			Year									ly cov	ered b	y cas	h flow	., oct			
	127 6	71.9	50.6	120.2	380.3	indus	trial	users	decl	ine, e	since	thev	are	À uti	litv r	ate l	iike	is be	ndine	. No	rtl
	137.6 134.3		46.3		361.8				-	• -				west							-,-

83.7 80.0 53.8 57.0 143.5 143 416.7 425 135.7 145 1999 450 2000 155 85.0 62.0 148 EARNINGS PER SHARE A Cal-Mar.31 Jun.30 Sep.30 Dec.3 Year endar 1996 1.02 .76 .76 21 d.02 1.97 1997 1.07 .07 d.14 1.76 E1.02 1998 97 d.26 .21 .76 . .14 .14 .20 1999 RO d.20 1.50 2000 1.10 2.00 d.15 .85 QUARTERLY DIVIDENDS PAID B . Full Calendar Mar.31 Jun.30 Sep.30 Dec.3 Year .30 .30 .305 1995 .293 1996 .30 .30 .30 .305 .305 .30 .30 .305 1.21 1997

margins on this high-volume business. came under pressure, further undercutting the bottom line. At the same time, Canor, the Canadian exploration subsidiary, felt the brunt of receding oil prices. The producer posted a small loss, before impair-

ment charges and writedowns of its Canadian properties, which included unproductive wells. Yearend charges for Canor and other energy subsidiaries totaled \$0.49 a

There will continue to be hurdles in 1999. Results for the Canadian production subsidiary and the margin on the gas system's industrial sales may continue to be held down by depressed crude prices through the first quarter, with the outlook

revenue boost, which represents the gas system's first formal rate petition in some 10 years. The proposed tariffs are designed to recover the utility's investments in expanded gas-storage capacity and in a new computer system. The application seeks an allowed return on common equity of 11.4%, though Northwest may have to settle for less given today's low rate of inflation and low money costs. New rates may become effective by September and benefit share earnings fully in 2000. Northwest shares, though they are un-timely due to the recent earnings slack, are of good quality and may be held for income in conservative portfolios. Gerald Holtzman March 26, 1999

(B) Next dividend meeting about Apr. 26.

.305

.305

1.22

1998

Goes ex about Apr. 30. Dividend payment dates: about the 15th of February, May, August, November. Dividend reinvestment plan available. (C) Includes intangible assets. In

Company's Financial Strength Stock's Price Stability B++ 95 Price Growth Persistence Earnings Predictability 25 25 To subscribe call 1-800-833-0046

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PEOPL	ES E	NEF	RGY I	NYSE-I	PGL	F	ECENT RICE	36	PÆ RATIO	16.0	Trailing Median	18.9) R 13.0) P	ELATIVE /E RATIO	0.99	DIV'D YLD	5.4	%	VALUI LINE	3 4	82
	3 Raked		High: Low:		26.8	26.5 20.0	28.3 21.8	31.6 24.5	35.0 27.5	32.1 23.4	32.0 24.3	37.4 29.6	39.9 31.3	40.1 32.1	40.3 31.8	<u> </u>		Targe	Price	Ran 120
SAFETY	1 Raised	9/29/95	LEGE				_		├ ──		├ ─	!	 			·		 		+ 8
TECHNICAL	3 Raised	11/6/98	l di	vided by tr	nterest Rate	, ===	-	 	ļ	 	 		 			ļ		┼	├ —	40
BETA .75 (1.00	= Market)		Options:	No	e Strength	100							Tol.							‡:
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io Buy 78 io Saali 62	: 56	85 62	shares	4.0 -	1. 1.	26.	73.	-	 	 	4 1	11	1.11. 11111	lilia de la			1 yr. 3 yr.	-1.1 32.0	-6.3 48.6	F
KKTY(000) 15585		15865	traded	2.0 -						himble						2222	5 yr.	56.7	87.8	پيا
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47.77 52.71 2.62 3.37		46.20 3.65	36.13 3.04	34.29 3.75	36.42 3.92	35.63 3.74	33.69 .173	31.54 3.67	36.09 3.85	36.70 3.99	29.60 3.68	4.98	36.34 4.92	32.28 4.44	31.15 4.50	33.60 4.90		es per sh Row" per i		39 5.
1.25 2.07		227	1.66	2.31	2.39	2.07	2.05	206	211	2.13	1.78	2.96	2.81	225	2.25	2.65		now persh		3
1.00 1.03		1.29	1.41	1.50	1.58	1.65	1.71	1.76	1.78	1.80	1.80	1.82	1.87	1.91	1.95	1.99		Deci'd per		2
2.14 2.11		2.78	2.83	2.66	4.15	3.15	3.10	3.40	3.77	2.50	2.75	2.45	2.55	4.05	3.25	3.20		pending p		3
10.93 11.88		14.02	14.27	15.09	16.20	16.61	16.95	17.72	18.02	18.39	18.38	19.49	20.43	21.03	21.45	22.25		alue per si		25
31.02 32.03		32.43	32.51	32.57	32.62	32.70 11.2	32.76 11.8	34.77	34.88 15.0	34.87	34.91	34.96	35.07 12.7	35.26 16.2	35.65	36.00		n Sha Out		37
7.5 4.8 .63 .45		9.0 .61	13.0	7.8 .65	7.9 ,60	.83	.75	.79	89	87	.98	.67	73	.85	Bold figs Value	res are Line		n'i P/E Rat P/E Ratio		1
10.7% 10.3%		6.3%	6.5%	8.3%	8.4%	7.1%	7.0%	6.5%	5.6%	6.3%	6.9%	5.7%	5.2%	5.2%	estia	ates		n'i Div'd Yi		5.0
APITAL STRE	CTURE	es of 12/3	1/98		1188.0	1165.2	1103.7	1096.8	1258.9	1279.5	1033.4	1198.7	1274.4	1138.1	1110	1210		es (\$mill)		14
					80.5	69.7	68.5	71.6	74.1	74.4	62.2	103.4	98.4	79.4	80.0	95.0		fit (\$mill)	,	1
Total Debt \$57	9.1 mill. i	Due in 5	Yrs \$20.9	mill.	34.0%	34.9%	33.8%	31.9%	33.6%	30.1%	34.4%	37.6%	36.4%	36.2%	36.0%	36.0%		Tax Rate		36.0
LT Debt \$521.7	mill. I	LT Interes	st \$42.0 m	vill.	6.8%	6.0%	6.2%	6.5%	5.9%	5.8%	- 6.0%	8.6%	7.7%	7.0%	7.2%	7.9%		fit Margin		8.5
Total interest c	overage;	5.0x)			45.0%	47.1%	46.3% 52.1%	43.8% 55.1%	45.7% 54.3%	49.4% 50.6%	49.2% 50.8%	43.6% 56.4%	42.4% 57.6%	41.1% 58.9%	40.0%	40.5%	_	rm Debt F		40.0
Pension Liabili	itv None	•		-	52.5% 1007.0	51.0% 1066.1	1065.0	1118.7	1156.5	1267.5	1263.6	1208.3	1243.5	1258.0	60.0% 1270	59.5% 1345		n Equity R pitel (\$mil		60.0 15
	•		•		1085.1	1134.0	1181.2	1243.6	1318.0	1341.9	1373.1	1381.1	1402.2	1446.7	1460	1475		nt (\$mill) ·	"	15
Pld Stock None	9				9.9%	8.5%	8.5%	8.4%	8.1%	7.8%	7.0%	10.3%	9.5%	7.8%	7.5%			on Total C	ep T	9.0
Common Stoc	k 35,481,	303 shs.			14.5%	12.4%	12.0%	11.4%	11.8%	11.6%	9.7%	15.2%	13.7%	10.7%	10.5%		Return o	on Shr. Eq	uity	13.0
rutstanding at 1 MARKET CAP:		nn 1144 (`an\		14.8%	12.4%	12.1%	11.4%	11.7%	11.6%	9.7%	15.2%	13.7%	10.7%	10.5%			on Com Ed		13.0
URRENT POS		1997		2/31/98	5.1% 66%	2.6%	2.1% 83%	1.9%	1.9%	1.9%	NMF 101%	5.9% 61%	4.7% 66%	1.7%	1.5% 86%			d to Com i is to Net P		5.0 64
(SMILL)	~ .									1									<u> </u>	
Cash Assets Other		33.3 295.4	10.6 303.6	13.2 398.2						fistributes Coke Co								r 63% of at age: 10		
Current Assets	• 7	328.7	314.2	411.4	tomers	at 9/30/9	7) and N	lorth Sho	re Gas (Co. (136,8	119), in C	hicago	employe	es, 26,0	00 share	holders.	Directo	rs own 1	% of c	omm
ccts Payable	٠.	134.8	123.4	156.7						lume: 24 ial, 2%;								Richard		
Debt Dué Other		2.8 108.3	19.3 112.7	57.4 143.0									Chicago	IL 6060	3. Tel.: 3	12-431-4	655: 122 000. Inte	South Mi	M.Decon	O.COT
Current Liab.	7		255.4	357.1														to rec		
ix. Chg. Cov.		189%	404%	395%	from	war	m we	eathe	r. The	e com	panys	two	empl	oyee d	ount	by 1	1% in	the	last	thr
NNUAL RATE			st Estd		gas 1	utilitio	es, Pe	oples	Gas I	light :	and N	forth	years	. Peor	oles a	nd N	orth	Shore	Gas	hav
l change (per sh) Revenues	10 Yrs -1.0		5% 2	02-04 2.5%	Shor	e Gas	, serv	e ter	ritorie	s cov	ering	Chi-	also	applie	d for	new	rate	-struct	ures	th
Cash Flow"	3.0	% 5.1	0% 3	1.0%	cago	and	the	surro	undir	ng su	burbs	-an	Would	ı nx	gas r	rices	for i	five-ye	ar t	erm
amings ividends	2.5 3.0	r% 1.	5% 2	3.5% 2.0%	clima	tnat	eonje: IX KI	UWII	11880 11880	e per	Cust.	mer	tue (no co	цу ПО	pes t	o red	uce its like	gas	pu ete
look Value	3.5			1.0%	tend	to b	e hig	h. wi	th the	weat	her b	eing	these	savin	es: A	decis	ion h	y the	reguil	ato
Iscal QUAR	TERLY REV	ENUES (\$	mil) ^	Full Fiscal Year	the 1	najor	varia	ble. A	ınd be	ecause	the	utili-,	comin	nission	is st	ill per	ding.	•••		٠
nds Dec.31	Mar.31	Jun.30	Sep.30	Year	tioe'	romil	ated t	ate a	bructu	ires d	n not	COTI-	The	comp	anv i	e mii		e oter	stami	. :

tain weather-normalization riders, temperature is also the biggest variable affecting profits. Fiscal 1998 (years end September 30th) was the warmest in 40 years in the service territories—15% warmer than normal, in utility degree-days—causing earnings to slump by 20% from the prior year. Last year, the unseasonable warmth began in the second quarter. This year, the first quarter was 20% warmer than last year's. Consequently, earnings plunged for the period. Comparisons should be easy the rest of the way, but we expect full-year share net to be flat.

the itiatives outside the utility frame-af- work. The Peoples Energy Services subsidiary is engaged in nonregulated gas marketing joint ventures and is now serv-ing more than 20,000 industrial customers. Peoples Energy is also becoming more active in exploration and production. The company recently announced the opening of a new office in Houston to pursue acquisitions and joint ventures in this area.

This neutrally ranked stock offers a

high yield. Peoples Energy has raised the dividend with the April 15th payment, its fourth straight annual increase. While the Peoples is pushing to improve efficiency. The utilities are embracing automation in such functions as meter reading and customer information. These actions library of Peoples' utility markets.

Ben Sharav, CFA March 26, 1999

49 (A) Fiscal year ends Sept. 30th.
(B) Basic earnings per share. Excludes acct'g gain: '89, \$0.30. Next earnings report due late April.

568.0

445.5

475

1.81

1.34

1.60

1.68

.45 .455 .47

.48

202.4

199.7

211

230

.34

.25

27

.455

.47

.48

.23

EARNINGS PER SHARE A B

Dec.31 Mar.31 Jun.30 Sep.30

QUARTERLY DIVIDENDS PAID C.

Mar.31 Jun.30 Sep.30 Dec.31

116.8

128.7

140

145

d.25

d.41

d.33

d.26

d.30

.455

.47 .48

1997

2000

1997

1998

1999

2000

Cal-

endar

1995

1996

1997

1998

1999

387.2

1.07

1.01

.66

1.00

.45

.46

.47

.48

(C) Next dividend meeting about May 4. Goes ex about June 18. Dividend payment dates: about 15th of Jan., Apr., July, Oct. • Dividend reinvestment plan available.

1198.7

1274.4

1138.1

2.81

2.25

2.25

2.65

Full

1.82

1.87

(D) Includes deferred charges. In '97: \$19.4 mill., \$0.55/sh. (E) In millions.

Company's Financial Strength Stock's Price Stability Price Growth Persistence Earnings Predictability To subscribe call 1-800-833-0046

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WA	SHI	NGT	ON (GAS	NYSE.	-WGL	F	PRICE	24	P/E RATIO	17.8	Trailing Median:	19.7) 13.0) F	ELATIVE VE RATIO	1.11	Ard DM.D	5.1	%	VALU LINE		88
TIMEL		4		High: Low:	13.3 10.6			17.3 13.7	19.6 15.6		21.3 16.0	22.4 16.1	25.0 19.1	31.4 20.9	30.8 23.1	27.4 22.3	-			Price 2003	
SAFET	•	Raised		LEGE	NDS 22 x Divid	lends p sh	<u> </u>											1			5
TECHN	EO (1.00	3 Raised	2/4/98	di	vided by I elative Pri	lends p sh nterest Rati ce Strength	•					2 for 1									# \$
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	Price	Gain A	nn'i Total Return				, , , , , , , , , , , , , , , , , , ,	111111111111111111111111111111111111111	***************************************		777	بسائيم									‡ 1
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Inside	r Decis	ions						1													‡
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Options to Self			0 0 0	 	 	 		-						 			 -	% TO	T. RETUR	N 2/00	+
nstitu	itional (101991	Decisio: 1991:00	NS. 401998		<u> </u>										1		 -	""	THES STOCK	W. ARTIN. W. ARTIN. W.DEX	
lo Buy lo Sell	50 53	55 43	66 48	Percent shares	3.0 -			Lilia	-				1,11	alat L	144			1 ут. 3 уг.	-7.0 26.5	-6.3 48.6	F
HJ4,2(000	13256	12825	14284	traded	1.5 -				Million	الساسا	naranji							5 yr.	55.0	87.8	上
1983 25.81	1984 24.80	1985 23.20	1986 21.62	1987 20.17	1988	1989	1990 18.75	1991 17.50	1992	1993 21.55	1994	1995	1996 22.19	1997 24.16	1998	1999 22.05	2000		ELINEPU		02-04
1.76	1.92	1.94	1.97	2.03	1.90	2.03	2.17	2.04	217	2.25	2.43	2.51	2.93	3.02	279	2.60	24.25 3.15	•	es per sh Flow" per s		30.1 3.8
1.07 .72	1.23	1.23	1.15	1.14	1.26	1.22	1.26	1.14	1.27	1.31	1.42	1,45	1.85	1.85	1.54	1.35	1.85	Earning	s per sh	• .	2:
1.05	1.26	1.54	1.77	2.32	_94 2.79	3.00	1.01 2.38	1.05 2.05	1.07 2.17	1.09	1.11 2.84	1.12 2.63	1.14 2.85	1.17 3.20	1.20 3.62	1.22 3.00			ed'd per : pending pr		1.2
8.11	8.55	8.96	9.12	. 9.40	9.96	9.86	10.17	9.63	10.66	11.04	11.51	11.95	12.79	13.48	13.86	14.55	15.20	Book Vi	due per sh	<u> </u>	17.
31.60 6.5	32.30 6.6	32.94 8.3	33.39	33.91	38.42	38.70 10.6	39.23	39.89 12.8	40.62 13.6	41.50 15.6	42.19	42.93 12.7	43.70	43.70 12.7	43.84	46.50 Bold fig	46.85		n She Out		48.0
.55	.61	.67	.78	.74	.80	.80	.87	.82	.82	.92	.92	.85	.72	.73	.90	Value	Line	Avg Ann'i P/E Ratio Relative P/E Ratio			: 1
10.3%	9.6%	8.1%	6.7%	7.2%	7.8%	7.5%	6.9%	7.2%	6.2%	5.3%	5.6%	6.1%	5.4%	5.0%	4.5%	estic		Avg Ann'i Div'd Yield			4.5
	LL STRUK ebt 600.5			11/98 Yrs 315.0	milL	755.6 47.3	735.5 50.2	697.9 46.4	746.2 52.2	894.3 55.1	914.9 60.5	828.7 62.9	969.8 81.6	1055.8 82.0	1040.6	1025 63.0			es (Smill) : H (Smill)	•	145
T Deb	\$452.3 r rerest co	nill. (.T Interes	st \$31.0 m		36.2%	36.9%	36.7%	37.6%	38.6%	38.1%	37.4%	37.7%	36.9%	35.6%	36.0%	36.0%		is (Some) Tax Radio	\vdots	36.0
			,			6.3%	6.8%	8.6%	7.0%	8.2%	6.6%	. 7.6%	8.4%	7.8%	6.6%	6.1%			it Margin		7.7
ensio	Liabilit	/ None				42.0% 54.0%	39.5% 56.4%	38.9% 56.9%	38.9% 57.3%	41.7% 54.9%	40.0% 56.7%	37.8% 58.9%	37.6% 59.4%	41.1% 56.2%	40.3% 57.1%	39.5% 58.0%			rm Debt A Equity R		39.5° 58.5°
	ck \$28.4 : 600 shs			\$1,3 mil. ble at 100		706.9	707.0	675.8	756.1	834.3	856.3	870.6	941.1	1049.0	1064.B	1165	1210	Total Ca	pital (Smill		. 145
onv, in	to 7.4 con	nmon sh	3.; 2,073	shs. \$4.3(cum.	729.0 8.5%	783.3 8.8%	821.1 8.5%	864.5 8.6%	921.1	995.0	1056.1 8.7%	10.1%	9.3%	1319.5	7.5%		Net Plan	t (Smill) n Total Ca		9.03
• • •				common	sns.	11.5%	11.7%	11.2%	11.3%	11.3%	11.8%	11.6%	13.9%	.13.3%	10.8%	9.0%			n Shr. Eq.		1257
ommo	n Stock	46,237,0 -	00 shs.		.	12.0%	12.3% 2.5%	11.7%	11.7%	11.7%	2.6%	2.8%	5.6%	5.1%	25%	9.0%			n Com Eq		13.0
	T CAP: \$			ap)	<u>.</u>	79%	80%	91%	84%	81%	79%	77%	62%	.63%	78%	91%			to Com E		5.5°
(\$MI ash A ther urrent ccts P ebt Du ther	Assets ayable le	. <u>.2</u> 2	9.7 10.3 20.0 13.2 88.8 49.2	189.0 50.5	19.5 322.5 342.0 136.9 148.2 78.1	of natur and Ma (aproxin pendent pal gas	al gas in uyland to nately 83 produce transport	Washing mostly 5,000 curs; Colun er. Harro	gton, D.C residen stomers, nbia Gas nshire Ga	tial and a tial a tia	comment Suppliers: is the confederally	eas of V ial custo various npany's p regulated	irginia : omers inde-: orinci- i sub-	Est'd. lat Officers J.H. Dec District o ton, D.C.	or costs, and direc iratianrei I Columb 20080. T	17% of tors own ot. Pres. ia and V ot. 202-	revs. Ha less th and Ch 'A. Addre 624-6410	s 2,274 an 1% c Oper. ess: 110 0. Interne	age facilities on the control of the	1,501.sl n. stk. (Schepi LW:, W: ashgasi	ichida Zhann s. Inc ashing com
urrent ix. Cho	LIAD. J. Cov.				363.2. 229%	Wash	ungto	on Ga	s Lig viden	nt is	a top	-qual fety	ity-: The	stoćk. wieh:	on th	e ope	n mai	ket f	or sha	rehol	der
NNUA	RATES	Past	Pas	t Est'd	96-98	· mode	rata s	selloff	in th	us, sto	ck. (aı	nd in	gas	In th	e pas	t -yea	ir. ho	weve	r. ma	nagei	nen
evenu Cash F		1.59		9% 4	2-04 .5%	stock	s, ger	erally	r) III I	recent	i week d the	s, is renee	due.:	has re	verte	a to il	s hist	toric j	policy of c	of iss	uin
aming	3	4.09	6 7.0	7% 4	.0% .5%	\mathbf{mild}	spac	e-heat	ing .	weath	ier ti	บเร. y	ear,	dend i	payme	nts.	The a	dvant	age to	the	com
viden ook .Va	lue	2.59 3.59	5.0	% 5	.5% .5% .0%	which	has	curbe	d gas	demai	nd, ke	eping	op-	pany.	is tha	t orig	inal	issue	share us, ad	s pro	wid
scal ear nds:			NUES (\$ 1		Full Fiscal	usual	ly :ge:	nerate	s mo	re tha	ın: 10)% of	its	ing c	pacit	v) an	d enl	nance	- cash	flow	fo
nds. 996	274.3		Jun.30 . 157.8 .	Sep.30 105.9	Fiscal Year 969.8	earni	ngs a	nd c	ash. fl	low ir	ı ∙the,	·fall :	and $_{\odot}$	capita	l proj	ects.	And.	by th	ne sar t ratio	ae ta	ken
997	345.0	431.5	171.9	107.4	1055.8	the fi	rst h	alf of.	fiscal	1999	(ends	Sept	em- 🔝	less .t	han tl	ne inc	licate	d pay	out ra	atio. '	Thi
		4017	.156.4	1.56.4																	
198 199	367.6 297.3	390.2 . <i>400</i>	185		1040.6 1025	ber 3	30th)	may	well :	mean	thin oneth	· divid	end :	factor	seem	s to g	give t	he ca	sh div	iden	la.

Beginning 1989, fiscal years end Septem-er 30th. (B) Based on diluted shares. Next eamings report due late April. (C) Next dividend meeting about June 9. Goes lable.

EARNINGS PER SHARE A B

Dec.31 Mar.31 Jun.30 Sep.30

QUARTERLY DIVIDENDS PAID .C.

Mar.31 Jun.30 Sep.30 Dec.3

28

.285

.295

.30

d.13 d.44 d.02 d.33 d.17 d.38

.28

.285

.295

1.85

1.85 1.54

1.35

1.12

1.14

1.17

1.20

.88 · 1,54 .85 · 1.35 .87 · 1.22

.85

.285

.295

30

278 .28

1.55

.285

.295

.30

Fiscal Year Ends

1997

1999

2000

enda

1995

1996

1997

1998

1999

ex about June 28. Approximate dividend payment dates: February 1, May 1, August 1, November 1. Dividend reinvestment plan avail
(E) In millions, adjusted for stock split.

ment plan now receive original-issue tive.

should continue to grow slowly, in line relatively high ratio of equity capital while with the dividends of most other gas it nurtures its non-regulated businesses, stocks. WGL, unlikely to be a performance including gas marketing, energy manage-

stock in the 12 months ahead, should get ment services, and the installation of commost of its support from its generous curmercial heating/cooling equipment. These rent yield, which is close to the gas-utility shareholder-risk ventures now contribute stock average. The shares also tend to disonly a modest profit; in all. So the tradeoff

play good price stability, making WGL, in is that until nonregulated profits build all, a reliable, low-risk equity for income. rapidly, the issuance of new common

all, a reliable, low-risk equity for income. rapidly, the issuance of new common Participants in the dividend reinvest- shares may be a little share-earnings dilu-

shares. WGL previously bought company Gerald Holtzman Company's Financial Strength Stock's Price Stability Price Growth Persist **Earnings Predictability** To subscribe call 1-800-833-0046

March 26, 1999

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KE'	<u> YSP/</u>	<u>an e</u>	NER	<u>IGY</u>	NYSE	-KSE	R	RICE	26	P/E RATIO	IMF	Trailing: Median:	13.0) P	ELATIVE VE RATIO	NMF	YLD YLD	6.8	·/_	ALUE LINE	4	74
TIMELI	IESS -	- Suspend	led 6/12/98	High: Low:	16.9 14.4		21.5 16.7	20.8 18.0	23.4 18.7	28.5 21.6	28.6 21.5	29.6 22.0	32.6 24.9	37.1 26.1	37.6 25.4	31.3 26.0			Target 2002		
SAFETY	1 2	2 Lowered	3/26/99	LEGE		ands p sh			 				<u> </u>	old KeyS	on low	KeySpen					∔ 80
TECHN			led 6/12/98	1 · · · · H	BIAINE PRO	ands p sh Kerest Rate e Strength	· 二			3-for-2											± 50
) = Market) OJECTI(WS.	2-for-1 sq 3-for-2 sq	olit 7/93		-		 	<u> </u>				المعاد					!		+ 40
			nn'i Total Return	Options: Shaded	Yes area indic	ales recess	ion			11.1"111	4,,,	السالب	1411-11-11	17,	1111	1.					+ 32 + 24
Hìgh	40 (-	+55%)	16%	····	-	1021-01	11.11.	والمعاشرة	ننالع م												+ 20 + 16
Low Inside	Decis	+15%) ions	10%		1111,111		•	<u>. </u>													Ī 12
	M J J	ASO	NDJ		 			· -	··-		••••	• • • • • • • • • • • • • • • • • • • •	••								† 10
to Buy Options	0 0 0	0 0 0													<u> </u>						↓ 6
b Sell Institu	0 0 0 tional [0 0 0 Decisio						l											. RETURI THES V	N 2/99 r. aruth.	L 4
to Buy	201998 139	301998 109	401998 86	Percen				ļ	ļ					1.				1 yr.	stock	NDEX -6.3	
to Seli Hid's(000)	67	99 77190	96 65692	shares traded	3.0 — 1.5 —		aradini			tanhi	रच रची	h.o.uli						3 yr. 5 yr.	_	48.6 87.8	F
1983	1984	1985	1986	1987	1988	1989	1990	1991	1992		1994	1995	1996	1997	1998	1999	2000		LINE PUB		02-04
32.12	33.87	32.22	30.49	27.12	25.51	26.71	26.64	23.43	24.74	25.99	28.13	24.93	28.72	29.12	11.95	26.15	28.10	Revenues		[40.7
2.19	2.36	2.58	2.28	2.46	2.55	2.64	2.62	2.38	3.03 1.35	3.04 1.73	3.29 1.85	3.35 1.90	3.54 1.96	4.27 2.12	.10 d1.34	3.45 1.40	3.90	"Cash Flo			5.6 3.0
1.51 .97	1.55 1.00	1.67	1.57 1.08	1.62 1.11	1.66 1.15	1.68	1.62 1.23	1.45 1.27	1.29	1.73	1.35	1.30	1.42	1.46	1.50	1.78		Earnings Div'ds De	•		1.8
2.47	2.46	2.57	2.33	2.84	3.46	4.30	3.51	3.44	395	4.37	4.15	4.36	6.04	5.60	2.50	2.60		Cap'l Spe			4.0
10.16	10.68	11.34	11.53	12.19	12.77	13.36	13.68	14.37	14.55	15.54 46.38	16.27 47.59	16.94 48.79	18.17 49.86	19.09 50.77	23.25 144.00	20.40 130.00		Book Valu Common			25.0 130.0
29.24 6.5	30.60	31.91 7.4	33.03	34.08 10.8	35.23 9.4	36.29 10.1	37.30 11.9	42.28 13.1	15.1	14.3	13.7	12.7	13.7	13.8	144.00	Bold fig		Avg Ann'i			12.
.55	.61	.60	.69	.72	.78	.76	.88	.84	.92	.84	.90	.85	.86	.80	•	Value estin	Line	Relative P	YE Ratio	- 1	.8
9.8%	9.7%	8.4%	6.7%	6.3%	7.4%	7.0%	6.4%	6.7%	6.4%	5.3%	5.3%	5.8%	5.3%	5.0%	4.8%		2125	Avg Ann'i	Div'd Yle	eld	5.19
			s of 9/30		-10	969.2	993.9	990.5	1074.9	1205.5	1338.6	1216.3	1432.0	1478.2	1720.0	3400		Revenues		`	530
)ue in 5 Y .T interes			64.3 29.2%	63.6 26.0%	61.8 30.2%	59.9 34.0%	76.6 35.1%	87.4 31.8%	91.8 32.0%	97.2 28.9%	106.1 35.0%	d166.9	235 38.0%		Net Profit Income Ta			38.09
	erest cov Liabilit	rerage: 1.	.5x*			6.6%	6.4%	6.2%	5.6%	6.4%	6.5%	7.5%	6.8%	7.2%	NMF	6.9%		Net Profit			8.5
		¥ 14.∧																		41.	
PId Sto	ck \$448.		b'viO br	\$44.8 mi	II.	51.0%	49.0%	51.2%	51.6%	48.6%	47.3%	46.4%	43.8%	43.5%	31.0%	35.0%		Long-Terri	•	- 1	42.09
_		0 mill. F		\$44.8 mi	li.	44.7%	46.8%	45.4%	47.8%	50.8%	47.3% 52.2%	53.2%	55.8%	56.5%	60.0%	55.0%	53.5%	Common	Equity Re	tio	51.09
Commo	n Stock	0 mill. F 146,693,	,554 shs.	•	ii.	44.7% 1084.2					47.3%						53.5% 5050	-	Equity Re ital (\$mill	tio	51.0°
Commo	n Stock	0 mill. F 146,693,		•	ii.	44.7% 1084.2 989.4 7.7%	46.8% 1090.0 1062.7 7.6%	45.4% 1337.5 1151.3 6.0%	47.8% 1322.1 1228.7 6.1%	50.8% 1417.9 1305.5 7.0%	47.3% 52.2% 1482.8 1405.3 7.5%	53.2% 1553.8 1512.6 7.5%	55.8% 1624.4 1698.1 7.4%	56.5% 1714.1 1810.6 7.3%	50.0% 5150 3800 NMF	55.0% 4800 4000 6.5%	53.5% 5050 4500 7.0%	Common Total Capi Net Plant Return on	Equity Reital (Smill) (Smill) Total Ca	ntio). p1	51.05 640 600 8.05
Commo	n Stock T CAP: :	0 mill. F 146,693, \$3.8 billio	,554 shs.	•	ii.	44.7% 1084.2 989.4 7.7% 12.1%	46.8% 1090.0 1062.7 7.6% 11.4%	45.4% 1337.5 1151.3 6.0% 9.5%	47.8% 1322.1 1228.7 6.1% 9.4%	50.8% 1417.9 1305.5 7.0% 10.5%	47.3% 52.2% 1482.8 1405.3 7.5% 11.2%	53.2% 1553.8 1512.6 7.5% 11.0%	55.8% 1624.4 1698.1 7.4% 10.7%	56.5% 1714.1 1810.6 7.3% 10.9%	5150 3800 NMF NMF	55.0% 4800 4000 6.5% 7.5%	53.5% 5050 4500 7.0% 9.0%	Common Total Capi Net Plant Return on Return on	Equity Reital (\$mill) (\$mill) Total Ca Shr. Equ	p'i	51.05 640 600 8.05 12.05
COMMO	n Stock T CAP:	0 mill. F 146,693, \$3.8 billio	,554 shs.	ap)	9/30/98	44.7% 1084.2 989.4 7.7% 12.1% 12.4%	46.8% 1090.0 1062.7 7.6% 11.4% 11.7%	45.4% 1337.5 1151.3 6.0% 9.5% 9.5%	47.8% 1322.1 1228.7 6.1% 9.4% 9.1%	50.8% 1417.9 1305.5 7.0%	47.3% 52.2% 1482.8 1405.3 7.5%	53.2% 1553.8 1512.6 7.5%	55.8% 1624.4 1698.1 7.4%	56.5% 1714.1 1810.6 7.3%	50.0% 5150 3800 NMF	55.0% 4800 4000 6.5%	53.5% 5050 4500 7.0% 9.0%	Common Total Capi Net Plant Return on Return on Return on	Equity Re ital (Smill) (Smill) Total Ca Shr. Equ Com Equ	p1	51.0° 640 600 8.0° 12.0° 12.5°
COMMO MARKE CURRE (\$MI) Cash A	n Stock T CAP: :	0 mill	,554 shs. on (Mid C 1996 41.9	(ap) 1997 36.9	9/30/98 1756.9	44.7% 1084.2 989.4 7.7% 12.1%	46.8% 1090.0 1062.7 7.6% 11.4%	45.4% 1337.5 1151.3 6.0% 9.5%	47.8% 1322.1 1228.7 6.1% 9.4%	50.8% 1417.9 1305.5 7.0% 10.5% 10.6%	47.3% 52.2% 1482.8 1405.3 7.5% 11.2% 11.2%	53.2% 1553.8 1512.6 7.5% 11.0% 11.1%	55.8% 1624.4 1698.1 7.4% 10.7%	56.5% 1714.1 1810.6 7.3% 10.9%	60.0% 5150 3800 NUF NUF	55.0% 4800 4000 6.5% 7.5% 7.5%	53.5% 5050 4500 7.0% 9.0% 9.0% NMF	Common Total Capi Net Plant Return on Return on	Equity Re ital (Smill) (Smill) Total Ca Shr. Equ Com Equation Com Equation Equation (Smill)	p1 nity uity	51.0° 640 600 8.0° 12.0° 12.5° 5.0°
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Company's Financial Strength Stock's Price Stability Price Growth Persistence Earnings Predictability B++ NMF NMF

(A) Data for old KeySpan Energy through 197 gains (charges): '86, (\$0.43); '90, (\$0.19); '96, (\$0.19); '96, (\$0.19); '98 on a calendar-year basis; lirst-qtr. proforma data unavailable. (B) Avg. shs. Excl. nonrecur. mid-Apr. Div'd paym'ts: (in '98) Feb. 1, May 1 (C) Next div'd meet'g late Mar. Goes ex data unavailable. (B) Avg. shs. Excl. nonrecur. mid-Apr. Div'd paym'ts: (in '98) Feb. 1, May 1 (C) Next div'd meet'g late Mar. Goes ex (S) Salskh. (E) In mill., adj. for splits. (C) 1999, Value Line Publishing, Inc. All rights reserved. Féctual material is obtained from sources believed to be reliable and is provided without warranties of any kind. THE PUBLISHER IS NOT RESPONSIBLE FOR ANY ERRORS OR OMISSIONS HEREIN. This publication is strictly for subscriber's own, non-commercial, internal use. No part of it may be reproduced, stored or transmitted in any printed, electronic or other form, or used for generating or marketing any printed or electronic publication, service or product.

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			Common Stock Prices	ck Prices					
	1998		1999	_	Current	ŧ	1998	1999	
	High	Low	High	Low	High	Low	Dividend	Dividend	1993
Atmos Energy Corporation	32.30	24.80	33.00	23.00	23.80	23.16	1.06	1.10	98.0
AGL Resources	23.40	17.70	23.40	18.30	19.01	18.56	1.08	1.08	1.04
Indiana Energy	26.40	19.60	24.60	19.10	20.31	19.83	0.90	0.94	0.74
Laclede Gas Company	27.90	22.40	27.00	20.80	22.33	21.78	1.32	1.34	1,22
Northwest Natural Gas	30.80	24.30	27.00	22.10	24.52	23.60	1.22	1.23	1.17
Peoples Energy	40.10	32.10	40.30	31.80	35.31	34.71	1.91	1.95	1.78
Washington Gas Light	30.80	23.10	27.40	22.30	24.04	23.36	1.20	1.22	1.09
Moody's Companies' Average	29.90	23.20	28.28	22.40	24.25	23.64	1.27	1.29	1.17

Sources : Value Line Investment Survey 3/26/99

em Kentucky Gas Company ble Local Distribution Companies 1999 Cost of Capital

			DENDS	DIVIDENDS				EAR	EARNINGS	
	1994	1995 199	995 1993-95 2		94 to '03 GR	1993	1994	1995 19	1995 1993-95 200	2002-04E
Atmos Energy Corporation	0.88	0.92	0.89	1.30	4.34%	1.19	0.97	1.22	1.13	3.00
AGL Resources	1.04	1.04	1.04	1.20	1.60%	1.08	1.17	1.33	1.19	1.90
Indiana Energy	0.77	0.80	0.77	1.08	3.83%	96.0	1.15	1.10	1.07	1.95
Laclede Gas Company	1.22	1.24	1.23	1.45	1.88%	1.61	1.42	1.27	1.43	2.25
Northwest Natural Gas	1.17	1.18	1.17	1.35	1.57%	1.74	1.63	1.61	1.66	2.40
Peoples Energy	1.80	1.80	1.79	2.12	1.88%	2.11	2.13	1.78	2.01	3.30
Washington Gas Light	1.1	1.12	1.11	1.35	2.23%	1.31	1.42	1.45	1.39	2.30
Moody's Companies' Average	1.19	1.20	1.19	1.43	2.16%	1.47	1.49	1.42	1.46	2.35

Sources : Value Line Investment Survey 3/26/99

11.50%
5.3
6.9
5.14%
4.1
5.6
5.7
5.49%

Sources: Value Line Investment Survey 3/26/99

STANDARD &POOR'S

MARCH 1999

EARNINGS GUIDE

	a Delay Year Date									Earn	ings	.Gt	ıide	<u> </u>						,	ASI-	-AL	IT	17
	Prior Year Data Next Year Data Name of Izaue	Com. Stock Rank	Fisc			Next Qua Estimate High		# of	1996 Actual EPS	Street E	199 stimate High		S of	Street E	200 stimate:	00 s (\$/Shr) Low	# of	5-Yr Proj EPS Growth Rate-%	Annual Revs.	Net Tangible Book	Cash Flow	Month End Price	1999	Next EPS Rept
	Asia Satellite Telecom ADS ASM Intl N.V. ASM Lithography Hidg NV Aspect Technology Aspect Development	NR NR NR NR	05 25 25 25 25 25 25 25 25 25 25 25 25 25	01	0.07 0.12	0.07 0.13	0.07	- - 11	v1.90 vd2.38 r/a vPd0.43 Pv0.48	1.59 0.34 0.66	1.75 0.34 0.69	1.45 0.34 0.62	3	1.744 0.47 0.48		1.42	3 1 11 8	23 18 26	128 351 771 23.1	3.84 0.53 2.70 2.29	2.18 d1.72 1.03	16% 5 39% 1%	.10	Date
	Aspect Telecommunications Aspen Technology Asset Investors Corp Assisted Living Concepts Associated Bano-Corp	NR NR NR A	44444	04 01	d0.09 0.18 0.36 0.18 0.59	d0.07 0.25 0.36 0.19 0.62	d0.10 0.10 0.36 0.18 0.55	6 1 8	\$0.61 \$0.59 \$0.04 \$0.34 \$2.46	0.150 0.23 1.58 0.60 2.50	d0.06 0.42 1.58 0.61 2.55	d0.24 d0.15 1.58 0.58 2.40	9 7 1 8	0.304 0.71 1.90 0.88 2.694	0.42 1.35 1.90 0.92 2.75	0.21 0.40 1.90 0.85 2.65	5 5 1 8	32 30 15 34 10	86.4 512 253 10.5 48.7 954	2.54 4.10 6.17 15.81 7.86 13.96	1.00	30% 7% 12% 13 4%	8 8	4/20 4/15 5/01 4/23
	Associated Materials Associates First Capital'A' Astea Inti Astocia Industries Astoria Financial Astra AB'A' ADS	2625 3625 3625 3625 3625 3625 3625 3625	దర్శిద్దద్ది	01 04 01	0.10 0.46 0.21 0.89	0.10 0.48 0.21 0.92	0.10 0.45 0.21 0.85	1 18 3 12	Pv01.55 v1.75 Pv2.53 v0.71 Pv00.94	2.00 2.04 0.011 3.75	2.00 2.05 0.01 3.85	2.00 2.02 0.01 3.55	24 1 15	2.305 2.38 -1.52† 4.14	2.30 2.45 1.55 4.35	2.30 2.30 1.50 3.90	1 18 3 13	15 17 35 19	408 9,377 28.9 265 1,285	6.69 9.13 2.89 5.22 26.88	1.08	31 10% 40% 3% 27%	20	4/21 5/05 4/14 4/28
	AstroPower Inc Asymetrix Learning Sys Asyst Technologies @ Entertainment Inc	22222 233333	Dc Dc Dc Mc Dc	01 01 04	0.22 0.07 d0.13 d0.30	0.22 0.08 d0.12 d0.25	0.21 0.06 d0.14 d0.32	2226	v0.78 Pv0.28 vPd0.49 v1.36 Pvd3.75	0.85 0.36 d0.294 d1.05 d2.73	0.89 0.40 d0.23 d0.89 d2.73	0.79 0.32 d0.35 d1.12 d2.73	9 2 3 7 1	0.96 0.104 60.244 62.04	1.04 0.10 0.05 42.04	0.84 0.10 d0.73 d2.04	9	13 50 48 25	5,708 23.2 33.4 165 62.1	3.97 2.54 2.86 9.74	7.86 d1.98	45% 19% 10 4% 21%	23 28 d	4/20 5/06 5/21
•	At Home Corp'A' AT&T Corp Atchison Casting ATG Inc Atlantic American	25 25 25 25 26 26 26 26 26 26 26 26 26 26 26 26 26	Dc 15 Je Dc Dc	5588 F	d0.06 0.95 0.49 0.14	d0.04 1.00 0.50 0.14	0.07 0.94 0.47 0.14	13 9 2 1	Pvd1.26 vPt3.63 v1.55 pv0.08 Pv0.37	3.304 1.42 0.38 0.40	d0.05 4.20 1.45 0.38 0.40	d0.17 3.20 1.35 0.38 0.40	14 17 3 1 1	0.344 3.764 2.12 0.70t	0.45 4.44 2.75 0.70	0.25 3.35 1.49 0.70	9 12 2 1	. 7 40	48.1 53,223 374 19.1	1.89 1.78 8.03 13.46 2.78	5.09 3.15	10 106% 82% 9% 8%	25 7	5/15 4/21 4/20 4/20 4/17
•	Atlantic Data Svcs Atlantic Financial Atlantic Richfield	NE N	DC Mr DC Mr DC DC	01 04 01 01	0.40 0.20 0.12 0.22	0.40 0.20 0.12 0.34	0.40 0.18 0.11 0.05	1 4 3 iö	Pv1.65 Pv1.42 pv0.46 v0.88 v1.40	1.80 1.94 0.69 0.90 1.934	1.80 2.00 0.69 0.90 3.15	1.80 1.75 0.68 0.90 0.80	1 6 3 1 29	2.38 0.74 1.15 2.824	2.40 0.76 1.15 3.65	2.35 0.73 1.15 1.50	;; 3 1	17 30	106 45.7 290 42.8 13.7 10,809	4.20 6.41 4.72 2.90 8.81 23.59	0.20	12 32 5% 16%	7 : 16 · 4 8 :	5/04 5/01 1/24
_	Atlas Air Almel Corp ATMI Inc Atmos Energy Corp	B- NR B- B+	Dc 12 Dc 13 Dc 14 Sp 14	88000	0.25 0.28 0.10 0.06 1.18	0.25 0.30 0.13 0.07 1.25	0.25 0.26 0.06 0.05 1.14	. 9	Pvc0.87 vP1.36 vPd0.58 v0.24 v1.84	1.00 1.87 0.66 1.614	1.00 2.00 0.80 1.80		1 14 15 5	2.30 1.24 0.49 2.034	2.40 1.82 0.51 2.27	2.20 0.85 0.45 1.70	B 11 7	21 21 27 9	251 422 1,111 102 848	Neg 7.17 7.04 3.14 12.21	1.23 1.46 1.37	8% 30% 17% 22%	9 5 16 . 26 4	7/24 5/04 1/13 1/28
•	ATS Medical Atwood Oceanics Au Bon Pain'A' Audiovox Cl'A'	C B- B- B- B-	00 00 00 00 00 00 00 00 00 00 00 00 00	35835	0.19 0.04 0.62 0.11 0.13	0.19 0.04 0.70 0.11 0.13	0.19 0.03 0.50 0.11 0.13	$\overline{}$	vd0.35 Pv0.16 v2.84 v±0.15 Pv±0.16	0.42 0.16 2.344 0.25 0.60t	0.46 0.18 2.62 0.25 0.60	0.38 0.11 2.13 0.25 0.60	2 5 6 1	0.63† 0.264 2.684 0.50† 0.71	1.15 0.32 3.25 0.50 0.71	0.10 0.20 1.97 0.50 0.71	2 3 5 1	25 41 9	11.6 18.0 152 251 617	2.58 3.10 12.02 5.00 9.02	d0.27 4.10 1.56 1.18	14% 7% 16% 6%	34 . 46 4 7 . 25 .	/24
_	Aurora Foods Auspex Systems Authentic Fitness Autocam Corp	NR NR B- NR NR NR	Dc Dc Je 15 Je 16 Dc	008880 008880	0.67 0.23	d0.29 0.21 d0.35 0.72 0.24 d0.27	d0.29 0.16 d0.35 0.65 0.22 d0.27	5 1 7 4	v1.01 v1.18	1.25 0.914	0.85 d0.43 1.28 0.94	d0.02 0.85 d0.43 1.22 0.87 d1.02	4 5 1 7 4 1	0.284 1.05 0.281 1.45 1.744 d0.17	0.37 1.05 0.28 1.50 1.85 0.17	0.12 1.05 0.28 1.39 1.70 d0.17	4 3 1 6 4	18 17 18 18 16	26.5 947 169 367 90.4 4.77	2.48 Neg	1.10 d0.11 1.47 2.34	7½ 16% 10 15½	d 4 19 d 4 13 4	/30 /24 /30

Stock Splits & Dividends 13-for-1,'96. 22-for-1,'97,'98. 32-for-1,'95. 42-for-1,'95. 52-for-1,'97. 51-for-5 REVERSE,'97. No adj for stk dstr,'93. 6-for-5,'97:5-for-4,'95,'98. 52-for-1,'96. 102.67-for-1,'97. 11 No adj for stk dstr,'96. 123-for-2,'99. 132-for-1,'94. 152-for-1,'94. 152-for-1,'94. 152-for-2,'94.4dj for 5%,'98.

AEH-ALB Earnings Guide Standard & Poor's 5-Yr Proj EPS Annual Growth Revs. Rate-% (\$ Mil.) Net Tangible Book (\$/Shr) e Prior Year Data ‡ Next Year Data 1999 **Next Quarter** 2000 1998 Actual EPS Stock Rank Street Estimates (\$/Shr) # of Street Estimates (\$/Shr) # of Street Estimates (S/Shr) # of Flow (\$/Shr) Name of Issue Fiscal High Low Ests. Mean High Low Esta Mean High Low Ests. My Oc Je Dc v0.36 v0.03 Pvd4.71 v0.51 vP3.56 d0.32 2 1.25 2 d4.75 10 0.63 7 2.90 11 Aehr Test-Systems AEP Industries Aerial Communications NR B-NR B-B+ d0.12 0.25 d1.06 0.17 0.71 d0.11 0.25 d0.93 0.17 0.71 d0.12 0.25 d1.19 0.16 0.71 d0.30 1.25 d3.35 0.65 3.90 5.77 6.25 Neg 4.01 15.04 d0.31 d0.094 d0.09 40.8 2 1 8 6 1 701 155 119 2,149 1.25 d4.01 d3.64† d3.13 0.83 0.87 3.45 3.45 d4.26 0.80 3.45 3 4 20 30 9 Aeroflex Inc Aeroquip-Vickers Inc 0.64 3.39 AES Corp
Aetna Inc
Aetrium Inc
AFC Cable Systems
Affiliated Computer Services'A' 312335 vPA1.67 vP5.41 Pvd1.00 Pv2.00 ±v1.11 2.014 4.44 Nii4 2.27 1.64 Dc Dc 194 55558 0.44 1.02 d0.13 0.53 0.42 0.47 1.12 d0.12 0.54 0.42 0.42 0.95 d0.14 0.52 0.42 2.20 4.80 Nil 2.27 1.65 1.78 4.25 d0.01 2.25 1.62 2,398 20,604 59.6 273 1,189 B+ B B-13 20 3 4 7 8.34 9.06 5.64 12.35 1.71 3.20 6.00 2.14 4.98 12 12 28 15 23 18 21 2.56 2.00 2.56 2.03 2.56 2.05 ŇR B+ Affiliated Managers Grp
Affinity Technology Gp
Alfymetrix Inc
AFLAC Inc
Aftermarket Technology 04004 1.55 d0.21 d1.02 1.91 0.714 Neg 0.89 3.24 13.48 Neg NR NR NR A+ NR Dc Dc Dc Dc 0.34 Nil d0.32 0.47 0.36 Nil d0.29 0.48 0.11 0.32 Nil d0.37 0.44 d0.20 Pv1.33 vd0.54 Pvd1.11 vP1.76 1.65 d0.21 d0.40 1.98 0.82 1.50 d0.21 d1.10 1.85 0.50 238 4.15 52.0 7,104 346 2034 2.20 1.95 4 25 35 d0.31 2.20 1.00 **40.03 2.24 1.07** 0.20 2.30 1.20 dÖ.89 16 19 · 20 va1.19 Nil d1.21 1.21 0.714 1.36 0.454 AG Associates
Ag Services of America
AGCO Corp
AGL Resources
Agouron Pharmaceuticals d1.21 1.15 0.50 1.27 0.23 46.0 186 2,941 1,339 467 NR B+ NR B+ C Sp. FD's DC's Je¹⁰ 885588 d0.32 0.11 d0.11 0.43 0.02 0.32 0.11 0.03 0.50 0.19 vd2.29 v0.96 vP0.99 v1.41 v0.40 d1.21 1.26 1.95 1.45 1.06 2.89 9.62 10.13 11.42 7.49 d0.32 0.11 1.48 0.65 1.40 0.77 1.48 1.05 1.49 1.85 20 9 5 1.48 0.924 1.45 1.424 1.03 3.54 3 12 12 8 d0.21 0.35 d0.25 <u> 28</u> NR NR NR NR NR Je Au Dc¹¹ Dc Dc¹² v0.01 v1.29 Pv0.94 Pv0.91 · v0.90 d0.15 1.80 0.71 1.33 1.00 0.264 2.15 1.224 1.69 1.28 0.51 2.15 1.50 1.70 205 1,410 1,805 476 25,806 NH4 1.80 0.974 0.18 1.80 1.37 1.35 1.13 Nil 2.15 0.93 1.68 1.74 31.81 4.50 Neg 2.29 AgriBioTech Inc Agribrands Intl œ 0.15 0.15 0.15 2 QÎ QÎ 10 30 15 Na 0.21 2.01 Agrium Inc AHL Services Ahold Ltd ADR 0.05 0.21 d0.05 0.21 64 1.33 1.05 1.98 Dc¹³ Sp¹⁴ Dc¹⁴ Mr⁵ Dc 100000 100000 0.29 0.58 0.65 0.17 0.16 Air Express Intl Air Products & Chem Airborne Freight B+ A B+ B NR 0.26 0.53 0.60 0.13 0.15 0.23 0.50 0.55 0.10 0.14 vP1.26 v2.48 vP2.72 v0.57 Pv0.46 1,464 2,28 2,97 0,554 0,814 1.55 2.42 3.10 0.68 0.85 1.35 2.15 2.84 0.49 0.75 1.68 2.50 3.29† 0.67‡ 1.11‡ 1.75 2.65 3.50 0.80 1.15 1.60 2.30 3.10 0.60 1.07 1,513 4,910 3,075 1,448 114 5.99 10.17 15.16 0.43 5.91 11 22 14 12 5 15 12 12 16 15 13 13 10 5 Airgas Inc AirNet Systems AirTouch Communications AirTran Hidgs AK Steel Holding Akom Inc Aksys Ltd Dc Q1 Dc¹⁵ Q1 Dc¹⁰ Q1 Dc Q1 Dc Q1 vP1.07 vPd0.63 vP1.92 Pv0.21 Pvd1.17 5,181 439 2,394 56.7 1.00 Neg 0.34 15.09 0.78 1.99 NR NR NR B-NR 0.33 d0.09 0.33 0.08 d0.28 1.55 0.47 2.40 0.35 1.23 d0.30 1.03 0.35 d1.42 0.39 d0.08 0.50 0.08 0.27 d0.10 0.19 0.07 1.39 0.14 1.89 0.35 28 6 17 2 3 2.04 0.35 2.88 2.25 0.35 3.55 1.85 0.35 2.00 15 1 13 1.87 d1.22 3.55 0.19 15 13 13 1 31 15 11 35 50

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NR B+

BBR A+R

Month End Price 1999 Feb'99 P/E

15

21 17 4/24 5/04 4/15

15 28

17 d d 23

12 10 7 4/20 5/22 4/29 3/05

10 4/23

5% 19%

13% 56%

37% 74 7% 33% 46%

38% 43% 5%

5% 14% 6% 19 57

91 3% 21% 4% 5%

37% 24% 10% 9% 4%

50% 19% 23% 24 57

9%

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0.15

1.86 4.04 6.45 1.65 1.73 17½ 32% 39 9 8%

5.26

1.92 0.42

6.20 2.92 2.67 1.94 3.41

12,026 91.9 36.1 201 359

1,898 710 821 1,835 14,690 5.57

15.43 11.24 2.62 10.35 Neg

27.91 9.29 8.84 5.75 10.18 8.46

Next EPS

Rept

3/27 3/11

4/21 5/06 4/17 4/20 4/22

4/30 3/16

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4/28 4/09 4/30 5/04 4/20 12 9 14

5/15 17

5/04 4/29

4/23 4/30 5/15 5/13

4/29 5/04 4/09 5/04 4/24

4/22 4/21 3/02

Alaska Air Group

Albany Intl 'A'
Albertar-Culver C'B'

Albertson's, Inc

Albion Banc Corp Dc Q1 Dc16 Q4 Dc Q1 Sp10 Q2 Ja : Q4 Dc17 ... v4.81 ±v1.52 vP1.63 v±1.37 v2.08 . v0.46 Stock Splits & Dividends 1-3-for-2,94, 2-3-for-2,94, 2-4or-1,97, 3-3-for-2,95, 4-5-for-4,97, 3-4or-1,96, 3-4or-2,962-4or-1,98, 7-2-for-1,98, 3-4or-2,94;2-for-1,96, 3-4or-1,96, 10-2-for-1,97, 11-3-for-1,96, 12-3-for-1,97, 11-3-for-1,96, 12-3-for-1,97, 11-3-for-1,98, 15-2-for-1,98, 15-2-for-1,95 (wice), 16-4-fill for 0.5%,98(twice):Adj for 2%,98, 17-3-for-1,98, 15-2-for-1,98, 15-2

1.98 1.034 1.45 0.06

4.94

1.76 1.46 2.36 0.47

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Name of Issue	Com. Slock Rank	Fisca	_		lext Qua stimates High		# of Ests.	1998 Actual EPS	Street E	199 stimates High		# of Ests.	Street E	200 stimates High		# of Ests.	5-Yr Pro EPS Growth Rate-%	Annual Revs.	Net Tangible Book (\$/Shr)	Cash Flow (\$/Shr)	Month End Price Feb'99	1999 P/E	Next EPS Rept Date
Ikon Office Solutions IKOS Systems IL Fornaio (America) ILEX Oncology Illinois Tool Works	BCRR+	တို့ အထင် တို့ တို့ တို့ တို့	98255	0.14 0.01 0.14 d0.37 0.65	0.16 0.01 0.14 d0.37 0.68	0.13 0.01 0.14 d0.37 0.59	1	vd0.76 vd3.24 Pvc0.55 Pvd1.71 vP2.67	0.69 0.07† 0.62 d0.91 2.98	0.75 0.07 0.63 d0.56 3.05	0.65 0.07 0.60 d1.25 2.90	8 1 2 2 14	0.95 0.35 	0.95 0.35 	0.93 0.35 	5 1 5	16 20	5,629 40.9 83.1 14.3 5.648	Neg 1.32 7.15 2.74 8.16	0.73	14% 3% 8% 11% 68%	20 55 13 0	4/23 4/24 5/01 5/06 6/05
Illinova Corp ILOG S.A. ADR ILX Resorts Image Entertainment ImageMax Inc	3422B	DC 36 00	2221	d0.53 Nil 0.04 0.06	d0.50 Nil 0.04 0.06	d0.57 Nil 0.04 0.06	7 1 1 2	vc1.41 vd2.22 v0.59 vd0.71 pvd0.33	d0.344 0.34 0.164 0.07 0.17	Nil 0.34 0.16 0.07 0.20	0.55 0.34 0.16 0.07 0.13	18 1 1 1 2	1.53 0.534 0.434 0.35 0.42	2.10 0.55 0.43 0.35 0.50	0.90 0.51 0.43 0.35 0.34	18 2 1 1 2	7 35 24	2,510 54.6 36.4 75.5 48.9	18.26 1.44 5.53 0.58 Neg	0.77 d0.64	23% 8% 1% 7% 1%	d 24 9	4/29 3/11 6/26 3/03
Imasco Ltd Imation Corp IMC Global • IMC Mortgage • ImClone Systems		රිප්රීප්ප	01 04 04 04 04	0.08 0.59 0.47 d0.18	0.09 0.65 0.47 d0.18	0.06 0.55 0.47 d0.18	10 10 1	Pv1.67 Pv1.45 Pvd0.11 v1.54 vd0.67	1.24 0.764 2.37 1.87 d0.87	1.27 0.86 2.55 1.88 d0.87	1.20 0.65 2.20 1.85 d0.87	10 6 16 2	1.40 1.01f 2.654 2.17 d0.09	1.44 1.10 3.08 2.20 d0.09	1,37 0.95 2,40 2,15 d0.09	7 4 12 2	9 10 23	8,584 2,047 2,696 239 5.35	5.60 17.71 9.62 6.00 0.70	1.20 d0.82 2.86	- 33% 15% 19% 19% 10%	8	5/01 5/07 4/24 3/02 4/01
IMCO Recycling Immune Response Immunex Corp IMPAC Commercial Hidgs IMPAC Mige Hidgs	古の民党	88888	01 01 01 01	0.30 d0.02 d0.11 0.14 0.22	0.30 d0.02 Nil 0.19 0.27	0.29 d0.02 d0.29 0.10 0.17	31324	Pv1.17 Pvd0.78 vPd0.07 Pvd1.26 Pvd0.25	1.30 d0.394 0.681 0.92 1.07	1.36 d0.10 1.05 1.00 1.25	1.21 d0.82 0.26 0.85 1.00	6 4 16 3 6	1.45 0.31† 2.26 1.20 1.51†	1.48 0.67 4.00 1.20 1.51	1.40 d0.10 0.96 1.20 1.51	4 4 13 1	13 10 14	569 2.00 243 17.4 150	4.65 1.09 5.66 11.10 9.43	2.30 d1.47 0.02	12% 8% 141% 5%	10 ·	5/05 4/15 4/29 5/04
IMPCO Technologies Imperial Bancorp Imperial Chem Ind ADR Imperial Credit	공무무용	Ap Dc ⁰ Dc ¹⁰ Dc ¹¹	086 G	0.23 0.21 0.35 0.26	0.25 0.21 0.37 0.30	0.21 0.21 0.33 0.23	616 5	vP0.87 v0.60 Pv1.00 v2.36 Pvd1.93	1.20 0.78 1.56 1.97 1.294	1.25 0.80 1.67 2.40 1.50	1.15 0.76 1.45 1.57 1.20	7 2 9 8 5	1.68 1.25 1.73 2.07 1.454	1.75 1.25 1.85 2.44	1.60 1.25 1.67 1.50 1.45	2 1 7 8	31 18 11 15	56.3 71.1 425 17,463 16.2	12.14 2.62 9.18 1.33	0.89 1.00	25% 12% 18% 35% 8%	21 16 12 18	3/02 4/17 5/01
Imperial Oil Ltd IMRglobal Corp • IMS Health	E SEE B	Dc ¹² Dc ¹³ Dc ¹⁴ Dc ⁵	000000	0.29 0.21 0.21 0.33 0.04	0.29 0.21 0.24 0.34 0.06	0.29 0.21 0.20 0.31 0.02	1 6 9 7	Pv0.68 Pv1.26 Pv0.50 v0.93 Pvd0.03	1.17† 0.75↓ 0.94 0.81 0.37	1.17 · 0.92 0.96 · 0.81 0.40	1.17 0.50 0.88 0.81 0.30	1 15 6 1 8	1.32† 0.97 1.18 0.804 0.65	1.32 1.22 1.25 1.01 0.76	1.00	1 10 4 12 6	13	57.4 19,145 158 1,060 307	14.43	1.72 1.28 1.26	9 15% 18% 35%	8 21 19 44	5/06 5/05
Inco Ltd INCYTE Pharmaceuticals • Independence Community Bank	B B- NR NR B	Oc Dc Oc Mr Dc ¹⁵	01 01 01 	0.44 d0.24 d0.15	0.51 d0.15 d0.13	0.40 d0.41 d0.17	6421	Pv2.26 vPd0.63 Pv0.12 n/a v1.49		2.65 0.20 d0.68 0.73	2.50 d1.10 d0.75 0.61 1.50	7 20 3 2	2.924 d0.16† .0.014 .0.80	3.19 0.66 0.06 0.85	2.75	5 13 3 2	20 . 5 . 33	4,258 1,766 135 :: 262	11.85 19.56 6.07 12.11 14.80	4.15 1.30 0.86	15% 12% 28	6 d 23	4/22 4/27
Independent Bank(MA) Independent Bankshares Independent Energy Hidgs ADS	A+ B B NR B+	Dc ¹⁸ Dc ¹⁷ Je Sp ¹⁸	01 01 - 22	0.35 0.27 0.89	0.37 0.27 1.00	0.33 0.27 0.75	21 4	Pv1.38 Pv1.08 Pv1.02 c d0.15 v1.33	1.50 1.19 1.15	1.55 1.23 1.15	1.48 1.13 1.15	6 1 5	1.68 1.28 0.27 1.68	1.70 1.28 0.30 1.75	1.65 1.28 0.25 1.60	1 3 3		20.2 18.3 466	5.87 6.51 9.17 2.93 9.73		18% 15 11% 12	12 13 10	4/14 4/13 4/20

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Indiana United Bancorp Indigo Aviation ADS Indigo N.V. Individual Investor Group Indus Inti De Q1 0.39 0.39 0.39 1 De Q1 0.17 0.19 0.15 2 De De Q1 0.07 0.027 0.27 1 De Q1 0.07 0.09 0.06 3 Pv1.35 Pv1.07 Pv0.22 vd0.77 Pv0.38 1.60 1.60 1.60 1 1.26 1.27 1.25 2 0.014 0.01 0.01 1 d1.13 d1.13 d1.13 1 0.40 0.41 0.40 3 Stock Splits & Dividends

1 2-for-1, 95:No adj for stk dstr Unisource Worldwide. 2 1-for-2 REVERSE, 95. 3 2-for-1, 97. 4 1-for-5 REVERSE, 98. 5 2-for-1, 98. 5 2-for-1, 95. 5 2-for-1, 95.

								.:	Earni	ings	Gu	Iide)							KIN-	–LA	D	69
Prior Year Data Next Year Data Name of Issue	Com. Stock Rank	Fisca			lext Quar stimates High		# of	1998 'Actual EPS	Street E	199	9	# of		200 stimates High		# of	5-Yr Pro EPS Growth Rate-%	Annual Rovs. (5 MIL)	Net Tangible Book (\$/Shr)	Cash Flow (\$/Shr)	Month End Price Feb 99	1999 P/E	Next EPS Rept Date
King World Prod'ns Kinnard Investments Kirby Corp Kirn Brewery ADS Kitty Hawk	8+ 8- 8- 8- 8- 8- 8- 8- 8- 8- 8- 8- 8- 8-	30000 0000	82 61 61	0.53 0.23 d0.09	0.54 0.23 d0.06	0.52 0.22 d0.11	6 2 2	v1.79 Pvd0.58 Pv0.46 v1.85 Pv0.99	2.14 0.25 1.20 2.37 1.33	2.15 0.25 1.22 2.37 1.49	2.13 0.25 1.17 2.37 1.00	7 1 5 1 4	2.35 1.42 3.11 1.07	2.38 1.50 3.11 1.07	2.31 1.35 3.11 1.07	3 1	9 15 15 10	684 40.9 327 11,527 715	12.18 5.41 6.38 52.63 10.79	1.93 0.17 2.06	26% 4% 17 115% 8%	12 19 14 49	4/08 4/20 4/23
KLA-Tencor Corp Klamath First Bancorp KLLM Transport Sv KLM Royal Dutch Air KN Energy	82828 #####	**************************************	985 15	0.14 0.31 0.12 0.43	0.17 0.33 0.13 0.47	0.10 0.28 0.10 0.35	17 2 2	v1.52 v1.00 Pv0.42 av3.89 Pv0.92	0.56† 1.17 0.93 2.87† 1.394	0.65 1.30 0.95 3.85 1.60	0.16 1.08 0.90 1.95 1.15	19 4 2 7 10	1.56t 1.38t 2.67 1.954	1.90 1.45 3.18 2.30	1.15 1.31 2.12 1.70	16 2 6	24 10 15 10 13	1,166 72.9 229 6,425 4,388	13.70 16.30 12.51 22.76 12.93	1.95 1.54 8.87	51¼ 15½ 7¼ 28 20%	93 13 8 10 15	4/16 4/21 4/21 4/30
Knight-Ridder Inc Knight Transportation • Knightsbridge Tankers Knight/Trimark Grp'A' Knoll Inc	ARRER KR KR KR KR KR KR	000000	00 100 00 00 00 00 00 00 00 00 00 00 00	0.62 0.23 0.34 0.45	0.66 0.23 0.34 0.46	0.59 0.21 0.33 0.44	84 146	vP3.73 Pv0.87 n/a Pvp0.96 Pv2.14	2.99 1.06 1.40 1.431 2.33	3.15 1.07 1.60 1.45 2.40	2.85 1.05 1.20 1.38 2.25	17 5 2 5 8	3.29 1.33 1.40 1.73† 2.65	3.45 1.35 1.40 1.75 2.74	1.30 1.40 1.71 2.57	7 2 1 2 5	11 26 5 30 16	3,092 125 356 949	Neg 4.47 18.30 3.15 1.71	5.46 2.30	50% 21% 17% 34% 19%	17 20 12 24 8	4/28 4/24 4/23
Kofax Image Products Kohr's Corp Kollmorgen Corp Komag Inc Koor Indus Ltd ADS	NR NR 8- 8-	Dc Ja Dc Dc	85 F85	0.32 0.23 0.55 d0.14	0.33 0.23 0.55 0.55	0.30 0.22 0.54 d0.17	524	v0.96 v0.62 v0.91 Pv01.40 vPd6.89	0.85t 1.15 1.30 0.15t	0.85 1.16 1.30 0.25	0.84 1.14 1.30 d0.13	15 15 5	1.49 0.96† 1.39 0.98†	1.53 0.96 1.40 1.15	1.45 0.95 1.35 0.85	6 2 15 ::3	28 15 23 18	13.6 33.4 3,060 244 329	2.22 5.21 6.43 3.62 6.36	1.27 2.44 2.03	20 9 69 15 7	60 12 47	4/27 3/11 4/20 4/17
Kopin Corp Korea Efectric Power ADS KOS Pharmaceuticals Koss Corp	O NR NR B	Dc Dc Dc Je	Q1 Q2 Q3	0.31 0.09 d1.00 0.29	0.36 0.11 d0.95 0.29	0.25 0.06 d1.06 0.29	23 121	v1.75 Pvd0.25 v0.21 vd2.79 v1.65	0.84 0.65 0.331 64.46 1.34	1.15 0.73 0.50 d4.36 1.34	0.35 0.52 0.11 d4.61 1.34	3 4 3	0.441 d3.324	1.80 0.73 d2.84	1.19 0.20 d3.95	.3 3 3	9 18 4 16	3,565 26.9 9,379 2.89 40.6	4.23 9.86 1.12 6.92	4.96	18% 16% 13% 5% 12	25 42 d	3/27 5/01 3/06 4/08
Krause's Furniture Kroger Co Kroll-O'Gara Co Kronos Inc Kril Inc	NR B+ NR B+ NR	# 00 00 00 00 00 00 00 00 00 00 00 00 00	88899	0.48 0.30 0.40 0.31	Na 0.50 0.31 0.42 0.32	Nil 0.46 0.28 0.36 0.30	11 2 4 2	vd0.39 vP1.70 cv0.09 v1.73 v0.83	d0.224 2.29 1.02 2.13 1.18	d0.22 2.35 1.08 2.15 1.21	d0.22 2.25 0.92 2.08 1.13	19 4 5 3	0.104 2.71 1.24 2.60 1.50	0.10 2.78 1.32 2.65 1.60	0.10 2.65 1.20 2.56 1.41	1 9 4 3 3	15 23 23 28	115 28,203 190 202 96.2	Neg Neg 4.43 8.87 Neg	d0.26 3.13 2.59 1.96	1½ 64% 30% 42% 18	28 30 20	3/16 4/17 3/20 4/24 3/12
Kubota Corp ADR Kuhlman Corp Kulicka & Softa Ind Kyocera Corp ADR L-3 Communications Hidgs	NR B+ B- NR NR	Mr Dc Sp ² Mr Dc	108 101 101	0.57 d0.23 0.22	0.60 d0.15 0.23	0.56 d0.33 0.20	3 11 2	v2.16 Pv2.20 vd0.23 v0.93 Pv1.26	1.80 1.59	1.18 2.55 d0.25 1.80 1.67	1.18 2.50 d0.72 1.80 1.50	1 13 1 3	1.65t 2.78 1.19 2.30 1.93	1.65 2.78 1.50 2.30 2.00	1.65 2.78 0.79 2.30 1.85	1 8 1 2	18 17 16 22	7,740 762 411 5,453 1,037	Neg 4.92 10.66 14.82 Neg	38.67 3.00 0.34 3.73	48% 38% 25% 47% 42%	15 d 26	4/15 4/17
ta Jolla Pharmaceutical La-Z Boy LaBarge Inc LabOne Inc Labor Ready	NR A- B- NR		1485 4	0.39 0.10 0.20 0.22	0.43 0.10 0.20 0.23	0.38 0.10 0.20 0.21	6 1 1 5	Pvd0.42 v0.93 v0.30 Pv0.69 v0.25	1.20† 0.38 0.854	0.54 1.25 0.38 0.85	d0.54 1.19 0.38 0.85	1 7 1 1	1.33† 0.45 1.00 1.06†	1.40 0.45 1.00 1.07	d0.67 1.30 0.45 1.00 1.05	1 7 1 1 3	12 20 20 20	8.60 1,108 99.3 102 335	0.99 6.32 1.91 3.52 2.44	1.32 0.39 0.50	4 18% 2% 11% 28%	16 8	5/07 5/22 5/01 4/27
Laboratorio Chile ADS Laboratory Corp Amer Hidgs Laclede Gas LaCrosse Footwear LADD Furniture Charles College British College Colleg	NR C B NR B-	Sp ¹² Dc	0880 0880	0.01 1.24 0.32 0.36	0.02 1.27 0.32 0.39	Nil 1.20 0.32 0.33	2 2 1 6	v0.81 vP0.20 v1.58 v1.01 Pv1.53	1.72 0.07† 1.44↓ 1.99	1.96 0.10 1.53 2.14	1.40 0.03 1.35 1.90	3 4 2 7	2.13 0.20 1.84 1.00 2.31	2.27 0.20 1.88 1.00 2.40	2.00 0.20 1.80 1.00 2.20	2 1 2 1 4	7 2 15 15	180 1,613 547 146 571	0.48 Neg 14.52 7.15 6.97	d0.35 2.65	13¼ 1¾ 23 7¼ 18¼	16	4/30 6/08 4/21

Prior Year Data		Τ		-				-	Earn	ings	G	lide) 						1	NOR-	-NC	V	8
Name of Issue	Com. Stock Rank	Fisc	<u> </u>		Next Qua Estimate High	s (\$/Shr) Low	# of	1996 Actual EPS	Street (19 Estimate High		ø of	Street	20 Estimate High	s (\$/Shr)	# of	5-Yr Pro EPS Growth	Annual Revs.	Net Tangible Book	Cash	Monte End Price	٠.	No EF
Norland Medical Systems Norrell Corp Norsk Hydro A.S. ADS Norstan, Inc Norlech Systems	8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8	፭ ሪሪ≾\$ሪ	G G G G G	0.31 0.26 0.06	0.32 0.26 0.06	0.25		vd2.60 Pv1.29 vP2.15 v0.39 v0.28	d0.30 1.58 2.53	1.63 3.90	d0.30 1.54 1.94 0.78	1	1.81 2.98 1.23	1.86 3.21 1.25	1.78 2.75 1.20	7 2 3	17 15 15	20.5 1,411 12,781 456	Neg 2.73 27.10 5.47	1.33 52.53 2.51	Feb % 15% 33% 10	9/E 10 13 13	4/0 3/0 4/2 6/1
North American Vaccine North Bancshares North Carolina Nat Gas	NR C NR A-	ፊ ያዳያዎ	Ri 1 R <u>2</u>	0.06 0.10 	0.15 0.10 	Nil	3 3 :: 1	Pvc3.17 v0.16 vd1.76 v0.42 v1.70	3.37 0.50 d1.204	3.57 0.55	0.30 3.00 0.44 d1.20	3 3 1 12	0.35 4.12 0.85 d0.73 0.35	0.35 4.12 0.85 d0.73 0.35	0.35 4.12 0.85 60.73 0.35	1 1 1	15 15 30	36.4 1,738 5.84 8.38 9.04	3.24 Neg 2.65 Neg 10.43	5.38 d1.03	26% 7% 7% 10%	12 8 15 d	3/1 5/0 3/2
North Coast Energy North Face North Fork Bancorp Northeast Bancorp	NR CNR B+	Dc Mr Dc Dc Je	5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	0.37 0.02 0.03 0.38 0.33	0.37 0.02 0.04 0.40 0.33	0.36 0.02 0.02 0.37 0.33	2 1 6 12 1	Pv1.40 Nii Pv0.76 vP1.18 v0.96	1.51 0.02 1.394 1.59 1.17	1.54 0.02	1.48 0.02 1.35 1.55 1.17	3 1 6 14	1.63 1.70 1.76	1.63 1.75 1.85	1.63 1.60 1.70	1 - 4	6 24 11	232 · 27.5 8.59 263 817	12.17 13.93 0.76 7.58 5.45	0.10	32 16% % 12% 22	19 11 38 9 14	5/0 4/20 7/0 5/0
NorthEast Optic Network Northeast Pennsylvania Fini Northeast Utilities Northern Bank Commerce	B NR	Dc ⁴ Dc Sp Dc Dc ⁴	9989 9	d0.63 0.18 d0.08 0.10	#0.63 0.18 Nii 0.10	d0.63 0.18 d0.16 0.10	11161	Pv1.50 Pvpd0.71 vd0.20 vd1.05 v0.31	1.41 d2.24 0.73†	1.41 d2.23 0.73 d0.15 0.34	1.41 d2.25 0.73 d0.15 0.34	1 2 1	0.79t 1.03 0.45	0.79 1.27	0.79 0.70	 1 14		27.0 14.9 864 31.5 3,835	8.48 14.60 2.79 13.60 16.67		11% 15% 15 12% 15	10 11 d 17	4/20 4/15 5/12
Northern States Pwr Northern Telcm Ltd E Northern Trust A Northfield Laboratories M	NR I	My		0.61 0.49 0.33 0.82 d0.27	0.61 0.52 0.39 0.84 d0.27	0.60 0.47 0.28 0.79 d0.27	2 3 24 11	Pv2.27 vP1.84 vPd0.99 Pv3.04 vd0.42	2.42 2.01 2.22 3.45	2.53 2.05 2.45 3.55 d0.67	2.19 1.95 2.05	8 19 35 21 2	2.43 2.13 2.64 3.86	0.45 2.55 2.17 2.86 3.95		1 4 9 31 15	12 5 20 13	4.20 218 2,819 17,575 2,267	4.04 17.24 15.93 8.70 Neg	3.53	5% 32 25% 58	17 13 13 26	4/27
Vorthrop Grumman Vorthwest Airlines Vorthwest Bancorp Vorthwest Equity Corp N	IR IR IR	Dc Dc Je ¹¹ Mr		0.01 1.30 d0.32	0.02 1.38 d0.10	Nil 1.25 d0.50	4 8 6	v±0.19 vP3.07 vPd3.48 v0.45 v1.37	0.384 6.134 3.35 0.444 1.50	0.39 6.30 4.35 0.46 1.50	0.35 6.00	4 13 12 2	0.964 6.604 0.454	1.30 7.10 0.45	0.60 6.40 0.45	4 9	40 9 8 8	Nil 113 8,902 9,045 184	3.93 6.52 Neg Neg 4.21	12.31	7½ 62¼ 25	20 · 10 · 7	4/20 4/08 4/15
lorthwest Pipe N lorthWestern Corp A lorthwestern Steel & Wire N IOVA Corp N	R	DC (_	0.88 0.41 0.70 0.19	0.95 0.47 0.70 0.19	0.85 0.38 0.70 0.18		Pv1.02 Pv1.90 Pv1.44 v1.70 vd0.18	1.634 2.23 1.57 d0.084 1.14	1.95 2.30 1.60	1.50 2.15 1.45 0.25 1.14	8 3 5	1.75 2.63 1.80 d0.284 1.74	1.75 3.00 1.80 0.20 1.76	1.75 2.45 1.80 0.75	2 3 1 2	4 16 10 2	8.37 417 210 1,187 596	14.54 16.67 9.28 Neg 3.46	2.41	24% 14%	15 4 7 4	4/20 4/21 5/01
lovaCare Employee Svcs Ni lovaCare B ovamerican Steel Ni ovametrix Med Sys B- ovaris AG ADS Ni	R N	le (23 d	0.07 0.28	0.08 Nil 0.35 0.05	0.08 0.11 0.20 0.05	7	pv0.22 v0.91 v0.91 v0.31 v2.55	0.014 1.35 0.334	0.33	0.32 0.11 1.05 0.25 3.08	3 9 2 2 2 2 7	0.214 1.25 0.494	0.75 1.25 0.57		6 4 1 2	17 15 30	1,146 1,272 1,672 401 31.6	6.47 Neg Neg 5.32 2.61	1.70	6% 2% 9%	19 5 d 4 7	1/16 5/04 1/29
ovaStar Financial NI ovAtet Inc NI ovavax Inc NI ovel Denim Holdings NI ovel Inc B ck Splits & Dividends 13	RO	lc lc		······	0.26 0.12	0.25	2 P	vd2.71 v0.92 vd0.39 d	1.22 10.04 d 10.20 d 1.884	1.50 0.04 0.20 1.88	1.00 10.04 10.20 1.87	3 1 1 3 9	1.20 0.34 Nii 2.184	3.97 1.20 0.34 Nil 2.20 0.87	2.15	1 1 1 3	14 2 15 25 22 17	81.0 27.1 0.52 83.2	4.90 13.52 2.75	d0.36	6% 1% 2% 13%	5 4 d	V30

Stock Splits & Dividends 13-for-2,96. 22-for-1,96. 33-for-2,98. 43-for-2,97. 515%,94. 52-for-1,97:3-for-2,98. 72-for-1,95:3-for-2,97. 515%,98. 102-for-1,98. 112-for-1,96,97. 112-for-1,96,97. 112-for-1,96. 112-for

Prior Year Data Next Year Data	Con				_		_			9	: Gı	iiuc	, 							PEA-	PE	R	91
Name of Issue	Stoc Ran	ķ		Street	Next Qu Estimate High	arter ns (\$/Shr) Low	# of	1996 Actual EPS	Street I	190 Estimate High		For Esta	Street E	200 stimate High		# of	5-Yr Pro EPS Growth	Annual Revs.	Net Tangible Book	Cash Flow	Month End Price	1999	Next
Pease Oil & Gas PEC Israel Economic Pechiney ADS PECO Energy Pediatric Services of Am	C NR NR B ler NR	DC DC DC Sp	Q	0.56	0.64	0.54	3	vd12.20 v2.92 v1.91 vPC2.32 vd0.91	3.00 2.00	ජ5.00 3.00	d5.00 3.00 1.65 2.75 0.20	1 1 3	3.15 2.25 3.07	3.15 2.38 3.24	3.15 2.11 2.90	1 2 16	Rate-% 12 5	4.66 88.6 11,644 5,211	3.16 22.26 7.80 12.25	(\$/Shr)	Feb'99 29% 16% 35%	P/E 10 10 8 13	4/06 4/28
Pediatrix Medical Group Peerless Systems Pegasus Communications Pegasus Systems Pegasystems Inc	'A' NR NR NR NR	DC 34 DC DC DC	04 00 00 04	0.49 0.08 d2.52 0.12 0.04	0.09 d2.52 0.13	0.07	16 4 1 4 3	v1.33 v0.42 Pvd6.64 Pv0.37 v0.04	1.78 0.38 d8.864 0.63 Nil	1.82 0.40 08.25 0.65	1.72 0.37 d10.28 0.60 d0.07		0.374 2.24 0.53 47.71 0.934 0.284	0.46 2.35 0.55 d7.71 1.00 0.40	0.30 2.06 0.50 47.71 0.85	3 17 4 1	27 35 23 47	302 129 25.4 195 29.1	Neg 12.32 3.50 Neg 4.35	1.61	30% 9% 24% 37%	17 25 d	5/06 3/18 5/14 5/01
Penn-America Group Penn Engr & Mig Penn National Gaming • Penn Treaty American • Penn Virginia Pennaco Energy	NR B+ NR B	Dc D	01 01 04 04	0.21 0.47 0.07 0.57 0.43	0.21 0.47 0.07 0.58 0.43	0.20 0.47 0.07 0.55 0.43	22141	Pv0.90 Pv±1.91 Pv0.49 v0.98 v1.88	0.874 2.02 0.65 2.12	1.00 2.03 0.70 2.15	0.82 2.00 0.60 2.05	8245	0.90 2.25 0.704 2.41 1.83	0.95 2.25 0.70 2.47 2.00	0.20 0.85 2.25 0.70 2.25 1.65	3 1 1 5 2	33 14 15 10 14 15	100 180 154 187	1.88 10.51 16.07 2.21 19.47	2.43	11% 19% 9% 24%	13 10 15	3/17
PennCorp Financial Grou Penney (J.C.) Penney (Financial Svcs Pennichuck Corp Pennsylvania Enterpr	NR B NR B+	ನ್ನಿ ನಿಕ್ಕಿನ	0ï	0.65	0.72	0.50	6	v1.07 vP2.19 v1.16 Pv1.59	d0.02 d1.354 3.024 1.26t 1.47	d0.02 d0.80 3.15 1.33 1.55	d0.02 d1.90 2.80 1.22 1.38	1 20 20 3	0.11 0.604 3.334 1.34	0.11 0.70 3.35 1.35	0.11 0.50 .3.30 1.33	1 2 2 2		39.4 664 30,678 103 17.4	19.93 0.64 6.11 15.81 9.74 19.81	4.14	18% 3 % 36% 14%	12 12	5/15 5/04
Penrwood Bancorp PennzEnergy Co Penske Molorsports Pentacon Inc Pentair, Ind	NR B- NR NR	Jes Dc Dc Dc	01 01 01	d0.44 d0.19 0.07	0.11 d0.10 0.11	d0.80 d0.22 d0.05	1 1443	Pv0.65 v0.41 vPcd1.14 Pv1.17 Pv0.56	1.50 0.62 d0.064 1.40 0.514	1.50 0.62 0.85 1.55 0.59	1.50 0.62 d1.65 1.30 0.43	1 8 8 3	0.254 1.55 0.93	1.10 1.55 0.93	d0.80 1.55 0.93		12 21	207 3.95 837 117 215	12.28 11.42 20.61 11.43	2.18 9.79	9% 32%	15 18 d	5/06 5/07 5/06
Pentegra Dental Group Penton Media Penwest Pharmaceuticals Peoples Bancorp	A NR NR NR A-	Dc ¹⁰ Mr Dc Dc Dc ¹¹	58 i 85	0.61 0.14 d0.27 0.43	0.68 0.14 d0.27 0.43	0.58 0.14 d0.27 0.43	71 111	vP2.46 n/a Pv0.70 n/a Pv1.70	2.86 0.44 0.25 d0.83 1.80	2.95 0.44 0.25 d0.81 1.80	2.80 0.44 0.25 40.84 1.80	7 1 1 2 1	3.23 0.58	3.25 0.58	3.20 0.58 d0.66 2.00	2 1 2 2	15 26 	1,938 205 26,1	Neg 4.94 1.13 Neg 2.91	3.58 d0.77 1.02	1¾ 18¾ 7½	13 4 4 . 75 .	V16
People's Bancorp People's Bancshares People's Bank Peoples Bank (NC) Peoples Energy Peoples Fire	NR NR B NR B+	Dc ¹² Dc ² Dc ¹³ Sp	61 62 82	0.59 0.43 1,69	0.59 0.45 1.70	0.59 0.39 1.67	15	v0.22 Pv2.25 Pv1.44 vP1.41 v2.25	2.50 1.82 2.16 2.53	2.50 1.92 2.16 2.75	2.50 1.57 2.16	2 12 1 10	0.47 2.80 2.06 2.56	0.47 2.80 2.15 2.56 2.80	0.47 2.80 2.00 2.56 2.60	1 5 1 3	12 	59.8 48.7 71.3 904 20.2	9.12 9.71 11.61 13.95	**************************************	9% 20% 28 32	8 4 15	V20 V20
Peoples Financial Peoples Heritage Finl Gr Peoples Holding PeopleSoft Inc Pep Boys-Man,Mo,Ja Pepsi-Cola Puerto Rico Bott'8'	A- B NR B+ A	Dc14 Dc15 Ja	01 01 04	0.37 0.12 d0.04	0.39 0.16 0.06		7 21 15	Pv0.68 Pv1.12 v1.82 Pv0.55 v0.80	0.624	0.71	0.60 1.58 0.55 0.55	1 16 7	1.81 2.40 0.844	1.85 2.40 1.00 1.05	1.75 2.40 0.70	3 7 1 15	12 8 30	1,138 6.82 499 84.3 1,314 2,057	20.94 10.82 6.54 18.03 2.65 13.12	Ö.59	10% 1 17 1 33% 18% 2	7 0 4 9 4	/27 /20 /22
Pepsi-Gernex S.A. PepsiCo Inc Perceptron Inc Perclose Inc Stock Splits & Dividends	NR NR A B- NR	Dc ⁴ Mr	<u>Q4</u>	0.15	0.17	0.23 d0.19 0.13	1 P		0.31 1 1.33 0.304 0.31	0.50 1.53 0.35		1 2 2 4 6	0.67† 1.50	0.90 1.72	0.44 1	12 10	<u></u>	99.4 493 2,348 49.6 10.6		#0.19 1.40 1.65 1.49	18% 2 5 3 7% 2 37% 2 5 1 42%	6 4 8 7 5	/20 : /04 /04

Perclose Inc NR Mr Q4 0.15 0.17 0.13 5 | vd1.38 0.31 0.35 0.28 6 | 0.93 1.03 0.80 0 50 10.0 | 5.00 |

Stock Splits & Dividends 1 1-for-10 REVERSE, 98. 2 3-for-2, 97. 3 3-for-2, 96.2-for-1, 96. 4 3-for-2, 95. 9 2-for-1, 97. 6 2-for-1, 98. 7 3-for-2, 98. 8 4-for-3, 98. 9 No adj for stk dstr, 98. 10 2-for-1, 96. 11 2-for-1, 94:10%, 95; 96:3-for-2, 98. 12 Bank conversion 3.8243-for-1, 98. 13 15%, 95:10%, 97:To split 3-for-2, ex Mar 23. 14 4%, 94:3-for-2, 96, 98. 15 2-for-1, 94, 95, 96, 97. 16 2-for-1, 96. No adj for stk dstr, 97.

									Earn	ings	, Gt	ıide	,						W	۸D—	WEI		125
Prior Year Data Next Year Data Name of Issue	Com Stock Rank	Fisc	<u>-</u>	Street	Vext Qua Estimate High	erter is (\$/Shr) Low	# of		Street (19 Estimate High		e of	Street E	200 stimate: High		8 01	FYr Pr EPS Growti Rate-9	Annual Nevs.	Net Tangible Book (S/Shri	Cesh Flow (\$/Shr)	Month End Price Feb'99	1999	Next EPS
Waddell & Reed Fin1 'A' Wal-Mart Stores Walton Corp Walgreen Co Wall Data	NR A+ B- A+ B-	\$ 20 £ 5	01 03 03 04	0.35 0.42 0.20 0.19	0.36 0.43 0.21 0.25	0.41	19	Pv1.33 vP1.98 Pvc0.60 v0.54 vd0.51	2.24 1.03	2.34	2.20 1.00 0.59	28 3 23	1.68 2.53 1.35 0.70 1.22	1.80 2.60 1.35 0.74 1.30	1.55 2.44 1.35 0.68	8 16 1 16 2	14 14 18 16	278 137,634 678 15,307	2.53 8.87 4.66 2.86	1.17 2.30 d0.60 0.72	18% 86% 9	. 13 -38 -9 53	4/20 5/12 5/04 3/31
Wallace Computer Svc Walter Industries Wang Laboratories Warnaco Group'A' Warner Chilcott Lab ADS	A NR NR B- NR	H My Do Do Do Do	88535	0.45 0.18 d0.03 0.79 d0.17	0.45 0.18 0.01 0.81 d0.06		4 5	v1.71 val.08 Pvd0.75 v0.42 Pvd1.64	: 1.83 1.08	1.90 1.10 1.10 2.30	1.80	4 5 7 12 4	2.09 1.23 1.90 2.64 0.384	2.12 1.40 2.00 2.80 0.70	1.14 2.05 1.10 1.80 2.60 0.15	2 4 5 12	12 11 17 18 14	1,356 1,837 1,268 1,436 64.9	7.84 6.94 Neg Neg 1.43 2.56	3.02 2.47 d0.79 1.28	20% 22% 12% 23% 22%	21 11 23 10	3/05 3/24 5/19
Warner-Lambert Warrantech Corp Warren Bancorp Washington Federal Washington Gas Lt Washington Homes	A- B- B- A-	De Mr De Sp'	RR: 2	0.40 0.50 1.39	0.42 0.51 1.45	0.40 0.49 1.33	31 :: 9 4	v1.04 v0.34 Pv0.75 v1.93 v1.54	1.48 0.10 0.76 2.02 1.664	1.48 0.10 0.80 2.11 1.90	1.48 0.10 0.72 1.97 1.55	1 1 2 11 7	1.93 2.16 1.93	2.00 2.27 2.05	1.85 2.09 1.75	39 -7 -3	22 15 5 10	8,180 200 31.9 472 1,041	2.12 1.77 5.14 12.61 13.86	4.09	7½ 68% 4% 9 22½ 23%	46 -43 12 11 14	5/07 4/14 5/01
Washington Mutual Washington Post'B' Washington Trust Bancorp Waste Connections • Waste Industries	NR	30000	800	0.19 0.78 4.42 0.14	0.19 0.81 4.65 0.15	0.19 0.76 4.01 0.14	1 9 5 	±v0.48 -vP2.56 vP±41.10 Pv0.97 Pvc0.22	0.95† 3.39 24.27 1.05 0.81†	1.00 3.50 24.75 1.05 0.82	0.90 3.15 23.50 1.05 0.75	2 19 9 1 5	1.29 3.88 27.834	1.29 .4.25 29.00	1.29 3.40 27.00	1 13 3	3 14 10 32	241 12,746 2,110 68.0 54.0	6.58 14.15 65.22 7.15 Neo	0.55 35.93	6 40 550% 18% 20	6 12 23 18 25	5/15 4/30 4/24 4/21
Waste Management Waste Systems Intl Waterlink Inc Waters Corp	NE REE	Dc Dc Sp Dc	34385 5	0.20 0.57 d0.06 0.07 0.64	0.22 0.59 d0.03 0.07 0.65	0.19 0.56 d0.08 0.06 0.63	5 13 2 3 6	vp0.54 vc31.26 vcd1.51 vd1.46 Pv2.27	0.82 2.10 d0.55 0.38 3.32	0.85 2.10 d0.54 0.45 3.36	0.80 2.10 d0.56 0.34 3.28	5 1 2 7 6	0.964 3.01 d0.23 0.64 3.93	1.07 3.05 d0.13 0.74 4.00	0.89 2.90 d0.33 0.50 3.89	5 17 2 3	20 16 25 19	116 2,614 3.46 135 619	0.06 Neg Neg Neg Neg	1.17 2.47 d1.26 0.24 0.37	13% 48% 5% 4%	16 23 d 12	4/28
Watkins-Johnson Watsoo, Inc Watson Pharmaceuticals Watts Industries'A'	NR B A- B+ A-	Dc ₁₃ Dc ₁₃ Je ₁₁	83558	0.22 d0.03 0.07 0.41 0.45	0.22 d0.02 0.08 0.41 0.51	0.22 d0.03 0.06 0.40 0.42	12983	v3.99 Pv±0.89 vP1.32 v1.95	0.96 6.56 1.10 1.76 1.784	0.96 6.56 1.15 1.79 1.95	0.96 6.56 1.08 1.75 1.50	1 10 10 11	0.55† 1.33† 2.13 1.154	0.60 1.45 2.17 1.15	0.50 1.25 2.10 1.15	2 3 7	15 25 23 14	0.26 291 1,009 556 730	Neg 19.98 5.71 3.65	1.10 1.17	8% · 22% 11% 48%	28. 9 3 11 27	5/01 4/30
Wave Technologies Intl WavePhore Inc • Wayne Svgs Bancshares Weatherford Intl	A- NR NR NR NR B-	Dc14 Ap Dc Mr15 Dc13	01 04 01 01	0.28 0.07 d0.27 0.13	0.30 0.10 d0.27 0.18	0.25 0.04 d0.27 0.10	3 2 1	Pv0.73 v0.03 Pvd1.38 v0.73 Pv0.66	1.29 0.19 d1.054 0.78 0.644	1.40 0.19 d1.05 0.78 0.88	1.15 0.19 d1.05 0.78	6 2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1.40 0.34 	1.45 0.37 	1.35 0.30 	***	30 25 18	946 36.1 22.3 20.1	9.97	2.79 2.06 d1.08	13% 15% 3% 7 16%	12 19 d	4/22 4/27 6/09 4/23 5/04
Webster City Fed Svgs Bk Webster Financial Weider Nutrition Intl'A' Weingarten Rity SBI	B NR B+ NR NR	Je Dc Dc My Dc	3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3	0.60 0.57 0.11	0.69 0.60 0.14	0.54 0.53 0.08	6 7 2	v2.30 v0.65 Pv1.83 v0.56 vPC2.08	2.91 0.66 2.37 0.45 2.25	3.00 0.67 2.45 0.55 2.25	2.75 0.64	6 2 10 2	3.28 0.70 2.60	3.50 0.72 2.65 0.70	3.00 0.67 2.50 0.56	4 2 3	15 11 20	2,011 1,178 6.95 697 251 198	2.63 18.56 10.60 12.78 3.18	2.47 2.66 0.88	30% 6%	8 24 13 15	4/21 4/23 4/21 3/17
Weis Markets Wellman Inc Wellpoint Hith Networks				d0.30 d0.01 1.04 0.50	0.14 0.02 1.06 0.53		5	Pvd0.15 Pv2.00 vP0.37 vP±3.29 Pv1.17	d0.854 2.05 0.414 4.28 2.22	0.05 2.05 0.50 4.33 2.25	d1.60 2.05 0.25 4.15	4 1 6 20 5 5	1.204 4.92	1.50 5.00 2.64	0.09 0.90 4.75		6 7 15 13	1,255 1,867 968 6,479 20,482	3.11 21.19 11.63 12.52 9.51	1.01 2.90 3.28 4.09	1% 36% 9% 78%	d 18 23	4/28 4/20 4/28 4/30 4/21

Stock Splits & Dividends 12-for-1, 95, 97, 99. 22-for-1, 96. 32-for-1, 96. 32-for-1, 96. 32-for-1, 98. 32-for-1, 98. 42-for-1, 98. 32-for-1, 9

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Western Kentucky Gas Company 3/8/99 3/9/99 3/10/99		3/10/99 23.500 23.000 18.938 18.500	3/11/99 23.813 23.125 18.750 18.500	3/12/99 23.875 23.500 19.000	3/15/99 23.938 23.500	3/16/99	3/17/99 23.375 23.000
Sorporation High 23.625 23.625 23.500 Apply 100 23.000 23.188 23.000 Low 23.000 23.188 23.000 High 19.188 18.875 18.938 Low 18.750 18.625 18.500 Ingh 20.750 20.750 20.375 Low 20.250 20.125 20.000 Ingh 23.688 22.938 22.500 Ingh 23.688 22.938 22.500 Ingh 23.000 22.438 22.313 Ingh 25.500 24.750 24.750 Ingh 25.500 24.750 24.750		3/10/99 23.500 23.000 18.938 18.500 20.375	3/11/99 23.813 23.125 18.750 18.500	3/12/99 23.875 23.500 19.000 18.625	3/15/99 23.938 23.500	3/16/99	3/17/99 23.375 23.000
Sorporation High 23.625 23.625 23.500 Low 23.000 23.188 23.000 Low 23.000 23.188 23.000 High 19.188 18.875 18.938 Icow 18.750 18.625 18.938 Icow 20.750 20.750 20.375 Icow 20.250 20.125 20.000 Icow 23.688 22.938 22.500 Icow 23.000 22.438 22.513 Icow 25.500 24.750 24.750 Icow 25.500 24.750 24.750		23.500 23.000 23.000 18.938 18.500 20.375	23.813 23.125 23.125 18.750 18.500	3/12/99 23.875 23.500 19.000 18.625	3/15/99 23.938 23.500	23.625	3/17/99 23.375 23.000
Orporation High 23.625 23.625 23.500 Low 23.000 23.188 23.000 High 19.188 18.875 18.938 Low 18.750 18.625 18.500 Impany Low 20.250 20.750 20.375 Indih 23.688 22.938 22.500 Indih 23.000 22.438 22.313 Indih 25.500 24.750 24.750 Indih 24.375 24.375 24.125		23.500 23.000 18.500 18.500 20.375	23.813 23.125 18.750 18.500	23.875 23.500 19.000 18.625	23.938	23.625	23.375
Low 23.000 23.188 23.000 23.188 23.000 23.188 23.000 23.188 23.000 23.188 23.000 23.375 20.375 20.375 20.375 20.000 20.375 20.000 20.375 20.000 20.375 20.000 20.375 20.000 20.375 20.000 20.375 20.000 20.375 20.000 20.375 20.3		23.000 18.938 18.500 20.375	23.125 18.750 18.500 20.563	23.500 19.000 18.625	23.500	23.125	23.000
High 19.188 18.875 18.938 Low 18.750 20.750 20.375 Low 20.250 20.125 20.000 Low 20.250 20.125 20.000 Low 23.688 22.938 22.500 Low 23.000 22.438 22.313 High 25.500 24.750 24.750 Low 24.375 24.375		18.500	18.750 18.500 20.563	19.000			
High 19.188 18.875 18.938 Low 18.750 18.625 18.500 High 20.750 20.750 20.375 Low 20.250 20.125 20.000 Low 23.688 22.938 22.500 Low 23.000 22.438 22.313 High 25.500 24.750 24.750 Low 24.375 24.375		18.500	18.750 18.500 20.563	19.000	_	333	
Low 18.750 18.625 18.500		18.500	18.500	18.625	19.563	19.000	18.875
High 20.750 20.750 20.375 Low 20.250 20.125 20.000 High 23.688 22.938 22.500 Low 23.000 22.438 22.313 High 25.500 24.750 24.750 Low 24.375 24.375		20.375	20.563		18.688	18.375	18.375
High 20.750 20.750 20.375 Low 20.250 20.125 20.000 High 23.688 22.938 22.500 Low 23.000 22.438 22.313 High 25.500 24.750 24.750 Low 24.375 24.375		20.375	20.563				
Low 20.250 20.125 20.000 High 23.688 22.938 22.500 Low 23.000 22.438 22.313 High 25.500 24.750 24.750 Low 24.375 24.125		20.000		20.750	20.375	20.125	20.063
High 23.688 22.938 22.500 Low 23.000 22.438 22.313 High 25.500 24.750 24.750 Low 24.375 24.125	<u> </u>		19.750	20.063	20.063	19.750	19.625
High 23.688 22.938 22.500 Low 23.000 22.438 22.313 High 25.500 24.750 24.750 Low 24.375 24.125							
Low 23.000 22.438 22.313		22.500	22.625	22.563	22.688	22.563	21.375
High 25.500 24.750 24.750 Low 24.375 24.125		22.313	22.250	22.375	22.438	20.750	20.750
Low 24.375 24.125		24 750	0E 37E	25 500	24 975	27070	0.00
C41.42 C16.47 C45.120		24.100	20.02	27.300	001.00	24.373	23.013
		24.123	24.300	24.000	73.500	23.000	27.8/2
34,625 34,563		34,563	35.125	35.625	35.750	35.750	38.000
		34,188	34.438	35.000	38,250	38.375	35.125
•		,					
Washington Gas Light High 24.125 24.000 24.000 24		24.000	24.313	24.063	24.438	24.500	24.000
Low 23.563 23.625 23.125 23		23.125	23.688	23.688	23.500	23.688	23.188

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FEDERAL RESERVE statistical release

These data are released each Monday. The availability of the release is announced on (202) 452-3206.

SELECTED INTEREST RATES

Yields in percent per annum

For immediate release April 12, 1999

• .	4000	4000	1000	1000	1000:	Wee	k Ending]
Instruments	1999 Apr 5	1999 Apr 6	1999 Apr 7	1999 Apr 8	1999 ⁻ Apr 9	Apr 9	Apr 2	1999 Mar
Federal funds (effective) 123	4.76	4.70	4.64	4.72	4.65	4.80	4.84	4.81
Commercial paper 3 4 5 6							1	
Nonfinancial	-1							1
1-month	4.82	4.81	4.81	4.80	4.79	4.81	4.84	4.82
2-month	4.80	4.82	4.80	4.78	4.79	4.80	4.82	4.82
3-month	4.81	4.82	4.80	4.80	4.79	4.80	4.82	4.8
Financial								
1-month	4.85	4.82	4.82	4.81	4.80	4.82	4.84	4.84
2-month	4.83	4.82	4.82	4.81	, 4.80	4.82	4.83	4.83
3-month	4.82	4.82	4.82	4.82	4.81	4.82	4.83	4.84
Bankers acceptances (top rated) 347	1							
3-month	4.80	4.80	4.80	4.80	4.81	4.80	4.82	4.82
6-month	4.80	4.80	4.80	4.80	4.81	4.80	4.83	4.82
CDs (secondary market) 3 8	7.00	4.00	4.00	4.00	4.01	7.00	7.00	7.02
1-month	4.86	4.86	4.86	4.85	4.85	4.86	4.87	4.88
3-month		4.89	4.88					
	4.89			4.88	4.88	4.88	4.90 °	4.91
6-month	4.95	4.95	4.94	4.94	4.93	4.94	4.96 °	4.98
Eurodollar deposits (London) 39	1							ľ
1-month	4.81	4.81	4.84	4.81	4.81	4.82	4.81	4.81
3-month	4.88	4.88	4.88	4.88	4.88	4.88	4.88	4.88
6-month	4.94	4.94	4.94	4.94	4.94	4.94	4.94	4.96
Bank prime loan ^{2 3 10}	7.75	7 .75	7.75	7.75	7.75	7.75	7.75	7.75
Discount window borrowing ^{2 11} U.S. government securities Treasury bills	4.50	4.50	4.50	4.50	4.50	4.50	4.50	4.50
Auction high ^{3 4 12}								1
3-month	4.27					4.27	4.38	4.48
6-month	4.35						4.36	4.52
1-year	4.33					4.35	4.50 C	4.67
Secondary market ^{3 4}							4.50	4.0
3-month	400	4 20	4.20	4.00	4.00	4.00	4.05	. م م
	4.29	4.30	4.30	4.28	4.30	4.29	4.35	4.44
6-month	4.32	4.36	4.37	4.35	4.34	4.35	4.34	4.47
1-year Treasury constant maturities ¹³	4.44	4.43	4.45	4.41	4.40	4.43	4.48	4.53
3-month	1	4.40	4.40					۱ . ـ .
	4.40	4.42	4.42	4.40	4.42	4.41	4.47	4.5
6-month	4.53	4.53	4.54	4.52	4.51	4.53	4.51	4.6
1-year	4.67	4.66	4.69	4.64	4.63	4.66	4.72	4.7
2-year	4.96	4.93	4.93	4.86	4.88	4.91	4.99	5.0
3-year	5.02	4.98	5.01	4.89	4.91	4.96	5.06	5.1
5-year	5.07	5.01	5.04	4.94	4.96	5.00	5.12	5.14
7-year	5.33	5.26	5.26	5.16	5.17	5.24	5.37	5.3
10-year	5.20	5.13	5.14	5.03	5.05	5.11	5.24	5.2
20-year	5.88	5.80	5.80	5.71	5.73	5.78	5.92	5.8
30-year	5.59	5.52	5.51	5.44	5.46	5.50	5.63	5.5
Composite							j .	1
Over 10 years (long-term) 14	5.83	5.75	5.75	5.66	5.68	5.73	5.88	5.8
Corporate bonds Moody's seasoned					•			
Aaa	6.67	6.60	6.60	6.52	6.54	6.59	6.70	6.6
Baa	7.52	7.47	7.47	7.40	7.40	7.45	7.56	7.5
State & local bonds 15	1	••••		5.07	7.40	7.43 5.07	5.11	5.10
Conventional mortgages 16				3.07	6.92		l .	7.0
	ĺ				U.3Z	6.92	6.98	1 ′.0

See overleaf for footnotes
* Some CD les for April 2, 1999 were revised. The correct rates were 3-month, 4.90 and 6-month, 4.96.
c-- corrected.

Table 6-7

Total Returns, Income Returns, and Capital Appreciation of the Basic Asset Classes Summary Statistics of Annual Returns

From 1926 to 1998

Series	Geometric Mean	Arithmetic Mean	Standard Deviation	Seria Correlation
Large Company Stocks				
Total Returns	11.2%	13.2%	20.3%	0.01
Income	4.5	4.5	1.4	0.84
Capital Appreciation	6.5	8.4	19.6	0.01
Small Company Stocks				
Total Returns	12.4	17.4	33.8	0.09
Long-Term Corporate Bonds				
Total Returns	5.8	6.1	8.6	0.10
Long-Term Government Bonds			<u></u>	
Total Returns	5.3	5.7	9.2	-0.01
Income	5.2	5.2	2.9	0.97
Capital Appreciation	0.0	0.3	8.0	-0.17
Intermediate-Term Government	Bonds			
Total Returns	5.3	5.5	5.7	0.18
Income	4.8	4.8	3.0	0.96
Capital Appreciation	0.4	0.5	4.4	-0.19
Treasury Bills				
Total Returns	3.8	3.8	3.2	0.92
Inflation	3.1	3.2	4.5	0.65

Total return is equal to the sum of three component returns; income return, capital appreciation return, and reinvestment return. Annual reinvestment returns for select asset classes are provided in Table 2-6.

Table 8-1 Key Variables in Estimating the Cost of Capital

,	Value
Yields (Riskless Rates)*	
Long-term (20-year) U.S. Treasury Coupon Bond Yield	5.4%
Intermediate-term (5-year) U.S. Treasury Coupon Note Yield	4.7
Short-term (30-day) U.S. Treasury Bill Yield	4.5
Risk Premia**	
Long-horizon expected equity risk premium: large company stock-total returns minus long-term government bond income returns	8.0
Intermediate-horizon expected equity risk premium: large company stock total returns minus intermediate-term government bond income returns	8.4
Short-horizon expected equity risk premium: large company stock total returns minus U.S. Treasury bill total returns [†]	9.4
Expected default premium: long-term corporate bond total returns minus long-term government bond total returns	0.4
Expected long-term borizon premium: long-term government bond income returns minus U.S. Treasury bill total returns [†]	1.4
Expected intermediate-term horizon premium: intermediate-term government bond income returns minus U.S. Treasury bill total returns [†]	1.0
Size Premia***	
Expected mid-capitalization equity size premium: capitalization between \$918 and \$4,200 million	0.5
Expected low-capitalization equity size premium: capitalization between \$252 and \$918 million	1.1
Expected micro-capitalization equity size premium: capitalization below \$252 million	2.6

[•] As of December 31, 1998. Maturities are approximate.

Note: An example of how these variables can be used is found with equation (35).

^{**} Expected risk premia for equities are based on the differences of historical arithmetic mean returns from 1926-1998. Expected risk premia for fixed income are based on the differences of historical arithmetic mean returns from 1970-1998.

^{***}See Chapter 7 for complete methodology.

[†] For U.S. Treasury bills, the income return and total return are the same.

Westem Kentucky Gas Company

Atmos Energy Corporation Share Price Comparison

LDC's %	0.00%	-2.87%	7%	%	%	%	%	%	8	%	3	%	। इ
		-2.	-2.57%	-5.29%	-11.17%	-12.00%	%6 <i>L</i> 'S-	-5.39%	-4.54%	%66'8 -	* 10.54 %	-20.28%	-19.93%
Moody's LDC's	186.15	180.81	181.36	176.31	165.36	163.82	175.37	176.11	177.69		188.53	148.39	149.05
Trans %	0.00%	1.69%	2.61%	2.91%	0.70%	-10.70%	2.33%	-1.09%	3.55%		7.01%	12.12%	16.84%
Dow Jones In Moody's Transy Trans %	668.01	679.27	685.47	687.47	672.68	596.54	683.57	660.75	691.74	708.27	780.83	748.96	780.5
Dow Jones In	0.00%	3.00%	1.39%	1.73%	%56'0	-14.33%	-10.88%	-5.36%	%09 [°] E			2.76%	11.21%
J Industrials	8799.81	9063.37	8922.37	8952.02	8883.29	7539.07	7842.62	8592.10	9116.55	9181,43	0358,83	9306.58	9786.16
Dow Jones UD Industrials	0.00%	-0.51%	-0.45%	2.77%	-2.55%	-2.71%	7.27%	5.42%	6.15%	9.22%	5.00%	2.77%	3.47%
DJ Utilities	285.94	284.47	284.65	293.87	278.65	278.20	306.72	301.45	303.52	312,30	302.10	293.87	295.85
Atmos Energy	0.00%	%E9 ⁻ 0-	3.80%	2.95%	-1.27%	-4.22%	-3.59%	0.21%	3.38%	8,86%	0.83%	-18.99%	-18.78%
Atmos	29.63	29.44	30.75	30.50	29.25	28.38	28.56	29.69	30.63	32,26	20.81	24	Mar-99 24.063
	Mar-98	Apr-98	May-98	96-unf	30-Inc	Aug-98	Sep-98	Oct-98	Nov-98	Dec-98	Jan-90	Feb-99	Mar-99

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Western Kentucky Gas Company Comparison of After-Tax Times Long Term Interest Earned Ratios

					_	Wtd Cost						
	LTD	LTD				oţ		Pref	ď		Pref	• •
	Interest	Ont	Rate		Ratio L	T.		Ont	æ		Ratio	
	(E) .	(5)				(2)	(9)	(2)	(8)	(8)	(6)	
Atmos Energy Corporation	N/A	N/A		8.03%	44.55%	3.58%	1% N/A	N/A		0.00%	0.00%	
AGL Resources	49.00	Ō	90.09	7.42%	47.50%	3.53	%!	2.00	74.30	6.73%	5.40%	
Indiana Energy	13.00	Ó	183.40	7.09%	37.50%	2.66	%	0	0	0.00%	0.00%	
Laclede Gas	13.5	Ö	179.30	7.53%	40.90%	3.08	%!	0.10	2.00	5.00%	0.50%	
Northwest Natural Gas	26.00	ō	347.00	7.49%	44.00%	3.30	%	2.6	36.5	7.12%	4.50%	
Peoples Energy	42.00	ō	521.70	8.05%	41.10%	3.31	%	0.00	0.00	0.00%	0.00%	
Washington Gas Light	31.00	9	452.30	6.85%	40.30%	2.76%	%:	1.30	28.40	4.58%	2.60%	
Moody's Companies' Average	29.08	œ	390.62	0.07	0.45	o.	0.03	1.50	23.53	0.04	0.02	
	!	į										

AFTERTAX.xls

	Wtd Cost of Pref (10)	Earned Equity Rate (11)	Equity Ratio (12)	Wtd of Cost Equity (13)	Wtd Cost of Capital (14)	Times Interest Earned (15)
Atmos Energy Corporation	0.00%	12.00%	55.45%	6.65%	10.23%	2.86
AGL Resources	0.36%	11.30%	47.10%	5.32%	9.21%	2.61
Indiana Energy	0.00%	•		-	•	•
Laciede Gas	0.03%	•		_		••
Northwest Natural Gas	0.32%			••		
Peoples Energy	0.00%	•				
Washington Gas Light	0.12%	•				
Moody's Companies' Average	0.00	0.11	0.56	0.06	0.09	3.01

SOURCE; VALUE LINE INVESTA

Western Kentucky Gas Company Case No. 99-070 KPSC Data Request #2 Dated August 19, 1999 DR Item 41 Witness: Hack

Data Request:

Refer to the Direct Testimony of John W. Hack at pages 2-3.

- a. Provide the most recent Request for Proposal ("RFP") issued by the Gas
 Supply Department on behalf of Western and the list of potential vendors
 to whom it was sent.
- b. Provide a thorough description of the bid selection process employed by

 Atmos/Western after receiving the responses to this most recent RFP.

Response:

- a. See Attachment KPSC #2 DR 41 (a) (1) Request for Proposal

 See Attachment KPSC #2 DR 41 (a) (2) RFP Vendor List
- Each vendor was subject to proof of creditworthiness and financial strength commensurate with this type and size of Agency Agreement.
 Most vendors on the bid list have provided services to the Company on previous occasions. Before a vendor would have been selected, trade reference would have been made if the Company had not dealt with that vendor in the past.

Of the 43 RFP responses, only 8 bid proposals conformed fully with the RFP. Six (6) vendors submitted proposals but did not conform to the RFP

requirements. Eight (8) declined to bid and there were twenty-one (21) vendors which did not respond to the RFP.

The determining factor, upon conformance with all RFP requirements, became price.

June 9, 1998

Western Kentucky Gas Company (WKG), a division of Atmos Energy Corporation is requesting proposals for firm gas supply requirements and management of WKG's storage and transportation contracts for a three-year term from July 1, 1998 through June 30, 2001.

WKG Firm Gas Supply Requirements

The successful bidder ("Agent") will be responsible for providing all of WKG's firm system supply requirements on any day, with the exception of a base load firm supply contract for 6,000 MMBtu/day which expires on October 31, 1998 and existing local production contracts (less than 3% of requirements). The Agent will be responsible for all costs associated with the acquisition of gas supplies, as well as all penalties, charges, fees, and any other costs or liabilities that are incurred as a result of management of the gas supply, storage and transportation contracts.

WKG's annual purchase requirements are approximately 26 Bcf, which include 8.3 Bcf of pipeline and on-system storage activity. Historical purchase volumes and typical storage injection and withdrawal volumes are provided to assist in the preparation of your proposal (Exhibit 1). These volumes may or may not be indicative of future requirements.

WKG Storage and Transportation Contracts

All of WKG's firm transportation and storage contracts on Texas Gas, Tennessee Gas and Trunkline will be assigned to the Agent as detailed in Exhibit 2. In addition, WKG is in the process of obtaining an interconnection and firm capacity of 10,000 MMBtu/day with Midwestern Pipeline. This should be complete by late summer 1998 and will be included in this agreement.

WKG also has two interconnects with ANR pipeline. WKG does not hold firm capacity on ANR, but has used these interconnections to inject gas into WKG's Bon Harbor and Kirkwood storage fields.

June 9, 1998 Page -2-

The Agent will have the responsibility of maximizing the release of unused capacity on these contracts when WKG's customers do not require the space. WKG will be credited for 90% of the released capacity revenues, allowing the Agent to retain 10%. Capacity utilized by Agent will be priced at current market value for the appropriate pipeline and path of capacity.

Special Conditions

WKG will retain operational control of the on-system storage assets to ensure system integrity.

All bidders are subject to proof of creditworthiness and financial strength commensurate with this type and term of arrangement.

Non-performance remedies as well as other terms and conditions will be negotiated and included in the agreement between the parties.

The Proposal

WKG expects all proposals to be submitted as follows:

All bids shall be submitted with the commodity price at a plus (+) or minus (-) basis of the simple arithmetic average of all four indices listed below to establish a per unit price for all the requirements:

- 1) the average of the weekly <u>Natural Gas Week</u> postings for the appropriate pipeline and receipt zone during the applicable month
- 2) the average of the daily midpoint <u>Gas Daily</u> postings for the appropriate pipeline and receipt zone during the applicable month
- 3) the <u>Inside FERC Gas Market Report</u> first-of-the-month posting for the appropriate pipeline and receipt zone
- 4) the Nymex settled closing price for the applicable month

WKG will retain the right to trigger a fixed commodity price based on Nymex for any future month(s) at mutually agreeable terms and conditions.

WKG will provide the Agent with seasonal injection and withdrawal storage plans prior to each season. WKG will purchase storage injection volumes from the Agent as provided in the seasonal storage plan. Withdrawal volumes contained in the plan will be credited to the applicable month's requirements and assumed to be withdrawn from storage inventory. Storage inventory levels should be substantially full by October 31st of each injection season. Due to operational conditions, WKG reserves the right to change

storage injection or withdrawal parameters with fifteen (15) day's notice prior to the start of any applicable month.

All agency proposals must be received no later than June 18, 1998 at 5:00 p.m. CST. No late bids will be accepted. WKG reserves the right to reject any and all bids.

Your bid must be in writing, and may be faxed to (972) 855-3773 or mailed to:

Western Kentucky Gas Company, a division of Atmos Energy Corporation Attention: Director Gas Supply Operations P.O. Box 650205 Dallas, Texas 75265-0205

If you have any questions, any of the three people listed below will assist you:

John Hack (972) 855-3758 David Lord (972) 855-3747 Phil Davis (972) 855-3756

I look forward to hearing from you.

Sincerely,

John W. Hack Director, Gas Supply Operations

JWH:lam

Enclosures

COMPANY	CONTACT	ADDRESS	PHONE / FAX
AMDCO ENERGY TRADING	Mr. Matt Galosi	550 Westake Park Blvd. Houston, TX 77079-2696	281/356-4938 281/356-4938
ANADARKO PETROLEUM CORPORATION	Mr. Darryl Kennedy Marketing Account Mor.	17001 Northchase Drive	281/874-3263 281/874-3354
AQUILA ENEAGY CORP.	Mr. Gil Muhl ("mule") VP of Marketing	2 Houston Center, Suite 1850 909 Fannin Street Houston, TX 77010	713/336-7450 713/336-7403
BURLINGTON RESOURCES	Mr. Ray Thompson	5051 Westheimer, Suite 1400 Houston, TX 77056	713/624-9053 713/624-9608
CATEX/CORAL ENERGY, LLC Ms. Kristy Harrell	Ms. Kristy Harrell	909 Famin Street, Suite 700 Houston, TX 77010	713/767-5400 713/767-5455
CMS MARKETING SERVICES & TRADING COMPANY	Mr. Stan McDivitt	810-8 Princeton Parkway Owensboro, KY 42301	502/686-8833 502/686-8835
COLUMBIA ENERGY SVCS.	Eric McMurray	1330 Post Oak Bivd., 20th Floor Houston, TX 77056	713/693-2821 713/621-5392
COMMONWEALTH ENERGY	Mr. Coley McDevitt	745 West Main Street, Suite 100 Louisville, KY 40202	502/584-0599 502/584-1794
CONOCO, INC.	Mr. James Prewitt	600 North Dairy Ashford Houston, TX 77079	281/293-5791 281/293-3525
DUKE ENERGY	Mr. Mark Evans	10777 Westhelmey, Suite 650 Houston, TX 77042	713/260-8579 713/260-1850
DYNEGY (formerly NGC)	Mr. Slava Wilson	1000 Louisiana Street, Suite 5800 Houston, TX 77002-5050	713/507-6410 713/507-6539
EL PASO ENERGY NKTG.	Mr. Allan Bounds	1001 Louisiana Street, 25th Floor Houston, TX 77002	713/757-7226 713/757-7816

ENGAGE ENERGY ENHON CAPITAL & TRADE RESOURCES CORP. Mr. Oscar Dalton, RESOURCES CORP. Mr. Don Krattenm Mr. Bryant Winn AND TRADING HIGHLAND ENERGY CO. Mr. Scott Williams ICC ENERGY Mr. John Butler	Mr. Jerry Campbell Mr. Oscar Dalton, Manager Mr. Don Krattenmaker Mr. Bryant Winn Mr. Scott Williams Mr. John Butler	Five Greenway Plaza, Suite 1200 Houston, TX 77046-0995 1400 Smith Street, Suite 3122-F Houston, TX 77002-7361 1331 17th Street, Suite 601 Denver, CO 80202 5555 San Felipe, Suite 2100 Houston, TX 77056 700 North Pearl Street, Suite 1060 Plaza of the Americas, LB #305 Dallas, TX 75201 302 North Market Street, Suite 500
	Butler	302 North Market Street, Suite 500 Dallas, TX 75202
INNOVATIVE GAS SERVICES Mr. Sleve Menke) Menke	3032 Alvey Park Drive West Owensboro, KY 42303
KCS ENERGY MARKETING Mr. Harry Stout	Staut	1800 West Loop South, Suite 1400 Houston, TX 77027-3210
KN ENERGY (tormerly AlidCon) Mr. Chris Johnson	Johnson	One Allen Center, Suite 500 500 Dallas Street Houston, TX 77002
LGAE ENERGY MARKETING Mr. Chuck Tanner	k Tanner	220 West Main Street, 7th Floor Louisville, KY 40202
MARATHON OIL COMPANY Mr. Gary I	Mr. Gary D. Satterfield	5555 San Felipe Street Houston, TX 77056
MOBIL / PAN ENERGY Mr. Scott Shadrach	Shadrach	10777 Westheimer, Suite 650 Houston TX 77042

COMPANY	CONTACT	ADDRESS	PHONE / FAX
NGTS, Inc.	Mr. Lonnie Brown	8150 North Central Expy., Suite 525 Dallas, TX 75206	214/365-0600 214/365-9670
NORAM ENERGY	Ms. Comie Carlle	1111 Louisiana Street, 8th Floor Houston, TX 77002	713/854-7575 713/207-9626
ONEOK Gas Marketing Co.	Mr. Mark Quinfan	100 West Fifth Street, Sulte 1100 Tulsa, OK 74103	918/591-5176 918/585-9254
OXY/USA	Mr. Alan Killion	5 East Greenway Plaza, Suite 2400 Houston, TX 77046	713/215-7096 713/215-7485
PG&E ENERGY TRADING	Mr. Jim Zirngibl Account Representative	12444 Powerscourt Drive, Suite 300 St. Louis, Missouri 63131	314/984-6834 314/984-6823
PHILLIPS PETROLEUM CO.	Mr. Steve Alleman	6330 West Loop South Bellaire, TX 77401	713/669-3666 713/669-3689
PN#) ENERGY MARKETING	Mr. Paul Andrae	320 Gold Southwest, Fifth Floor Albuquergue, New Mexico 68102	505/241-4287 505/241-4305
PRODUCERS ENERGY MARKETING	Mr. Keith Sawyer	616 FM 1960 West, Suite 800 Houston, TX 77090	281/583-6275 281/583-4353
SONAT MARKETING	Ms. Monica Wescom	4 Greenway Plaza, Suite 1800 Houston, TX 77046	713/693-6245 713/693-6007
SOUTHERN COMPANY ENERGY NARKETING	Mr. Randy Courtney	200 Westlake Park Blvd., Suite 200 Houston, TX 77079	281/584-6975 281/584-3906
TEXACO NATURAL GAS, INC.	Ms. Dorma Tomlin	1111 Bagby Street, Suite 2900 Houston, TX 77002	713/752-7822 713/752-4032

COMPANY	CONTACT	ADDRESS	PHONE / FAX
TPC CORPORATION (Tejas)	Mr. Lee Fascetti	200 Westlake Park Blvd., Sulte 1000 Houston, TX 77079	281/597- 6259 281/597-65 20
TRANSCANADA ENERGY	Mr. Dave Dulak Marketing Representative	4 Greenspoint Plaza, Suite 1200 16945 Northchase Drive Houston, TX 77070	281 <i>1774-</i> 5652 281 <i>1875-257</i> 1
UNION OIL CO. OF CAL.	Daria Spengeman	14141 Southwest Freeway Sugarland, TX 77478	281/287-7503 281/287-5395
UNION PACIFIC FUELS	Mr. Abel Gutlerrez	801 Cherry Street, M.S. 3200 Fort Worth, TX 76102	817/255-6543 817/877-6539
WESCO (Wims. Energy Svcs.)	Mr. Steve Perrin Account Director	3800 Frederica, Suite 300 Owensboro, KY 42301	502/686-3642 502/926-0909
WESTERN GAS RESOURCES	Ms. Karen LaCombe	10333 Richmord Avenue, Suite 930 Houslan, TX 77042	713/454-5338 713/954-5342
WOODWARD GAS MKTG.	Mr. Mark Tronzo (Extension 144)	11251 Northwest Freeway, Suite 400 Houston, TX 77092	713/688-7771 713/688-6668
NOBLE GAS MARKETING, INC. Mr. Uallace Keim	Mr. Vallace Keim	350 Glenborough, Suite 180 Houston, Texas 77067	281/876-8817 281/876-8845

Western Kentucky Gas Company Case No. 99-070 KPSC Data Request #2 Dated August 19, 1999 DR Item 42 Witness: Hack

Data Request:

Refer to the Testimony of John W. Hack at page 4 regarding Western's supply source arrangements.

- a. The testimony refers to a "Natural Gas Sales, Transportation, and Storage Agreement" with Reliant Energy Services. Has there been any change in that arrangement since the time Mr. Hack';s Testimony was filed?
- b. Provide a detailed description of any changes to that arrangement that have occurred since the filing of Mr. Hack's Testimony.

Response:

- a. Yes.
- b. The Agreement between Reliant Energy Services and WKG was terminated effective July 31, 1999 by mutual agreement. Effective August 1, 1999 a replacement Agreement was entered into with Woodward Marketing, LLC, the next best proposal from the original vendors submitting proposals for this service.

Western Kentucky Gas Company Case No. 99-070 KPSC Data Request #2 Dated August 19, 1999 DR Item 43, a - c Witness: Gary Smith

Data Request:

Refer to the direct testimony of Gary L. Smith at pages 34-38 and the response to Item 48 of the Commission's July 16, 1999 Order.

- a. The reference to the WNA tariff of Columbia Gas of Kentucky ("Columbia") does not refer to the fact that the Commission initially approved Columbia's WNA tariff as a three-year pilot. Was Western aware that Columbia's WNA tariff was implemented as a pilot program?
- b. There are some differences between Western's proposed WNA tariff and Columbia's WNA tariff. Did Western give any consideration to proposing its WNA tariff as a pilot program?
- c. Provide any reasons why Western would be opposed to having its proposed WNA tariff implemented on a pilot basis.

Response:

- a. No. Western was not aware that the WNA tariff for Columbia Gas of Kentucky was initially approved by the Commission as a three-year pilot.
- b. Western did not give any consideration to proposing the WNA tariff as a pilot program.
- c. Although Western would not oppose having its proposed WNA tariff implemented on a pilot basis, this is not our preference, given the WNA experience gained by Atmos' United Cities Gas business unit.

Western believes the WNA tariff eliminates an unnecessary variable component of both the customer's bills and the earnings of the Company - a philosophy that is unlikely to change after a three-year period.

Western Kentucky Gas Company Case No. 99-070 KPSC Data Request #2 Dated August 19, 1999 DR Item 44, a - c Witness: Gary Smith

Data Request:

Refer to the direct testimony of Gary L. Smith at pages 7-8.

- a. The testimony indicates that "through March 1999, Western's total average monthly meters in service have increased by 2,132 over the same period in FY 1998." Does the number 2,132 represent all meters for all customer classes?
- b. Provide a breakdown of the 2,132 increase in meters by customer classification.
- c. Provide the comparable numbers reflecting the average increase in monthly meters in service, by customer class, for the periods ended December 1998 and June 1999.

Response:

- a. Yes, the increase of 2,132 meters refers to all customer classes.
- b. Referencing Western's "consolidated operating revenue and statistics" in it's financial statements, for the period ending March 31, 1999, the following table provides a breakdown of increase in meters in service for each customer classification:

	Averag	e Meters in S	Service
	Fisc	al Year to D	ate
·	<u>3/31/98</u>	3/31/99	<u>Change</u>
Residential	155,840	157,724	1,884
Commercial	18 ,0 41	18,285	244
Industrial	426	442	16
Public Authority	1,588	1,576	(12)
Total Meters in Service	175,895	178,027	2,132

Western Kentucky Gas Company Case No. 99-070 KPSC Data Request #2 Dated August 19, 1999 DR Item 44, a - c Witness: Gary Smith

c. Referencing Western's "consolidated operating revenue and statistics" in its financial statements, for the periods ending December 31, 1998 and June 30, 1999, respectively, the following tables provide a breakdown of change in meters in service for each customer classification:

	Averag	e Meters in S	Service
	Fise	cal Year to D	ate
	12/31/97	12/31/98	<u>Change</u>
Residential	155,276	157,259	1,983
Commercial	17,933	18,206	273
Industrial	458	444	(14)
Public Authority	1,580	1,576	(4)
Total Meters in Service	175,247	177,485	2,238

	_	e Meters in S	
		al Year to D	
·	<u>6/30/98</u>	<u>6/30/99</u>	<u>Change</u>
Residential	155,813	157,992	2,179
Commercial	18,045	18,309	264
Industrial	398	435	37
Public Authority	1,587	1,572	(15)
Total Meters in Service	175,843	178,308	2,465

Western Kentucky Gas Company Case No. 99-070 KPSC Data Request #2 Dated August 19, 1999 DR Item 45, a - c Witness: Gary Smith

Data Request:

Refer to the direct testimony of Gary L. Smith at pages 11-12 and the response to Item 58 of the Commission's July 16, 1999 Order.

- a. Provide a more detailed description and further explanation of the differences in the ways that Western uses its financial statistics and its marketing reports for purposes of tracking customer growth.
- b. Provide a detailed explanation of how the revised forecasted growth of 1,700 residential customers shown in the testimony was derived.
- c. Provide a summary of the analysis referred to on page 12 of the testimony for commercial and public authority customers that resulted in the revised growth rate of 230 for commercial customers.

Response:

a. The marketing reports, as stated in the response to Item 58 (d) of the first KPSC data request, dated July 16, 1999, are a manual tracking process for the purpose of monitoring customer additions. The reports rely upon the tracking of these additions by local sales representatives, with, historically, a manual compilation of the figures for the Company. Given the marketing reports reliance on the accuracy of record-keeping at the local level, and my uncertainty as to their uniformity and precision, I have utilized these reports merely as a reference for general market trends. An example of such a trend is referred to in testimony regarding the recent decline observed in residential conversions.

For purposes of tracking customer growth, the financial statistics are viewed as the most reliable resource. The reported meters in service are determined through billing system reports. In my preparation of the test year budget, the financial statistics were the primary resource utilized in the forecast of net annual customer growth rates.

Western Kentucky Gas Company Case No. 99-070 KPSC Data Request #2 Dated August 19, 1999 DR Item 45, a - c Witness: Gary Smith

b. In my preparation of the test year budget, the primary resource utilized in the determination of the net annual residential growth rate of 1,700 was the net change in residential meters in service as of December 31 for recent years. This data is included in my direct testimony in the Table at page 12, lines 1-8. Marketing reports were assessed secondarily, lending insight into the possible causes of the moderating growth rates.

Refer also to my response to sub-part (a) of this data request Item 45.

c. The sole resource utilized to forecast the commercial and public authority customer growth rates was Western's financial statistics. The net change in meters in service as of December 31, for each class is summarized in the Table below:

Meters in Service					
Year	Comm	ercial	Public A	uthority	
(12/31)	<u>Meters</u>	<u>Change</u>	<u>Meters</u>	<u>Change</u>	
1994	17,011	340	1,516	20	
1995	17,363	352	1,549	33	
1996	17,662	299	1,556	7	
1997	18,078	416	1,585	29	
1998	18,298	220	1,578	(7)	

Western Kentucky Gas Company Case No. 99-070 KPSC Data Request #2 Dated August 19, 1999 DR Item 46 a - b Witness: Gary Smith

Data Request:

Refer to Item 58(a) of the response to Commission's July 16, 1999 Order.

- a. In the same format used in the response to Item 58(a), provide an update that includes two additional columns: one for fiscal year 1998 and one for the 12 months ended June 30, 1999.
- b. The response included "actual sales and transportation volumes, by class, in Mcf"; however, the request was that the volumes be provided adjusted for normal weather. Provide a second version of the update requested in part (a) with the volumes adjusted for normal weather for each of the five periods.

Response:

- a. Attached hereto is Schedule PSC DR No. 2, Item 46 (a), providing the additional information requested.
- b. Volume adjustments to normalize for weather are included as an attachment, Schedule PSC DR No. 2, Item 46 (b).

Western Kentucky Gas Company Case No. 99-070 Data Request #2 Dated August 19

KPSC Data Request #2 Dated August 19, 1999 DR Item 46 (a)

Witness: Smith

Line						
No.	(a)	(b)	(c)	(d)	(e)	(f)
1	Number of Customers by Class, 12	months ending averag	ge "customers":			
2	(Source - Western's Financial Stater					
3						12-mo Ending
4		FY 1995	FY 1996	FY 1997	FY 1998	6/30/99
5	Residential	146,802	147,166	149,331	151,820	153,192
6	Commercial	16,361	16,731	17,080	17,411	17,523
7	Industrial	369	335	316	295	278
8	Public Authority	1,509	1,534	1,550	1,574	1,562
9	Total Sales Customers	165,041	165,766	168,277	171,100	172,555
10						
11	Transportation Customers	17	33	77	95	110
12	MOTAL CHIMTON TO DO	166.060	165,500	160.054	121 102	100
13 14	TOTAL CUSTOMERS	165,058	165,799	168,354	171,195	172,665
14 15	Actual Calon & Transportation Vol	umas bu Class in Mai	<u>.</u>			
16	Actual Sales & Transportation Vol (Source - Western's Financial Stater		•			
17	(Source - Western's Philadelan State)	uents)				12-mo Endin
18		FY 1995	FY 1996	FY 1997	FY 1998	6/30/99
19	Residential	11,987,742	14,718,174	13,337,468	12,561,176	11,759,182
20	Commercial	5,289,634	6,351,303	5,977,762	5,604,480	5,139,484
21	Industrial	9,992,575	10,725,745	6,128,597	3,414,638	2,891,547
22	Public Authority	1,446,207	1,684,789	1,531,144	1,461,600	1,344,628
23	Unbilled	(55,705)	(24,136)	320,531	(222,854)	(69,466
24	Total Sales Customers	28,660,453	33,455,875	27,295,502	22,819,040	21,065,375
25		, ,			, ,	, ,
26	Transportation Customers	17,103,124	16,935,972	22,398,363	25,812,786	25,082,734
27	•					
28	TOTAL DELIVERIES	45,763,577	50,391,847	49,693,865	48,631,826	46,148,109
29						
30	Degree-Days:					
31	(Source - NOAA, Composite)					12-mo Endin
32		FY 1995	FY 1996	FY 1997	FY 1998	6/30/99
33	Actual, Calendar Month	3,665	4,748	4,315	4,013	3,701
-	Normal	4,340	4,340	4,340	4,340	4,340
35	Percent Normal	84.4%	109.4%	99.4%	92.5%	85.3%
36	Tall and stall College C. W	/F/) C) C	D . D. 177			
37 38	Industrial Sales & Transportation (Source - Western's Financial Statem	•	Prior Fiscal Year	:		
30 39	(Source - Western's Financial State)	nens)				12 E-4:-
40		FY 1995	FY 1996	FY 1997	FY 1998	12-mo Endin 6/30/99
41	Industrial Sales	1,226,708	733,170	(4,597,148)		
	THE COURT DATES	1,440,700	/33,1/0	(4,27/,148)	(2,713,959)	(523,091
42	Transportation	(395,005)	(167,152)	5,462,391	3,414,423	(730,052

Western Kentucky Gas Company Case No. 99-070 KPSC Data Request #2 Dated August 19, 1999 DR Item 46 (b) Witness: Smith

No.						
	(a)	(b)	(c)	(d)	(e)	(f)
	T					
1	Degree-Days:					10 E. 4
2	(Source - NOAA, Composite)	TTT 1006	ETT 1007	777 1007	T77 1000	12-mo Ending
3		FY 1995	FY 1996	FY 1997	FY 1998	6/30/99
4	Actual, Calendar Month	3,665	4,748	4,315	4,013	3,701
5	Normal	4,340	4,340	4,340	4,340	4,340
6	Percent Normal	84.4%	109.4%	99.4%	92.5%	85.3%
7						
8						
9	Weather Adjusted Volumes, by Cla	ss, in Mcf:				
10	(Source - Refer to Sheet 2 of 2 of thi	s Exhibit for Calculatio	n of Volume Adjus	stment. The Volume	e adjustments are	
11	added to the Volumes reported in We					
12	•					
					•	
13					·	12-mo Ending
		FY 1995	FY 1996	FY 1997	FY 1998	12-mo Ending 6/30/99
14	Residential		FY 1996 15,528,795	FY 1997 13,399,066	FY 1998 13,385,689	_
14 15	Residential Commercial	FY 1995 12,055,019 5,310,676				6/30/99
14 15 16		12,055,019	15,528,795	13,399,066	13,385,689	6/30/99
13 14 15 16 17 18	Commercial Industrial	12,055,019 5,310,676 9,992,575	15,528,795 6,626,318 10,725,745	13,399,066 5,999,613 6,128,597	13,385,689 5,880,976	6/30/99 13,288,850 5,697,778
14 15 16 17 18	Commercial	12,055,019 5,310,676 9,992,575 1,452,735	15,528,795 6,626,318 10,725,745 1,772,287	13,399,066 5,999,613 6,128,597 1,537,439	13,385,689 5,880,976 3,414,638 1,552,003	6/30/99 13,288,850 5,697,778 2,891,547 1,506,096
14 15 16 17 18 19	Commercial Industrial Public Authority Unbilled	12,055,019 5,310,676 9,992,575 1,452,735 (55,705)	15,528,795 6,626,318 10,725,745 1,772,287 (24,136)	13,399,066 5,999,613 6,128,597 1,537,439 320,531	13,385,689 5,880,976 3,414,638 1,552,003 (222,854)	6/30/99 13,288,850 5,697,778 2,891,547 1,506,096 (69,466)
14 15 16 17 18 19 20	Commercial Industrial Public Authority	12,055,019 5,310,676 9,992,575 1,452,735	15,528,795 6,626,318 10,725,745 1,772,287	13,399,066 5,999,613 6,128,597 1,537,439	13,385,689 5,880,976 3,414,638 1,552,003	6/30/99 13,288,850 5,697,778 2,891,547 1,506,096
14 15 16 17 18 19 20 21	Commercial Industrial Public Authority Unbilled Total Sales Customers	12,055,019 5,310,676 9,992,575 1,452,735 (55,705) 28,755,299	15,528,795 6,626,318 10,725,745 1,772,287 (24,136) 34,629,009	13,399,066 5,999,613 6,128,597 1,537,439 320,531 27,385,246	13,385,689 5,880,976 3,414,638 1,552,003 (222,854) 24,010,452	6/30/99 13,288,850 5,697,778 2,891,547 1,506,096 (69,466) 23,314,804
14 15 16 17 18 19 20 21 22	Commercial Industrial Public Authority Unbilled	12,055,019 5,310,676 9,992,575 1,452,735 (55,705)	15,528,795 6,626,318 10,725,745 1,772,287 (24,136)	13,399,066 5,999,613 6,128,597 1,537,439 320,531	13,385,689 5,880,976 3,414,638 1,552,003 (222,854)	6/30/99 13,288,850 5,697,778 2,891,547 1,506,096 (69,466)
14 15 16 17	Commercial Industrial Public Authority Unbilled Total Sales Customers	12,055,019 5,310,676 9,992,575 1,452,735 (55,705) 28,755,299	15,528,795 6,626,318 10,725,745 1,772,287 (24,136) 34,629,009	13,399,066 5,999,613 6,128,597 1,537,439 320,531 27,385,246	13,385,689 5,880,976 3,414,638 1,552,003 (222,854) 24,010,452	6/30/99 13,288,850 5,697,778 2,891,547 1,506,096 (69,466) 23,314,804

PSC DR NO. 2 Sheet 2 of 2 DR Item 46 (b)

Western Kentucky Gas Company

Case No. 99-070

KPSC Data Request #2 Dated August 19, 1999

DR Item 46 (b) Witness: Smith

Source	(g)		3,701 NOAA, Composite	4,340 NOAA, Composite			Financial Statements	Financial Statements	Financial Statements		235,841 Financials, Avg Prior July&Aug	Financials, Avg Prior July&Aug	Financials, Avg Prior July&Aug		(Line 6-(Line10x12mo))/Line 2	(Line 7-(Line11x12mo))/Line 2	(Line 8-(Line12x12mo))/Line 2		1,529,668 Line 14x(Line 2-Line 3)	558,294 Line 15x(Line 2-Line 3)	161,468 Line 16x(Line 2-Line 3)	
12-mo Ending June 1999	(J)		3,701	4,340	,		11,689,716	5,139,484	1,344,628		235,841	158,827	34,119		2,394	874	253		1,529,668	558,294	161,468	2,249,429
FY 1998	(e)		4,013	4,340			12,338,322	5,604,480	1,461,600		184,980	184,273	29,347		2,521	846	276		824,513	276,496	90,403	1,191,412
FY 1997	(p)		4,315	4,340			13,657,999	5,977,762	1,531,144		252,184	183,850	37,051		2,464	874	252		61,598	21,851	6,295	89,744
FY 1996	(2)		4,748	4,340			12,338,322	5,604,480	1,461,600		199,187	185,787	32,318		2,479	841	268		810,621	275,015	87,498	1,173,134
FY 1995	(q)		3,665	4,340			13,657,999	5,977,762	1,531,144		170,506	195,496	33,701		2,691	842	261		67,277	21,042	6,528	94,846
Item	(a)	Weather Statistics	Degree-Days, Actual Calendar Month	Degree-Days, Normal		Weather Sensitive Volumes	Residential Sales (incl Unbilled)	Commercial Sales	Public Authority Sales		Residential Base Load per Month	Commercial Base Load per Month	Pub. Auth. Base Load per Month		Residential Heating Load/DD	Commercial Heating Load/DD	Pub. Auth. Heating Load/DD		Residential Adjustment - Volume	Commercial Adjustment - Volume	Pub. Auth. Adjustment - Volume	Total Volume Adjustment - Weather =
Line No.		1	7	ĸ	4	5	9	7	∞	6	10	11	12	13	14	15	16	17	18	19	20	21 T

Western Kentucky Gas Company Case No. 99-070 KPSC Data Request #2 Dated August 19, 1999 DR Item 47, a, c Witness: Gary Smith

Data Request:

Refer to Exhibits GLS-1 and GLS-7 in the Direct Testimony of Gary L. Smith.

- a. Explain the increase of \$84,884 in the negative revenue adjustment for "additional contract reformation" as shown on line 33 of the two exhibits. Provide any necessary calculations.
- c. Provide a breakdown, by customer, of the adjusted volumes of 13,332,103 Mcf and revenues of \$1,692,428 for "Total Special Contracts." This does not require identifying customers.

 Reference to Customer No. 1, No. 2, etc will suffice.

Response:

The response to part (c) of this request is filed under a petition for confidentiality due to the necessity of revealing the affected volume and/or discount level for purposes of these computations.

- a. The calculation is shown on Schedule DR-47(a) attached hereto.
- c. The calculation is shown on Schedule DR-47(c) attached hereto.

Western Kentucky Gas Company Case No. 99-070 KPSC Data Request #2 Dated August 19, 1999 DR Item 47 (a) Witness: Gary Smith

Response:

Western, on line 33 of Exhibit GLS-1, included an adjustment for "Additional Contract Reformations" of \$1,100,000 below those revenues calculated on lines 1-32, at <u>present</u> tariff rates. Included in this adjustment are six customers who utilized tariff service during the reference period - whose volumes appear in the applicable tariff margin category.

On line 33 of Exhibit GLS-7, the adjustment for "Additional Contract Reformations" required recalculation to state the level of discount below the revenues calculated on lines 1-32, at proposed tariff rates. The volumes for those six tariff customers, by margin block, is shown below. Also shown is the calculation of the additional \$84,884 discount, when comparing to proposed versus present tariff margin structures.

			Tarii	ff Margins per	Mcf	Change in Tariff
Line		Tariff Volumes	Present	Proposed	Change	Revenue Basis
<u>No.</u>		Affected		(Col d - Col e)	(Col b x Col e)
	(a)	(b)	(c)	(d)	(e)	(f)
1	Firm Service Volumes:					
2	(G-1, LVS-1, T-2/G-1, T-4)				
3	First 300 Mcf/month	18,000	1.0615	1.2000	0.1385	2,493
4	Next 14,700 Mcf/month	572,574	0.5585	0.6946	0.1361	77,927
5	Over 15,000 Mcf/month	69,302	0.4085	0.4299	0.0214	1,483
6						
7	Interruptible Service Volum	nes:				-
8	(G-2, LVS-2, T-2/G-2, T-3)				
9	First 15,000 Mcf/month	633,648	0.4936	0.5300	0.0364	23,065
10	Over 15,000 Mcf/month	1,487,695	0.3436	0.3301	(0.0135)	(20,084)
11						
12	Total					\$ 84,884

Western Kentucky Gas Company Summary of Revenue at Present Rates Test Year Ending 12/31/2000 Special Contracts - REDACTED COPY

							Forward-looki	Forward-looking Adjustments			
			Reference Period - Twelve Months Ending 9/30/98	iod - Twelve N	fonths Ending 9/.	86/08	To Te	st Year			
				Contract Adj.			Customer	Customer Conservation	Total		
Line			Volumes	Bills and	Weather Adj.	Total	Growth	& Efficiency	Test Year	Present	Present
No.	Description	Service Type	As Metered	Volumes	Volumes	Volumes	Forecast	Adjustments	Volumes	Margin	Revenue
	(a)	(9)	(3)	(p)	(J)	(3)	(8)	(þ)	(3)	9	(k)
1 SPECLA	SPECIAL CONTRACTS:										
7											
3											
•											

DR Item 47 (c) Schedule 2 of 2 CONFIDENTIAL

> Special Contracts - REDACTED COPY Western Kentucky Gas Company Summary of Revenue at Present Rates Test Year Ending 12/31/2000

			Contract Adj.	Contract Adj.			Customer Conserv	Conservation	Total		
Line				Bills and	Weather Adj.	Total	Growth	& Efficiency	Test Year	Present	Present
No.	Description	Service Type	As Metered	Volumes	Volumes	Volumes	Forecast	Adjustments	Volumes	Margin	Kevenue
	(a)	(9)	<u>ම</u>	€	€	ම	(8)	(u)	3	6	¥
1 SPECIAI	1 SPECIAL CONTRACTS:										
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									12 223 102	7	1 600 498
15 Special	Special Contracts Total		13,230,373	101,730		13,332,103	•		ı	#	1,1
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Western Kentucky Gas Company Case No. 99-070 KPSC Data Request #2 Dated August 19, 1999 DR Item 47-b Witness: Smith

Data Request:

Refer to Exhibits GLS-1 and GLS-7 in the Direct Testimony of Gary L. Smith.

b. Provide the calculations, along with a narrative explanation, showing how the gas cost revenues \$77,522,158 were derived.

Response:

b. The estimated monthly sales volumes were grossed-up for lost and unaccounted for gas as a starting point for gas supply requirements. The supply requirements were segregated into the various supply components (i.e. commodity purchases, storage injections and withdrawals and local production).

The demand charges were calculated based on current pipeline tariffs.

The resulting annual demand cost was distributed monthly based on the per unit demand cost (firm and interruptible) which was applied to the estimated sales volumes.

The commodity costs were calculated using NYMEX futures prices for the respective forward months as of 4/19/99. Pipeline variable commodity cost for the applicable pipelines was also included in the gas cost estimate.

The Attachment KPSC #2 DR 47 (b) pages 1-3 includes a Summary (page 1) and detailed pricing worksheets (pages 2 and 3) for the Gas Cost Revenue calculation.

January 1, 2000 - December 31, 2000 **Estimated Cost of Gas TEST PERIOD**

	Jan-00	Feb-00	Mar-00	Apr-00	May-00	Jun-00	<u>Jul-00</u>	Aug-00	Sep-00	Oct-00	Nov-00	Dec-00	Total
Source of Supply													
Commodity Purchases Local Production Purchases Storage (WI) Storage (IN)	2,075,314 41,000 2,375,100	1,547,752 38,000 2,053,200	1,697,351 40,000 1,000,500	2,408,177 40,000 - (902,000)	2,305,369 40,000 - (1,415,000)	2,158,049 35,000 - (1,624,000)	408,177 2,305,369 2,158,049 2,194,013 1,967,902 40,000 40,000 35,000 25,000 23,000 (902,000) (1,415,000) (1,624,000) (1,650,000) (1,432,000)	1,967,902 23,000 - (1,432,000)	1,711,308 22,000 - (1,066,000)	2,040,469 1,554,390 21,000 38,000 (611,000)	1,554,390 38,000 948,300	1,526,063 40,000 2,322,900	23,186,157 403,000 8,700,000 (8,700,000)
Total Supply Requirements	4,491,414	3,638,952	2,737,851	1,546,177	696,068	569,049	569,013	558,902	802'308	1,450,469	2,540,690	3,888,963	23,589,157
Supply Cost													
Demand Local Production Commodity Variable Pipeline Commodity Storage (WI) Storage (IN)	\$4,074,337 \$108,580 \$5,433,172 \$99,345 \$5,280,726 \$0	\$3,293,393 \$96,645 \$3,889,501 \$74,091 \$4,565,023 \$0	\$2,466,640 \$1,369 \$96,732 \$91, \$4,053,274 \$5,413 \$81,252 \$115 \$2,224,482 \$0 (\$2,027,	\$1,369,245 \$91,132 \$5,413,582 \$115,279 \$0 (\$2,027,696)	\$815,049 \$90,052 \$5,120,225 \$110,358 \$0 \$3,142,715) (\$486,183 \$79,146 \$4,814,607 \$103,306 \$3,623,144) (\$486,183 \$481,986 \$79,146 \$56,783 4,814,607 \$4,916,783 \$103,306 \$105,027 \$0 \$623,144) (\$3,697,650) (\$477,897 \$52,516 \$4,433,683 \$94,203 \$0 \$3,226,296)	640 \$1,369,245 \$815,049 \$486,183 \$481,986 \$477,897 \$577,583 \$1,286,477 32 \$91,132 \$90,052 \$79,146 \$56,783 \$52,516 \$50,409 \$48,621 274 \$5,413,582 \$5,120,225 \$4,814,607 \$4,916,783 \$4,433,683 \$3,869,267 \$4,662,472 252 \$116,279 \$110,358 \$103,306 \$105,027 \$94,203 \$81,920 \$97,677 482 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$3,122,256,296 \$3,142,715 \$3,623,144 \$3,697,650 \$3,226,296 \$2,410,226 \$1,396,135	\$1,286,477 \$2,289,415 \$48,621 \$92,959 \$4,662,472 \$3,755,406 \$97,677 \$74,409 \$0 \$2,173,475 \$1,396,135) \$0	\$1,286,477 \$2,289,415 \$48,621 \$92,959 \$4,662,472 \$3,755,406 \$97,677 \$74,409 \$0 \$2,173,475 \$1,396,135) \$0	\$3,520,542 \$103,452 \$3,900,617 \$73,053 \$5,324,017	21,138,747 967,027 54,262,589 1,109,920 19,567,723 (19,523,861)

Based on current pipeline demand cost Assumptions:

\$8,922,380 \$4,961,542 \$2,992,968 \$1,860,098 \$1,862,929 \$1,832,004 \$2,168,953 \$4,699,112 \$8,385,665 \$12,921,681 \$77,522,145

\$14,996,160 \$11,918,653

Total Supply Cost

Commodity prices based on NYMEX, on 4/19/99

L & U based on 1.9%

Storage injections and withdrawals estimated by supply plans Sales by calendar month

Total 21,262,176 1,322,526 585,938 646,584 23,817,224 429,109 23,013,811	1,200,000 3,700,000 3,800,000 8,700,000 1,200,000 3,700,000 3,800,000	8,700,000	23,186,157	\$0.04787	\$2.1755 \$18,926,729 \$2.2441 \$19,523,862		21,138,747		56,383,398
Dec-00 3,601,107 122,259 79,580 53,882 70,744 3,794,110 3,888,963	320,400 987,900 1,014,600 2,322,900	- 40,000	3,848,963	\$2.556 \$0.0303 \$0.6500 \$0.0950			\$3,520,542	2.4375 0.9440 \$3.3815	\$9,401,139
Nov-00 2,321,304 111,200 58,270 53,882 2,544,656 46,218 2,478,722 2,540,690	130,800 403,300 414,200 948,300	38,000	2,502,690	\$2.416 \$0.0303 \$0.6500 \$0.0950			\$2,289,415	2.3957 0.9440 \$3.3397	\$6,096,250
Oct-00 1,275,363 113,344 41,173 53,882 1,483,762 26,385 1,415,092 1,450,469	98,000 313,000 200,000	611,000	1,429,469	\$2.285 \$0.0303 \$0.6500 \$0.0950	\$2.260 \$1,380,860 \$1,396,135		\$1,286,477	2.3000 0.9440 \$3.2440	\$3,412,635
Sep-00 541,957 96,936 28,164 53,882 720,939 12,139 651,032	- 123,000 313,000 630,000	1,066,000	645,308	\$2.261 \$0.0303 \$0.6500 \$0.0950	\$2.234 \$2,381,444 \$2,410,226		\$577,583	2.2074 0.9440 \$3.1513	\$1,591,370
Aug-00 438,149 96,954 26,367 53,882 615,352 10,167 545,270	- 166,000 616,000 650,000	1,432,000	535,902	\$2.253 \$0.0303 \$0.6500 \$0.0950	\$2.227 \$3,189,064 \$3,226,296		\$477,897	2.2005 0.9440 \$3.1445	\$1,354,106
Jul-00 440,434 104,350 26,367 53,882 625,033 10,351 555,135	- 246,000 729,000 675,000	1,650,000	544,013	\$2.241 \$0.0303 \$0.6500 \$0.0950	\$2.217 \$3,658,050 \$3,697,650		\$481,986	2.2094 0.9440 \$3.1534	\$1,380,943
Jun-00 446,396 98,422 26,491 53,882 625,191 10,352 555,170 569,049	- 246,000 718,000 660,000	1,624,000	534,049	\$2.231 \$0.0303 \$0.6500 \$0.0950	\$2.203 \$3,577,672 \$3,623,144		\$486,183	2.1976 0.9440 \$3.1416	
May-00 788,001 102,752 32,066 53,882 976,701 16,924 907,677	- 173,000 657,000 585,000	1,415,000	890,369	\$2.221 \$0.0303 \$0.6500 \$0.0950	\$2.169 \$3,069,135 \$3,142,715		\$815,049	2.2299 0.9440 \$3.1739	\$2,177,929 _a 84, <u>3</u> 73,315
Vorksheet Apr-00 1,359,732 120,607 42,473 53,882 1,576,694 28,126 1,508,465 1,508,465	- 148,000 354,000 400,000	902,000	1,506,177	\$2.248 \$0.0303 \$0.6500 \$0.0950	\$1.852 \$1,670,504 \$2,027,696		\$1,369,245	2.2784 0.9440 \$3.2224	\$3,592,297
Test Period Worksheat Mar-00 Apr-00 2,505,140 1,359,73 116,130 42,47 53,882 53,88 2,735,962 1,576,69 49,804 1,508,46 2,737,851 1,546,17	138,000 425,500 437,000 1,000,500	40,000	2,697,851	\$2.388 \$0.0303 \$0.6500 \$0.0950			\$2,466,640	2.3596 0.9440 \$3.3036	\$6,455,740
Feb-00 3,365,652 118,349 75,491 53,882 3,613,374 66,196 3,550,197 3,638,952	283,200 873,200 896,800 2,053,200	- 38,000	3,600,952	\$2.513 \$0.0303 \$0.6500 \$0.0950			\$3,293,393	2.3870 0.9440 \$3.3310	\$8,625,260
Jan-00 4,178,941 12,1223 88,686 53,882 4,442,732 81,703 4,381,867	327,600 1,010,100 1,037,400 2,375,100	41,000	4,450,414	\$2.618 \$0.0303 \$0.6500 \$0.0950	_	21,138,747 0.26120312 0.94399037	\$4,074,337	2.4584 0.9440 \$3.4023	\$10,921,823
Firm Sales Int Sales T-2/G-1 T-2/G-2 Total Sales 0.019 L&U / Co Use Supply Req (Excl T-2) MMBtu	Storage Tenn Gas (WI) Texas Gas (WI) Co Owned (WI) Total (WI) Tenn Gas (IN) Texas Gas (IN) Co Owned (IN)	Total (IN) Quantity Local Production	Requirements excluding Prod.	Rates NYMEX PRICE TGT/MW/Trunk Var Tran TGP - GS Variable Tran TGP - G Variable Transp	Nates Calculating Stol age inventory Summer 1999 NYMEX Total Cost for Injections	Collection of Demand Charges Ann. Demand Charges N/C Charge - Int N/C Charge - Firm	Collection by Month> Commodity Gas Charge Firm	Commodity N/C Total (Not Ind Margin)	Collection of Commodity (only)

Weighted Storage Prices Tennessee Gas MMBtu

Variable	Cost Total					\$30,488	\$35,638	\$50,676	\$50,676	\$34,196	\$25,338	\$20,188		\$247,200
Variable	Cost FTGS					\$19,240	\$22,490	\$31,980	\$31,980	\$21,580	\$15,990	\$12,740		\$156,000 \$247,200
Variable	Cost FTG						\$13,148	\$18,696	\$18,696	\$12,616	\$9,348	\$7,448		\$91,200
TOTAL	1-GS (IN)					29600	34600	49200	49200	33200	24600	19600		240,000
TOTAL	FT - G (IN) FT - GS (IN) Cost FTG					118400	138400	196800	196800	132800	98400	78400		000'096
TOTAL	<u>-</u>	64080	65520	56640	27600	0	0	0	0	0	0	0	26160	240,000
TOTAL		256320	262080	226560	110400								104640	000,096
	(WI) FT - GS (IN) FT - G (WI)	0	0	0	0	29592	34608	49200	49200	33192	24600	19608	0	240,000
	FT-G(WI) FI	256320	262080	226560	110400	0	0	0	0	0	0	0	104640	960,000
	E Z	0	0	0	0	0.1233	0.1442	0.205	0.205	0.1383	0.1025	0.0817	0	-
	₹	0.267	0.273	0.236	0.115	0	0	0	0	0	0	0	0.109	~
1200000 960000 240000														
0.8	Z	•	•	ı	•	148,000	173,000	246,000	246,000	166,000	123,000	98,000	•	1,200,000
Total TGP FT - G FT - GS	×	320,400	327,600	283,200	138,000		•	•	•	•	•	•	130,800	1,200,000
		Dec	Jan	Feb	Mar	Apr	May	Jun,	בו	Aug	Sep	ot o	Nov	Total

Weighted Storage Prices Texas Gas & Company Owned

Z	754000 \$22,846	1242000 \$37,633	1378000 \$41,753	1404000 \$42,541	1266000 \$38,360	943000 \$28,573	513000 \$15,544	7500000 \$227 250	20000
WI 2002500 2047500 1770000 862500								817500	•
Dec Jan Feb Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov Total	3

Western Kentucky Gas Company Case No. 99-070 KPSC Data Request #2 Dated August 19, 1999 DR Item 48, a - b Witness: Gary Smith

Data Request:

Refer to Exhibits GLS-1, GLS-5, and GLS-7 of the Direct Testimony of Gary L. Smith.

- a. Exhibits GLS-1 and GLS-7 show 6,281 as the increased number of commercial bills related to the customer growth forecast. Exhibit GLS-5, which summarizes the customer growth forecast adjustment, includes 6,210 as the increased number of commercial bills. Identify which is the correct number.
- b. Provide the calculations, along with a narrative explanation, of how the Mcf volumes in Exhibit GLS-5 resulting from the customer growth forecast were derived for each customer class.

Response:

a. As explained below, Exhibits GLS-1 and GLS-7 require a revision to clarify this matter. These Exhibits are attached hereto.

Exhibits GLS-1 and GLS -7 inappropriately place the 6,281 bills in column (h), labeled "Customer Growth Forecast". This column should have read 6,210 to correlate to the increased number of commercial bills detailed on Exhibit GLS-5. Exhibits GLS-1 and GLS-7 should have included a net of increase of 81 Firm Service Customer charges in column (f), labeled "Contract Adjustment - Bills and Volumes". Please refer to Exhibit GLS-3, line 1, columns (e) and (i) which show a reduction of 119 commercial firm service bills and an increase of 190 industrial firm service bills, producing a net increase of 81 bills.

The billing units used to determine present and proposed revenues were correct in Exhibit GLS-1 and GLS-7 respectively. The present and proposed Firm Service Customer Charge, non-residential, was applied to 238,063 total billing units, the sum of 231,782 bills during the reference period (column (c), line 3) plus adjustments of 81 plus 6,200 bills described above.

Western Kentucky Gas Company Case No. 99-070 KPSC Data Request #2 Dated August 19, 1999 DR Item 48, a - b Witness: Gary Smith

b. On Exhibit GLS-5, the volume estimates attributable to customer were calculated in the following manner.

For Residential customers, the increased number of bills (column (a), line 1 of GLS-5) was divided by 12 months to determine the "annualized" net customer additions. Thus, net residential additions from the reference period to the forecasted test year are 45,900 bills divided by 12 months, equals 3,825 customer additions. The estimated average annual consumption for these additions was based on current, weather normalized average usage for the residential class, 86.15 mcf per year. Multiplying 3,825 customers times 86.15 mcf annually per customer, yields 329,524 mcf.

Similarly, for Commercial customers, the increased number of bills (column (e), line 1 of GLS-5) was divided by 12 months to determine the "annualized" net customer additions. Net commercial additions from the reference period to the forecasted test year are 6,210 bills divided by 12 months, equals 517.5 customer additions. The average annual consumption for these additions was based on 348.94 mcf per year. Multiplying 517.5 customers times 348.94 mcf annually per customer yields 180,576 mcf.

KPSC DR 2 - Item 48 (a)
EXHBIT GLS-1
Schedule 1 of 1
(REVISED)

Western Kentucky Gas Company Summary of Revenue at Present Rates Test Year Ending 12/31/2000

Forward-looking Adjustments

		Re	Reference Period - Twelve Months Ending 9/30/98	Twelve Months	Ending 9/30/98		To Test Year	st Year			
	•			Contract Adj.			Customer	Conservation	Total		
Line		Number	Volumes	Bills and	Weather Adj.	Total	Growth	& Efficiency	Test Year	Present	Present
No. Description	Block (Mcf)	of Bills, Units	As Metered	Volumes	Volumes	Volumes	Forecast	Adjustments	Volumes	Margin	Revenue
(a)	(9)	(9)	Ð	€	(e)	(8)	(F)	Θ	6	(X)	e
1 Sales	6	1 055 070					75 000			S 10	\$0 600 323
2 Fum Sales (G-1, LVS-1)	Customer Cang	731 787		7			6.210			13.60	3,237,657
U 4	0-300		18.553.788	(81.063)	1.079.624	19.552.349	481,208	(735,061)	19,298,496	1.0615	20,485,353
t v	301 - 15.000		2,498,766	(638,339)	85,954	1,946,381	28,892	(20,410)	1,954,863	0.5585	1,091,791
, 10	Over 15,000		8,819	` o	0	8,819	0	0	8,819	0.4085	3,603
7 Internotible Sales (G-2, LVS-2)	Customer Chrg	414		(16)						150.00	59,700
	0-15,000		1,406,428	(333,250)		1,073,178			1,073,178	0.4936	529,721
. 6	Over 15,000		376,956	(127,603)		249,353			249,353	0.3436	82,678
10 Overrun (T-4)	0 - 300		11,639	(11,639)		0			0	1.1677	0
	301 - 15,000		25,410	(25,410)		0			0	0.6144	0
12	Over 15,000		0	0		0			0	0.4494	0
13 Overrun (T-3)	0 - 15,000		141,016	(141,016)		0			0	0.5430	0
14	Over 15,000		0	0		0			0	0.3780	0
15 Transportation		٠			·						٠
16 Customer Charges (T2/G1)	Customer Chrg	Ξ								13.60	
17 Customer Charges (T2/G2,T4,T3)	Customer Chrg	1,392		27						150.00	212,850
18 Transp. Adm. Fee	Customer Chrg	1,468		367						45.00	82,575
19 Parked Volumes [2]	•		526,520							0.10	52,652
20 Alternate Receipt Point										!	:
21 Firm Transport (G-1)	0-300		30,455	252		30,707			30,707	1.0615	32,595
22	301 - 15,000		500,929	(24,009)		476,920			476,920	0.5585	266,360
23	Over 15,000		78,311	0		78,311			78,311	0.4085	31,990
24 Interruptible Transport (G-2)	0 - 15,000		786,564	(229,742)		556,822			556,822	0.4936	274,847
25	Over 15,000		148,134	(58,376)		89,758			89,758	0.3436	30,841
26 Firm Carriage (T-4)	0-300		168,705	104,683		273,388			273,388	1.0615	290,201
27	301 - 15,000		2,680,003	672,759		3,352,762			3,352,762	0.5585	1,872,518
28	Over 15,000		531,549	(310,532)		221,017			221,017	0.4085	90,285
29 Interruptible Carriage (T-3)	0 - 15,000		4,177,009	479,546		4,656,555			4,656,555	0.4936	2,298,476
30	Over 15,000		3,493,877	(860,790)		2,633,087			2,633,087	0.3436	904,729
31 Total Special Contracts [3]		156	13,230,373	101,730		13,332,103			13,332,103	1	1,692,428
32 Total Tariff		2,091,140	48,848,731	(1,482,799)	1,165,578	48,531,510	510,100	(755,471)	48,286,139		43,326,173
33 Additional Contract Reformations [4]											(1,100,000)
34 Other Revenue						,					755,000
35										•	
36 Total Revenue, excluding gas costs										₩	42,981,173
37											000
38 Gas Costs										¥	120,502,138
39 TOTAL REVENUE										•	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1

41 [1] Number of Bills included in G-1 Sales.
42 [2] Parked Volumes not included in Total Deliveries.
43 [3] Information on individual Special Contracts is condential.
44 [4] Discount from present tariff rates. Based on confidential information.

KPSC DR 2 - Item 48 (a)
EXHIBIT GLS-7
Schedule 1 of 1
(REVISED)

Summary of Revenue at Proposed Rates Test Year Ending 12/31/2000 Western Kentucky Gas Company

		R	Reference Period - Twelve Months Boding 9/30/98	Twelve Months	Ending 9/30/98		Forward-looki To Te	Forward-looking Adjustments To Test Year			
				Contract Adj.			Customer	ner Conservation	Total		
Line		Number	Volumes	Bills and	Weather Adj.	Total	Growth	& Efficiency	Test Year	Proposed	Proposed
No. Description	Block (Mcf)	of Bills, Units	As Metered	Volumes	Volumes	Volumes	Forecast	Adjustments	Volumes	Margin	Revenue
(a)	(g)	(9)	(p)	(£)	(9)	(B)	(b)	Θ	Ð	(k)	(3)
1 <u>Sales</u>	1	1 855 078					75 000			9	\$17 116 452
2 Fum Sacs (G-1, LVS-1)	Customer Chra	731 782		2			6.210			\$24.00	5.713.512
n 4	005-0		18 553 788	(8) (8)	1 079 624	19 552 349	481 208	(135 061)	19 298 496	1 2000	23,158,195
r vo	301 - 15.000		2.498.766	(638,339)	85.954	1.946.381	28.892	(20.410)	1.954.863	0.6946	1,357,848
ı v o	Over 15.000		8.819	0	0	8,819	0	0	8,819	0.4299	3,791
7 Interruptible Sales (G-2, LVS-2)	Customer Chrg	414		(16)					•	250.00	99,500
	0-15,000		1,406,428	(333,250)		1,073,178			1,073,178	0.5300	568,784
6	Over 15,000		376,956	(127,603)		249,353			249,353	0.3301	82,311
10 Overum (T-4)	0 - 300		11,639	(11,639)		0			0	1.3200	0
	301 - 15,000		25,410	(25,410)		0			0	0.7641	0
12	Over 15,000		0	0		0			0	0.4729	0
13 Overum (T-3)	0 - 15,000		141,016	(141,016)		0			0	0.5830	0
14	Over 15,000		0	0		0			0	0.3631	0
15 Transportation											
16 Customer Charges (T2/G1)	Customer Chrg	Ξ								24.00	
17 Customer Charges (T2/G2, T4, T3)	Customer Chrg	1,392		7.2						250.00	354,750
18 Transp. Adm Fee	Customer Chrg	1,468		367						20:00	91,750
19 Parked Volumes [2]			526,520							0.10	52,652
20 Alternate Receipt Point (T-5) [2]									100,000	0.10	10,000
21 Firm Transport (G-1)	0 - 300		30,455	252		30,707			30,707	1.2000	36,848
22	301 - 15,000		500,929	(24,009)		476,920			476,920	0.6946	331,269
23	Over 15,000		78,311	0		78,311			78,311	0.4299	33,666
24 Interruptible Transport (G-2)	0-15,000		786,564	(229,742)		556,822			556,822	0.5300	295,116
25	Over 15,000		148,134	(58,376)		89,758			89,758	0.3301	29,629
26 Firm Carriage (T-4)	0-300		168,705	104,683		273,388			273,388	1.2000	328,066
27	301 - 15,000		2,680,003	672,759		3,352,762			3,352,762	0.6946	2,328,828
28	Over 15,000		531,549	(310,532)		221,017			221,017	0.4299	95,015
29 Interruptible Carriage (T-3)	0 - 15,000		4,177,009	479,546		4,656,555			4,656,555	0.5300	2,467,974
30	Over 15,000		3,493,877	(860,790)		2,633,087			2,633,087	0.3301	869,182
31 Total Special Contracts [3]		156	13,230,373	101,730		13,332,103			13,332,103		1,692,428
32 Total Tariff		2,091,140	48,848,731	(1,482,799)	1,165,578	48,531,510	510,100	(755,471)	48,286,139	İ	57,117,566
33 Additional Contract Reformations [4]											(1,184,884)
34 Other Revenue											1,176,139
35										,	
36 Total Revenue, excluding gas costs										₩	57,108,821
37											77 522 158

38 Gas Costs 39 TOTAL REVENUE

41 [1] Number of Bills included in G-1 Sales.
42 [2] Parked Volumes and Alternate Receipt Point Volumes not included in Total Deliveries.
43 [3] Information on individual Special Contracts is condential.
44 [4] Discount from proposed tariff rates. Based on confidential information.

77,522,158 134,630,979