STATE OF MICHIGAN BEFORE THE MICHIGAN PUBLIC SERVICE COMMISSION

In the Matter of the Application of CONSUMERS ENERGY COMPANY) for Accounting and Ratemaking Approval of Depreciation Rates for Gas Utility Plant.

Case No. U-12999

EXHIBITS

OF

THOMAS L. SIMONSEN

Case No.

Exhibit

U-12999 A-__(TLS-1) 5 Pages

Witness T L Simonsen

Date

December 8, 2003

CONSUMERS ENERGY COMPANY

Depreciation Rates Calculated Using ELG and a Five-Year Average of Net Salvage by Function

Case No. U-12999 Exhibit A-___ (TLS-1) Page 1 of 5 Witness: TLSimonsen Date: December 2003

CONSUMERS ENERGY COMPANY

Gas Utility Depreciation Study, Case U-12999
Comparison of Depreciation Rates Using ELG
Net Salvage Calculated Using a Five Year Average by Function
Based on December 31, 2002 Plant Balances

A4		12/31/2002	Eviction	g Depr. Rates	5.	'r Average	Difference 5 Yr Average vs
Acct No.	Description	Balance	Rates	Annual Accrual	Rates	Annual Accrual	Existing
		Dalatio		7,000,000,000,000			
	rage Plant:			00 700	4 000/	47 574	(F. 450)
350.2	Rights of Way	1,321,117	1.72%	22,723	1.33%	17,571	(5,152)
351.2	Compressor Station Structures	7,676,757	2.34%	179,636	2.65%	203,434 144	23,798 64
351.2	M & R Station Structures	4,607	1.73%	80	3.12%		
351.4	Other Structures	3,337,803	2.87%	95,795	2.89%	96,463	668
352.1	Leaseholds & Rights	5,336,673	1.72%	91,791	1.31%	69,910	(21,881)
352.3	Well Construction	32,974,906	1.74%	573,763	3.78%	1,246,451	672,688
352.4	Well Equipment	16,388,907	4.08%	668,667	3.90%	639,167	(29,500)
353.0	Lines	22,020,894	2.88%	634,202	4.21%	927,080	292,878
354.0	Compressor Station Equipment	78,065,202	2.65%	2,068,728	3.27%	2,552,732	484,004
355.0	M & R Station Equipment	2,083,799	2.84%	59,180	3.07%	63,973	4,793
356.0	Purification Equipment	13,376,874	3.04%	406,657	3.98%	532,400	125,743
357.0	Other Equipment	3,153,829	4.05%	127,730	4.15%	130,884	3,154
	Subtotal U.G. Storage Plant	185,741,368	2.65%	4,928,952	3.49%	6,480,209	1,551,257
	ssion Plant:			400.040	1.17%	182,801	(7,812)
365.2	Rights of Way	15,624,024	1.22%	190,613	1.17%	137,867	(56,354)
366.0	Structures & Improvements	10,063,270	1.93%	194,221		2,974,504	110,166
367.0	Mains	183,611,384	1.56%	2,864,338	1.62%	402,940	(301,330)
368.0	Compressor Station Equipment	35,038,304	2.01%	704,270	1.15%	450,000	(21,316)
369.0	Measuring & Regulating Equipment	23,684,196	1.99%	471,316	1.90%	308,478	(147,039)
370.0	Communication	7,579,322	6.01%	455,517	4.07% 2.79%	96,122	(28,596)
371.0	Other Equipment	3,445,240	3.62%	124,718			
	Subtotal Transmission Plant	279,045,740	1.79%	5,004,993	1.63%	4,552,712	(452,281)
	ion Plant:			407 400	0.059/	cc 422	(41,066)
374.2	Rights of Way	6,960,315	1.54%	107,189	0.95%	66,123	
375.0	Structures & Improvements	4,242,886	1.98%	84,009	0.85%	36,065	(47,944)
376.1	Mains - bare steel	4,327,468	3.46%	149,730	2.69%	116,409	(33,321)
376.2	Mains - coated & wrapped steel	350,910,853	3.16%	11,088,783	2.92%	10,246,597 295,743	(842,186) (69,256)
376.3	Mains - cast iron	9,358,954	3.90%	364,999	3.16%	295,743	96
376.4	Mains - copper	16,968	3.05%	518	3.62%		649,710
376.5	Mains - plastic	541,424,815	3.72%	20,141,003	3.84%	20,790,713	·
378.0	Measuring & Regulating Equipment	32,498,407	2.75%	893,706	2.22%	721,465	(172,241)
380.1	Services - bare steel	224,035	10.29%	23,053	6.81%	15,257	(7,796)
380.2	Services - coated & wrapped steel	72,006,386	6.49%	4,673,214	5.79%	4,169,170	(504,044)
380.4	Services - copper	27,245,781	9.29%	2,531,133	6.07%	1,653,819	(877,314)
380.5	Services - plastic	392,981,530	9.61%	37,765,525	8.63%	33,914,306	(3,851,219)
380.5	Services - Risers (Formerly in C&W)	109,424,669	6.49%	7,101,661	8.63%	9,443,349	2,341,688
381.0	Meters	174,926,601	2.82%	4,932,930	0.84%	1,469,383	(3,463,547)
382.0	Meter Installations	151,913,431	3.68% 2.38%	5,590,414 438,283	3.60% 1.10%	5,468,884 202,568	(121,530) (235,715)
383.0	House Regulators Subtotal Distribution Plant	1,896,878,347	5.05%	95,886,150	4.67%	88.610.465	(7,275,685)
0		1,000,010,041	0.0070	30,000,100			
General 389.2	Plant: Rights of Way	1,516	0.00%	0	2.86%	43	43
	Structures & Improvements	23.627.456	2.97%	701,735	1.39%	328,422	(373,313)
390.0	Office Furniture & Equipment	1,717,346	7.61%	130,690	16.62%	285,423	154,733
391.0	• •	7,356,574	9.37%	689,311	4.06%	298,677	(390,634)
391.2	Computer Equipment	53,713	30.18%	16,211	10.60%	5,694	(10,517)
393.0	Stores Equipment	4,900,533	4.49%	220,034	8.52%	417,525	197,491
394.0	Tools, Shop & Garage Equipment		2.26%	22,737	16.91%	170,124	147,387
395.0	Laboratory Equipment	1,006,056 119,819	8.72%	10,448	22.32%	26,744	16,296
396.0	Power Operated Equipment		4.51%	369,593	11.34%	929,310	559,717
397.0 398.0	Communication Equipment Miscellaneous Equipment	8,194,971 260,787	5.77%	15,047	17.17%	44,777	29,730
550.0	Subtotal General Plant	47,238,771	4.61%	2,175,806	5.31%	2,506,739	330,933
	Total Gas Utility Plant	2,408,904,226	4.48%	107,995,901	4,24%	102,150,125	(5,845,776)
	iolai Gas Ginty Flam	2,700,007,220			-,,,		

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CONSUMERS ENERGY COMPANY
Gas Utility Depreciation Study, Case U-12999
Net Salvage Calculated Using a Five Year Average by Function
Comparison of Depreciation Rates Using ELG

Rate	%	à	7.35%	2.65%	3.12%	2.89%	1.31%	3.78%	3.90%	4.21%	3.27%	3.07%	3.98%	4.15%	3.49%	1.17%	1 37%	462%	1 15%	200	1.80%	4.U.7%	2.79%	1.63%		0.95%	0.85%	2.69%	2.92%	3.16%	3.62%	3.84%	2.22%	6.81%	5.79%	6.07%	8.63%	0.84%	3.60%	1.10%	4.67%
Annual Amount	€9	6 6 7	059,71	203,722	44	96,375	69,692	1,246,075	639,919	927,470	2,554,228	63,952	532,266	130,931	6,482,402	182,484	137 757	2 070 673	402 514	1 10 07 4	200,000	308,383	96,205	4,547,970	;	66,105	35,955	116,429	10,239,868	295,636	614	20,776,684	720,527	15,254	4,170,570	1,654,952	43,372,727	1,466,939	5,475,594	201,886	88,609,740
Amount to Recover	s	, , , , , , , , , , , , , , , , , , ,	256,842	4,671,334	1,458	2,412,258	2,286,601	38,528,631	16,023,563	39,621,514	55,554,449	1,230,433	11,720,508	2,346,276	174,953,968	8.936.223	S OUR RES	130,000,002	7 531 046	240, 50, 1	15,406,395	2,405,391	1,619,127	173,814,937		3,349,523	920,446	2,854,827	429,972,042	4,744,962	14,909	923,939,145	19,526,269	275,334	105,348,609	40,149,144	1,047,451,363	34,531,744	185,129,846	6,014,181	2,804,222,344
Allocated Book Res.	€	•	764,175	3,466,028	3,426	1,860,130	3,050,072	18,517,956	12,329,246	13,228,632	35,781,837	1,311,801	5,401,891	1,154,474	96,869,668	6 687 801	E 255 573	0.00,000,0	30,442,432	1 40, 100, 12	9,698,853	5,249,724	1,860,565	155,052,709		3,610,792	4,043,731	6,016,482	289,395,207	14,440,894	19,876	185,981,726	21,096,739	325,080	87,628,506	32,869,549	298,997,250	140,394,857	82,237,792	13,137,677	1,180,196,157
Theoretical Rsv w/NS	s,		649,023	3,978,788	3,933	2,135,315	2,590,462	21,257,482	14,153,222	15,185,662	41,075,363	1,505,868	6,201,041	1,325,266	110,061,424	4 616 075	2 677 697	3,027,367	00,347,203	086,122,81	6,694,373	3,623,481	1,284,205	107,020,975		1,833,377	2,053,202	3,054,865	146,940,216	7,332,354	10,092	94,432,093	10,711,855	165,059	44,493,313	16,689,491	151,815,647	71,285,392	41,756,182	6,670,646	599,243,784
Theoretical Reserve W/O NS	မာ	,	649,023	3,753,574	3,710	1,668,215	2,590,462	12,287,562	8,181,053	6,327,359	35,107,148	1,234,318	4,844,563	1,193,933	77,840,920	4 616 075	0 0 0 0 0 0	2,020,020	00,177,70	19,722,00	6,690,359	3,623,119	1,284,077	106,837,617		1,833,377	2,049,717	3,023,122	145,413,376	7,256,164	9,987	93,450,859	10,685,142	162,332	43,758,176	16,413,740	149,307,285	71,285,392	41,441,229	6,667,979	592,757,877
Net Salvage	%	į	%	% \$P	% 9-	-28%	%0	-73%	-73%	-140%	-17%	-22%	-28%	-11%		760	2 6	2.7-	%07-	%1-	%9-	-1%	-1%			%	-17%	-105%	-105%	-105%	-105%	-105%	-55%	-168%	-168%	-168%	-168%	%0	-76%	-4%	
Remaining Life	Yrs		31.59	22.93	10.14	25.03	32.81	30.92	25.04	42.72	21.75	19.24	22.02	17.92		78 O7		30.30	44.7	18.71	34.24	7.80	16.83			50.67	25.60	24.52	41.99	16.05	24.28	44.47	27.10	18.05	25.26	24.26	24.15	23.54	33.81	29.79	
Curve		;	S25	82	83	%	SS	%	R2.5	SS	82	R2.5	88	83		õ	2 8	2 8	2 2	ř.	22	\$	2			83	S	22	2	SS	82	82	F0.5	2	R0.5	5	81.5	83	R2.5	2	
ASL	yrs		65.0	42.0	45.0	20.0	65.0	50.0	50.0	65.0	40.0	45.0	35.0	30.0		7	9 6	0.00). O. 6	40.0	55.0	15.0	30.0			75.0	50.0	70.0	75.0	65.0	0.09	60.0	50.0	42.0	56.0	53.0	40.0	42.0	52.0	55.0	
12/31/2002 Balance	\$		1,321,117	7,676,757	4,607	3,337,803	5,336,673	32,974,906	16,388,907	22,020,894	78,065,202	2,083,799	13,376,874	3,153,829	185,741,368	45 604 004	120,120,01	10,063,270	183,611,384	35,038,304	23,684,196	7,579,322	3,445,240	279,045,740		6,960,315	4.242.886	4,327,468	350,910,853	9,358,954	16,968	541,424,815	32,498,407	224,035	72,006,386	27.245.781	502,406,199	174 926 601	151,913,431	18,415,248	1,896,878,347
Description		age Plant:	Rights of Way	Compressor Station Structures	M & R Station Structures	Other Structures	Leaseholds & Rights	Well Construction	Well Equipment	Lines	Compressor Station Equipment	M & R Station Equipment	Purification Equipment	Other Equipment	Subtotal U.G. Storage Plant	Transmission Plant:	Nights of way	Structures & Improvements	Mains	Compressor Station Equipment	Measuring & Regulating Equipment	Communication	Other Equipment	Subtotal Transmission Plant	ın Plant:	Rights of Wav	Structures & Improvements	Mains - bare steel	Mains - coated & wrapped steel	Mains - cast iron	Mains - copper	Mains - plastic	Measuring & Regulating Equipment	Services - bare steel	Services - coated & wrapped steel	Services - copper	Services - plastic	Maters	Mater Installations	House Regulators	Subtotal Distribution Plant
Act No.		U.G. Storage Plant:	350.2	351.2	351.2	351.4	352.1	352.3	352.4	353.0	354.0	355.0	356.0	357.0		Transmiss	2.000	366.0	367.0	368.0	369.0	370.0	371.0		Distribution Plant:	374.2	375.0	376.1	376.2	376.3	376.4	376.5	378,0	380.1	380.2	380.4	380.5	281.0	382.0	383.0	

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CONSUMERS ENERGY COMPANY

Rate	%	2.86%	4 30%	0,00.1	16.62%	4.06%	10.60%	8.52%	16.91%	22 32%	70.07	11.34%	17.17%	5.31%	4.24%
Annual Amount	ю	43	378 348	250,510	285,370	298,643	5,691	417,471	170,150	26 747	1 1 1 1 1 1 1	928,852	44,773	2,506,088	102,146,200
Amount to Recover	⇔	1 584	307 070 0	9,010,400	1,869,173	1,182,627	60,042	5,335,279	1.140,002	130 086	000,661	8,908,650	295,947	27,942,796	3,180,934,045
Allocated Book Res.	Ø	84	010070	14,040,070	(151,827)	6,173,947	(6,329)	(434,746)	(133,946)	(10 367)	(18,201)	(713,679)	(35, 160)	19,319,603	1,451,438,136
Theoretical Rsv w/NS	1	787	677 666 67	10,330,440	1,016,608	3,834,516	26,903	1,848,080	569 397	700	108,18	3,033,808	149,464	20,891,404	837,217,587
Theoretical Reserve W/O NS	es es	2007	107	10,320,120	1,016,608	3,834,516	26.903	1.848.080	569 397	100,000	108,18	3,033,808	149,464	20,881,084	798,317,498
Net Salvade		ò	8 2	-10%	%	%0	%0	8	8	8 6	%	%	%0		
Remaining Life	Yrs	9	30.43	27.45	6.55	3.96	10.55	12.7B	27.0	0.0	5.20	9.59	6.61		
Curve		â	ž	83	S	S	Ç,	S	a c	y .	5	g	g		
Š	yrs	e t	30.C	50.0	15.0	7.0	20.0	2 6	, t	0.0	10.0	15.0	15.0		
12/31/2002 Balance	€	,	brc,r	23,627,456	1,717,346	7 356 574	53 713	4 900 533	900,000,4	960,800,1	119,819	8,194,971	260,787	47,238,771	2,408,904,226
Description		Plant:	Rights of Way		Office Furniture & Fauinment						Power Operated Equipment		_	Subtotal General Plant	Total Gas Utility Plant
Acct No.	2	General Plant:	389.2	390.0	3910	30.70	7.00	2000	0.44.0	382.0	396.0	397.0	398.0		

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Witness: TLSimonsen Date: December 2003

CONSUMERS ENERGY COMPANY

Gas Utility Depreciation Study, Case U-12999 Net Salvage Calculated Using a Five Year Average by Function Calculation of Depreciation Rates

						New
Acct		12/31/2002	Net	Total Net	Net Salvage at	Net
No.	Description	Balance	Salvage	Salvage	Function Rate	Salvage
		\$	%	\$	\$	%
	und Storage Plant:	4.004.44	201		-46.17%	00/
350.2	Rights of Way	1,321,117	0%	(000.000)	(400.005)	0%
351.2	Compressor Station Structures	7,676,757	-5%	(383,838)	(429,625)	-6%
351.2	M & R Station Structures	4,607	-5%	(230)	(257)	-6%
351.4	Other Structures	3,337,803	-25%	(834,451)	(933,991)	-28% 0%
352.1	Leaseholds & Rights	5,336,673	0% 65%	(21,433,689)	(22 000 474)	-73%
352.3	Well Construction	32,974,906	-65%		(23,990,474)	-73% -73%
352.4	Well Equipment	16,388,907	-65% -125%	(10,652,790) (27,526,118)	(11,923,542) (30,809,658)	-/3% -140%
353.0	Lines	22,020,894 78,065,202	-125% -15%	(27,526,116)	(13,106,618)	-140%
354.0	Compressor Station Equipment		-20%	(416,760)	(466,475)	-22%
355.0	M & R Station Equipment	2,083,799 13,376,874	-20 <i>%</i> -25%	(3,344,219)	(3,743,145)	-28%
356.0	Purification Equipment		-23 <i>%</i> -10%	(315,383)	(353,004)	-11%
357.0	Other Equipment	3,153,829	-1076	(515,505)	(333,004)	-1170
	Subtotal	185,741,368		(76,617,258)	(85,756,789)	
	ssion Plant:				-17.80%	
365.2	Rights of Way	15,624,024	0%		-	0%
366.0	Structures & Improvements	10,063,270	-10%	(1,006,327)	(208,330)	-2%
367.0	Mains	183,611,384	-125%	(229,514,230)	(47,514,083)	-26%
368.0	Compressor Station Equipment	35,038,304	-5%	(1,751,915)	(362,682)	-1%
369.0	Measuring & Regulating Equipment	23,684,196	-30%	(7,105,259)	(1,470,932)	-6%
370.0	Communication	7,579,322	-5%	(378,966)	(78,454)	-1%
371.0	Other Equipment	3,445,240	-5%	(172,262)	(35,662)	-1%
	Subtotal	279,045,740		(239,928,959)	(49,670,143)	
Distributi	on Plant:				-110.16%	
374.2	Rights of Way	6,960,315	0%	-	-	0%
375.0	Structures & Improvements	4,242,886	-20%	(848,577)	(713,684)	-17%
376.1	Mains - bare steel	4,327,468	-125%	(5,409,335)	(4,549,448)	-105%
376.2	Mains - coated & wrapped steel	350,910,853	-125%	(438,638,566)	(368,911,063)	-105%
376.3	Mains - cast iron	9,358,954	-125%	(11,698,693)	(9,839,028)	-105%
376.4	Mains - copper	16,968	-125%	(21,210)	(17,838)	-105%
376.5	Mains - plastic	541,424,815	-125%	(676,781,019)	(569,197,568)	-105%
378.0	Measuring & Regulating Equipment	32,498,407	-30%	(9,749,522)	(8,199,704)	-25%
380.1	Services - bare steel	224,035	-200%	(448,070)	(376,843)	-168%
380.2	Services - coated & wrapped steel	72,006,386	-200%	(144,012,772)	(121,120,004)	-168%
380.4	Services - copper	27,245,781	-200%	(54,491,562)	(45,829,395)	-168%
380.5	Services - plastic	502,406,199	-200%	(1,004,812,398)	(845,083,944)	-168%
381.0	Meters	174,926,601	0%	(406 700 000)	(444,000,072)	0% -76%
382.0	Meter Installations	151,913,431	-90% -5%	(136,722,088) (920,762)	(114,988,272)	-70% -4%
383.0	House Regulators	18,415,248	-5%		(774,394)	-4 70
	Subtotal	1,896,878,347	-	(2,484,554,574)	(2,089,601,185)	
	ssion Plant:				-10.13%	00/
389.2	Rights of Way	1,516	0%	·- ^^ ~	(0.000.40)	0%
390.0	Structures & Improvements	23,627,456	-30%	(7,088,237)	(2,393,461)	-10%
391.0	Office Furniture & Equipment	1,717,346	0%	-	-	0%
391.2	Computer Equipment	7,356,574	0%	-	-	0%
393.0	Stores Equipment	53,713	0%	-	-	0%
394.0	Tools, Shop & Garage Equipment	4,900,533	0%	-	-	0%
395.0	Laboratory Equipment	1,006,056	0%	-	-	0%
396.0	Power Operated Equipment	119,819	0%		-	0%
397.0	Communication Equipment	8,194,971	0%	•	-	0% 0%
398.0	Miscellaneous Equipment	260,787	_ 0%			•
	Subtotal	47,238,771		(7,088,237)	(2,393,461)	
	Total Gas Utility Plant	2,408,904,226	=	(2,808,189,028)	(2,227,421,578)	:

Calculation of new net salvage by multiplying functional composite net salvage factor by functional subtotals of plant (2,227,421,580)

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Exhibit A-___ (TLS-1)
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Witness: TLSimonsen
Date: December 2003

CONSUMERS ENERGY COMPANY
Gas Utility Depreciation Study, Case U-12999
Historical Net Salvage, Per Page 219 of the MPSC Form P-522

									Five Ye	Five Year Rolling Average	e.
	Plant	Removal	Gross	Net	Net	Removal	Gross	Net	Plant	Net	Set
Year	Retired	Cost	Salvage	Salvage	Charges	Cost	Salvage	Salvage	Retired	Salvage	Salvage
Ϋ́r.	es es	49	es	89	₩	%	%	%	()	€9	%
Undergroun	Underground Storage Plant:										
1998	1,200,306	408,705	34,366	(374,338)	1,574,644	34.05%	2.86%	-31.19%	240,061	(74,868)	-31.19%
1999	1,411,817	464,772	•	(464,772)	1,876,590	32.92%	0.00%	-32.92%	522,425	(167,822)	-32.12%
2000	762,833	255,925	19,071	(236,855)	889,666	33.55%	2.50%	-31.05%	674,991	(215,193)	-31.88%
2001	8,000	236,979	•	(236,979)	244,979	2962.24%	0.00%	-2962.24%	676,591	(262,589)	-38.81%
2002	81,315	283,506	(2,948)	(286,455)	367,769	348.65%	-3.63%	-352.28%	692,854	(319,880)	-46.17%
Transmission Plant	in Plant:										
1998	104,082	306,208	141,198	(165,010)	269,092	294.20%	135.66%	-158.54%	20,816	(33,002)	-158.54%
1999	3,229,241	96,448	11,474	(84,974)	3,314,214	2.99%	0.36%	-2.63%	666,664	(49,997)	-7.50%
2000	2,309,063	435,195	7,673	(427,522)	2,736,585	18.85%	0.33%	-18.51%	1,128,477	(135,501)	-12.01%
2001	237,292	324,098	3,950	(320,148)	557,441	136.58%	1.66%	-134.92%	1,175,936	(189,531)	-16.97%
2002	772,135	192,552	6,197	(186,355)	958,490	24.94%	0.80%	-24.14%	1,330,363	(236,802)	-17.80%
Distribution Plant:	Plant:										
1998	3,143,570	8,225,168	11,497	(8,213,671)	11,357,241	261.65%	0.37%	-261.28%	628,714	(1,642,734)	-261.28%
1999	3,646,109	8,775,542	10,843	(8,764,699)	12,410,808	240.68%	0.30%	-240.38%	1,357,936	(3,395,674)	-250.06%
2000	16,192,942	7,684,326	1,100	(7,683,226)	23,876,169	47.45%	0.01%	-47.45%	4,596,524	(4,932,319)	-107.31%
2001	5,757,047	6,793,204	624	(6,792,580)	12,549,626	118.00%	0.01%	-117.99%	5,747,934	(6,290,835)	-109.45%
2002	5,356,298	6,238,477	131,322	(6,107,155)	11,463,454	116.47%	2.45%	-114.02%	6,819,193	(7,512,266)	-110.16%
General Structures:	uctures:										
1998	154,945	444,243	19,702	(424,541)	579,487	286.71%	12.72%	-273.99%	30,989	(84,908)	-273.99%
1999	667,633	67,385	68,487	1,103	666,530	10.09%	10.26%	0.17%	164,516	(84,688)	-51.48%
2000	2,860,286	30,524	76,974	46,450	2,813,836	1.07%	2.69%	1.62%	736,573	(75,398)	-10.24%
2001	801,022	20,103	•	(20,103)	821,124	2.51%	0.00%	-2.51%	896,777	(79,418)	-8.86%
2002	•	57,026		(57,026)	57,026	0.00%	0.00%	0.00%	896,777	(90,823)	-10.13%
NG Product	NG Production UOP, Transmission UOP and	ission UOP and	General Plant	Amortization [No	General Plant Amortization [Not used in study]:						
1000	2 445 451	200									

50,000	•	4,110	157,770	24,621		256,763	90,805	108,927	162,344	159,192
60,883	26,669	145,796	12,938	19,200		9,445,207	9,430,816	8,551,766	7,387,322	6,790,762
2,445,451	29,234	•	6,265,060	1,438,794	i.t	7,048,354	8,984,035	22, 125, 125	13,068,421	7,648,542
1998	1999	2000	2001	2002	Total by Year	1998	1999	2000	2001	2002

Case No. Exhibit U-12999

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3 Pages
T L Simonsen Witness Date December 8, 2003

CONSUMERS ENERGY COMPANY

Depreciation Rates Calculated Using ALG and a Five-Year Average of Net Salvage by Function

Case No. U-12999 Exhibit A-___ (TLS-2) Page 1 of 3

Witness: TLSimonsen Date: December 2003

CONSUMERS ENERGY COMPANY
Gas Utility Depreciation Study, Case U-12999
Comparison of Depreciation Rates Using ALG
Net Salvage Calculated Using a Five Year Average by Function
Based on December 31, 2002 Plant Balances

							Difference
Acct		12/31/2002	Existin	g Depr. Rates	5 \	r Average	5 Yr Average vs
No.	Description	Balance	Rates	Annual Accrual	Rates	Annual Accrual	Existing

	rage Plant:	4 204 447	4 700/	22.722	1.16%	15,325	(7,398)
350.2	Rights of Way	1,321,117	1.72%	22,723		-	9,980
351.2	Compressor Station Structures	7,676,757	2.34%	179,636 80	2.47% 2.78%	189,616 128	9,980 48
351.2	M & R Station Structures	4,607	1.73%				(6,008)
351.4	Other Structures	3,337,803	2.87%	95,795	2.69%	89,787	*
352.1	Leaseholds & Rights	5,336,673	1.72%	91,791	1.16%	61,905	(29,886) 603,441
352.3	Well Construction	32,974,906	1.74%	573,763	3.57%	1,177,204	·
352.4	Well Equipment	16,388,907	4.08%	668,667	3.62%	593,278	(75,389)
353.0	Lines	22,020,894	2.88%	634,202	3.76%	827,986	193,784
354.0	Compressor Station Equipment	78,065,202	2.65%	2,068,728	3.04%	2,373,182	304,454
355.0	M & R Station Equipment	2,083,799	2.84%	59,180	2.89%	60,222	1,042
356.0	Purification Equipment	13,376,874	3.04%	406,657	3.77%	504,308	97,651
357.0	Other Equipment	3,153,829	4.05%	127,730	3.81%	120,161	(7,569)
	Subtotal U.G. Storage Plant	185,741,368	2.65%	4,928,952	3.24%	6,013,102	1,084,150
Transmis	ssion Plant:						
365.2	Rights of Way	15,624,024	1.22%	190,613	1.05%	164,052	(26,561)
366.0	Structures & Improvements	10,063,270	1.93%	194,221	1.23%	123,778	(70,443)
367.0	Mains	183,611,384	1.56%	2,864,338	1.45%	2,662,365	(201,973)
368.0	Compressor Station Equipment	35,038,304	2.01%	704,270	0.88%	308,337	(395,933)
369.0	Measuring & Regulating Equipment	23,684,196	1.99%	471,316	1.64%	388,421	(82,895)
370.0	Communication	7,579,322	6.01%	455,517	3.48%	263,760	(191,757)
370.0	Other Equipment	3,445,240	3.62%	124,718	2.53%	87,165	(37,553)
37 1.0			1.79%	5,004,993	1.43%	3,997,878	(1,007,115)
	Subtotal Transmission Plant	279,045,740	1.7970	5,004,893	1.4376	3,991,010	(1,007,110)
Distribut	ion Plant:						
374.2	Rights of Way	6,960,315	1.54%	107,189	0.77%	53,594	(53,595)
375.0	Structures & Improvements	4,242,886	1.98%	84,009	0.67%	28,427	(55,582)
376.1	Mains - bare steel	4,327,468	3.46%	149,730	2.08%	90,011	(59,719)
376.2	Mains - coated & wrapped steel	350,910,853	3.16%	11,088,783	2.45%	8,597,316	(2,491,467)
376.3	Mains - cast iron	9,358,954	3.90%	364,999	1.67%	156,295	(208,704)
376.4	Mains - copper	16,968	3.05%	518	2.61%	443	(75)
376.5	Mains - plastic	541,424,815	3.72%	20,141,003	3.31%	17,921,161	(2,219,842)
378.0	Measuring & Regulating Equipment	32,498,407	2.75%	893,706	1.93%	627,219	(266,487)
380.1	Services - bare steel	224,035	10.29%	23,053	6.99%	15,660	(7,393)
380.2	Services - coated & wrapped steel	72,006,386	6.49%	4,673,214	5.12%	3,686,727	(986,487)
380.4	Services - copper	27,245,781	9.29%	2,531,133	5.49%	1,495,793	(1,035,340)
380.5	Services - plastic	392,981,530	9.61%	37,765,525	6.89%	27,076,427	(10,689,098)
380.5	Services - Risers (Formerly in C&W)	109,424,669	6.49%	7,101,661	6.89%	7,539,360	437,699
381.0	Meters	174,926,601	2.82%	4,932,930	0.50%	874,633	(4,058,297)
382.0	Meter Installations	151,913,431	3.68%	5,590,414	3.01%	4,572,594	(1,017,820)
383.0	House Regulators	18,415,248	2.38%	438,283	0.99%	182,311	(255,972)
	Subtotal Distribution Plant	1,896,878,347	5.05%	95,886,150	3.84%	72,917,971	(22,968,179)
General	Plant:						
389.2	Rights of Way	1,516	0.00%	0	2.50%	38	38
390.0	Structures & Improvements	23,627,456	2.97%	701,735	1.27%	300,069	(401,666)
391.0	Office Furniture & Equipment	1,717,346	7.61%	130,690	17.78%	305,344	174,654
391.2	Computer Equipment	7,356,574	9.37%	689,311	4.80%	353,116	(336,195)
393.0	Stores Equipment	53,713	30.18%	16,211	11.20%	6,016	(10,195)
394.0	Tools, Shop & Garage Equipment	4,900,533	4.49%	220,034	8.74%	428,307	208,273
395.0	Laboratory Equipment .	1,006,056	2.26%	22,737	17.41%	175,154	152,417
396.0	Power Operated Equipment	119,819	8.72%	10,448	28.38%	34,005	23,557
397.0	Communication Equipment	8,194,971	4.51%	369,593	11.50%	942,422	572,829
398.0	Miscellaneous Equipment	260,787	5.77%	15,047	17.73%	46,238	31,191
	Subtotal General Plant	47,238,771	4.61%	2,175,806	5.48%	2,590,709	414,903
	Total Gas Utility Plant	2,408,904,226	4.48%	107,995,901	3.55%	85,519,660	(22,476,241)

Case No. U-12999
Exhibit A-__ (TLS-2)
Page 2 of 3
Witness: TLSimonsen
Date: December 2003

CONSUMERS ENERGY COMPANY
Gas Utility Depreciation Study, Case U-12999
Net Salvage Calculated Using a Five Year Average by Function
Calculation of Depreciation Rates Using ALG

Rate	%	7000 1	- (•	•				861 3.62%						302 3.24%	,	•	0/001 +00'001	_		_	387,469 1.64%	263,446 3.48%	87,046 2.53%	611 1.44%	53,308 0.77%	28,628 0.67%	90,000 2.08%	355 2.45%	156,228 1.67%				15,661 6.99%		,099 5.49%	Ţ	882,142 0.50%	.,	182,223 0.99%	,234 3.84%
Annual	us.	1	2 6	, 80-		68	62,	1,176,715	592,861	828	2.375,240	09	504	120	A 015 302	2122		2	124	2,670,471	308,470	387,	263,	87,	4,004,611	53	28	06	8,601,355	156,		17,924,609	628,193	15,	3,689,080	1,495,099	34,593,074	882,	4,577,191	182	72,917,234
Amount to Recover	ss.	r (4	610,000	4,582,476	1,389	2,344,906	2,282,924	37,843,149	16.463.736	40.080.923	55 675 623	1.265,373	11,386,295	2,366,554	174 953 968	200,000,1		070'110'8	5,010,910	133,603,651	5,805,403	16,405,433	2,152,356	1,825,356	173,814,937	3,055,097	848.822	2,353,497	403,661,573	2,726,172	11,256	912,183,332	25,127,738	332,171	119,895,110	42,281,397	1,078,266,111	23,579,665	182,584,158	7,316,244	2,804,222,344
Allocated Book Res.	es.		064,007	3,454,887	3,494	1,927,482	3,053,749	19,203,438	11 889 073	12 769 223	35 660 663	1 276 862	5 736 104	1.134.196	899 688 80	000,600,06		0,012,190	5,253,626	97,746,693	29,583,284	8,699,814	5,502,759	1,654,337	155,052,709	3,905,218	4.115.355	6.517.813	315,705,675	16,459,684	23,529	197,737,539	15,495,271	268,242	73,082,005	30,737,296	268,182,502	151,346,936	84,783,480	11,835,613	1,180,196,157
Theoretical Rsv w/NS	ω	1	140,770	3,662,891	3,705	2,043,528	2,319,091	20,359,600	12 604 867	13 538 006	27 807 649	1.353.736	6.081.452	1,202,482	404 554 549	101,034,040		4,146,425	3,294,483	61,295,724	18,551,306	5,455,544	3.450.711	1,037,414	97,231,606	1.641.459	1 729 785	2.739.597	132,698,853	6.918.409	9.890	83,113,946	6,513,043	112.749	30.718,162	12.919.641	112,723,696	63,614,836	35,636,580	4,974,799	496 065 445
Theoretical Reserve W/O NS	()	ļ	5//,541	3,455,558	3,495	1,596,506	2,319,091	11,768,555	7 286 050	5.640.836	32 344 230	1 109 620	A 751 134	1 083.317	24 005 000	CCB,CDB, L.	1	4,146,425	3,293,824	61,136,768	18,549,451	5.452.273	3.450.366	1,037,310	97,066,417	1 641 459	1 726 849	2 711 130	131 319 993	6.846.521	787	82.250.318	6,496,801	110,886	30.210.624	12 706.177	110.861.227	63,614,836	35,367,785	4,972,810	A90 847 203
Net Salvage	%		%0	%g-	% 9-	-28%	%0	-73%	730%	14004	100	2000	2000	11%	<u>:</u>			%0	-5%	-56%	-1%	%9-	-1%	-1%		%	170%	105%	-105%	-105%	-105%	-105%	-25%	-168%	-168%	-168%	-168%	%0	-76%	4%	
Remaining Life	Yrs		36.58	24.74	10.86	26.08	36.75	32.16	27.77	10.75	40.50	23.54	2 1.04	19.70	2			55.10	40.36	50.03	18.82	42.34	8 17	20.97		57.34	20.00	28.55	46.03	17.45	25.40	50.89	40.00	21.21	32.50	28.28	31.17	26.73	39.89	40.15	
Curve			S	£	83	8	82	, &	6	3 6	9 6	2 6	2 4	2 6	2			2	8	82	84	2	2	2		ũ	2	- ရ	6	8	3 2	2 6	0.5	} <u>-</u>	2 S	ă	, to	8	R2.5	준	
ASL	yrs		65.0	45.0	45.0	50.0	65.0	2009	2 0	5 6	9 6	5 4 5 6		9 6	3			75.0	0.09	75.0	40.0	55.0	15.0	30.0		75.0	9 6	2 6	7.00	2 2	9 6	9 6	50.0	42.6	5.6.0	3 6	40.0	42.0	52.0	55.0	
12/31/2002 Balance	မာ		1,321,117	7,676,757	4,607	3,337,803	5 336 673	32 974 906	46 200 007	10,000,000	70,020,034	702,000,07	2,000,788	2,576,674	070'00'0	185,741,368		15,624,024	10,063,270	183,611,384	35 038 304	23 684 196	7 579 322	3.445.240	279,045,740	A 080 A	4 242 686	4,444,000	350,010,053	000,016,000	16 968	541 424 815	32 498 407	724 035	72 006 386	27 245 781	502 406 199	174 926 601	151,913,431	18,415,248	1 000 070 247
Description		age Plant:	Rights of Way	Compressor Station Structures	M & R Station Structures	Other Structures	easeholds & Rights	Well Construction		weil compilier	Lines	Compressor Station Equipment	M & K Stanton Equipment	Pumpanon Equipment		Subtotal U.G. Storage Plant	Transmission Plant:	Rights of Way	Structures & Improvements	Mains	Compressor Station Fourment	Messuring & Begulating Equipment	Commissioning a regularing regularing	Other Equipment	Subtotal Transmission Plant	on Plant:	Charles of way	Mains how the comments	Mains - Date steel	Mains - coated a wiapped steel	Mains - cast non	Mains - copies	Measuring & Beautating Equipment	Contract has steel	Services - posted & wrapped steel	Continue - Contact & Wighper store	Consider a copyon	Majore	Meter Installations	House Regulators	
Acct No.		U.G. Storage Plant	350.2	351.2	351.2	351.4	352 1	350.	0.700	4725	353.0	0.400	355.0	350.0	0.765		Transmiss	365.2	366.0	367.0	368.0	3000	370.0	3710	:	Distribution Plant:	27.4.6	373.0	270.1	376.2	376.4	376 F	378.0	380.4	380.1	3000.	4.000 4.006	384.0	382.0	383.0	

Case No. U-12999
Exhibit A-__ (TLS-2)
Page 3 of 3
Witness: TLSimonsen
Date: December 2003

CONSUMERS ENERGY COMPANY Gas Utility Depreciation Study, Case U-12999 Net Salvage Calculated Using a Five Year Average by Function

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Rate	%		2.50%	1.27%	17.78%	4.80%	11.20%	8.74%	17.41%	28.38%	11.50%	17.73%	5.49%	3.55%
Annual Amount	69	1	89	300,447	305,420	353,023	6,016	428,193	175,116	34,006	942,714	46,242	2,591,215	85,528,363
Amount to Recover	₩					1,182,627	60,042	5,335,279	1,140,002	139,086	8,908,650	295,947	27,942,796	3,180,934,045
Allocated Book Res.	ss.		æ	14,640,678	(151,827)	6,173,947	(6,329)	(434,746)	(133,946)	(19,267)	(713,679)	(35,160)	19,319,603	1,451,438,136
Theoretical Rsv w/NS	ss.		251	9,463,366	1,016,607	3,834,516	26,903	1,848,080	569,397	70,873	3,033,808	149,464	20,013,265	714,864,864
Theoretical Reserve W/O NS	es es		251	9,453,912	1,016,607	3,834,516	26,903	1,848,080	569,397	70.873	3,033,808	149,464	20,003,811	679,823,364
Net Salvage	%		%	-10%	%	%0	%0	%0	%0	%0	%0	%0		
Remaining Life	Yrs		41.72	29.99	6.12	3.35	86.6	12.46	6.51	4.09	9.45	6.40		
Curve			2	8	S	S	S	S	S C	Ξ	S	g		
ASL	yrs		50.0	50.0	15.0	7.0	20.0	20.0	15.0	10.0	15.0	15.0		
12/31/2002 Balance	w		1.516	23.627.456	1,717,346	7.356.574	53.713	4.900.533	1,006,056	119.819	8 194.971	260,787	47,238,771	2,408,904,226
Description	tainimentemente de descriptor de la descriptor de la manda que provincia de mente de la companya de la company	Plant:	389.2 Rights of Way	Structures & Improvements	Office Furniture & Equipment	Computer Equipment	Stores Foundant	Tools, Shop & Garage Equipment					Subtotal General Plant	Total Gas Utility Plant
Acct No.		General Plant:	389.2	390.0	391.0	391.2	393.0	394.0	395.0	396.0	397.0	398.0		

Case No.

Exhibit

U-12999 A-__(TLS-3) 2 Pages T L Simonsen

Witness

Date

December 8, 2003

CONSUMERS ENERGY COMPANY

Five History of Net Salvage Reported in Form P-522 for Years 1998 through 2002

CONSUMERS ENERGY COMPANY

Gas Utility Depreciation Study, Case U-12999 Historical Net Salvage, Per Page 219 of the MPSC Form P-522

Case No. U-12999 Exhibit A-__ (TLS-3)
Page 1 of 2
Witness: TLSimonsen Date: December 2003

2002 MPSC Form P-522, Page 219:

Net	Ch	arge	es	for	Pla	ınt	R	etir	ed:	
-		_					_			

7,648,543.00 **Book Cost of Plant Retired**

	Cost of Removal Salvage (credit)	6,790,762.00 (159,193.00)			
	Total Net Charges for Plt Ret.	14,280,112.00			
			Cost of		Total
2002 Net	Salvage by Function:	Credit to Plant	Removal	Salvage	Function
108.022	Ntl. Gas Prod.	0.00	0.00	0.00	0.00
108.023	Underground Stg	81,314.52	283,506.42	2,948.10	367,769.04
108.029	Transm. Unit of Prod.	0.00	0.00	0.00	0.00
108.026	Distribution	5,356,298.24	6,238,477.24	(131,321.77)	11,463,453.71
108.027	General Structures	0.00	57,025.80	0.00	57,025.80
108.037	General Other Eq.	1,438,794.21	19,200.00	(24,620.99)	1,433,373.22
108.025	Transmission St. Line	772,134.56	192,552.14	(6,196.47)	958,490.23
	2002 Total	7,648,541.53	6,790,761.60	(159,191.13)	14,280,112.00
	SC Form P-522, Page 219: Net Charges for Plant Retired: Book Cost of Plant Retired Cost of Removal	13,068,421.00 7,387,322.00			
	Salvage (credit)	(162,344.00)			
	Total Net Charges for Plt Ret.	20,293,399.00			
2001 Net	Total Net Charges for Plt Ret. Salvage by Function:	20,293,399.00 Credit to Plant	Cost of Removal	Salvage	Total Function
2001 Net 108.022				Salvage 0.00	
	Salvage by Function:	Credit to Plant	Removal		Function
108.022	Salvage by Function: Ntl. Gas Prod.	Credit to Plant	Removal 0.00	0.00	Function 0.00
108.022 108.023	Salvage by Function: Ntl. Gas Prod. Underground Stg	Credit to Plant 0.00 8,000.00	Removal 0.00 236,979.27	0.00 0.00	Function 0.00 244,979.27
108.022 108.023 108.029	Salvage by Function: Ntl. Gas Prod. Underground Stg Transm. Unit of Prod.	Credit to Plant 0.00 8,000.00 0.00	0.00 236,979.27 0.00	0.00 0.00 0.00	0.00 244,979.27 0.00
108.022 108.023 108.029 108.026	Salvage by Function: Ntl. Gas Prod. Underground Stg Transm. Unit of Prod. Distribution	Credit to Plant 0.00 8,000.00 0.00 5,757,046.73	Removal 0.00 236,979.27 0.00 6,793,203.66	0.00 0.00 0.00 (623.93)	Function 0.00 244,979.27 0.00 12,549,626.46
108.022 108.023 108.029 108.026 108.027	Salvage by Function: Ntl. Gas Prod. Underground Stg Transm. Unit of Prod. Distribution General Structures	Credit to Plant 0.00 8,000.00 0.00 5,757,046.73 801,021.50	Removal 0.00 236,979.27 0.00 6,793,203.66 20,102.76	0.00 0.00 0.00 (623.93) 0.00	Function 0.00 244,979.27 0.00 12,549,626.46 821,124.26
108.022 108.023 108.029 108.026 108.027 108.037	Salvage by Function: Ntl. Gas Prod. Underground Stg Transm. Unit of Prod. Distribution General Structures General Other Eq.	Credit to Plant 0.00 8,000.00 0.00 5,757,046.73 801,021.50 6,265,060.41	Removal 0.00 236,979.27 0.00 6,793,203.66 20,102.76 12,938.00	0.00 0.00 0.00 (623.93) 0.00 (157,770.11)	Function 0.00 244,979.27 0.00 12,549,626.46 821,124.26 6,120,228.30
108.022 108.023 108.029 108.026 108.027 108.037 108.025	Salvage by Function: Ntl. Gas Prod. Underground Stg Transm. Unit of Prod. Distribution General Structures General Other Eq. Transmission St. Line	Credit to Plant 0.00 8,000.00 0.00 5,757,046.73 801,021.50 6,265,060.41 237,292.36	Removal 0.00 236,979.27 0.00 6,793,203.66 20,102.76 12,938.00 324,098.31	0.00 0.00 0.00 (623.93) 0.00 (157,770.11) (3,950.00)	Function 0.00 244,979.27 0.00 12,549,626.46 821,124.26 6,120,228.30 557,440.67
108.022 108.023 108.029 108.026 108.027 108.037 108.025	Salvage by Function: Ntl. Gas Prod. Underground Stg Transm. Unit of Prod. Distribution General Structures General Other Eq. Transmission St. Line 2001 Total	Credit to Plant 0.00 8,000.00 0.00 5,757,046.73 801,021.50 6,265,060.41 237,292.36	Removal 0.00 236,979.27 0.00 6,793,203.66 20,102.76 12,938.00 324,098.31	0.00 0.00 0.00 (623.93) 0.00 (157,770.11) (3,950.00)	Function 0.00 244,979.27 0.00 12,549,626.46 821,124.26 6,120,228.30 557,440.67
108.022 108.023 108.029 108.026 108.027 108.037 108.025	Salvage by Function: Ntl. Gas Prod. Underground Stg Transm. Unit of Prod. Distribution General Structures General Other Eq. Transmission St. Line 2001 Total SC Form P-522, Page 219: Net Charges for Plant Retired:	Credit to Plant 0.00 8,000.00 0.00 5,757,046.73 801,021.50 6,265,060.41 237,292.36 13,068,421.00	Removal 0.00 236,979.27 0.00 6,793,203.66 20,102.76 12,938.00 324,098.31	0.00 0.00 0.00 (623.93) 0.00 (157,770.11) (3,950.00)	Function 0.00 244,979.27 0.00 12,549,626.46 821,124.26 6,120,228.30 557,440.67
108.022 108.023 108.029 108.026 108.027 108.037 108.025	Salvage by Function: Ntl. Gas Prod. Underground Stg Transm. Unit of Prod. Distribution General Structures General Other Eq. Transmission St. Line 2001 Total SC Form P-522, Page 219: Net Charges for Plant Retired: Book Cost of Plant Retired	Credit to Plant 0.00 8,000.00 0.00 5,757,046.73 801,021.50 6,265,060.41 237,292.36 13,068,421.00	Removal 0.00 236,979.27 0.00 6,793,203.66 20,102.76 12,938.00 324,098.31	0.00 0.00 0.00 (623.93) 0.00 (157,770.11) (3,950.00)	Function 0.00 244,979.27 0.00 12,549,626.46 821,124.26 6,120,228.30 557,440.67

2000 Net Salvage by Function:		Credit to Plant	Cost of Removal	Salvage	Total Function
108.022	Ntl. Gas Prod.	0.00	0.00	0.00	0.00
108.023	Underground Stg	762,833.48	255,925.22	(19,070.53)	999,688.17
108.029	Transm. Unit of Prod.	0.00	145,795.78	(4,109.78)	141,686.00
108.026	Distribution	16,192,942.31	7,684,326.36	(1,100.00)	23,876,168.67
108.027	General Structures	2,860,285.90	30,524.23	(76,974.46)	2,813,835.67
108.037	General Other Eq.	0.00	0.00	0.00	0.00
108.025	Transmission St. Line	2,309,063.28	435,194.71	(7,672.50)	2,736,585.49
	2000 Total	22,125,124.97	8,551,766.30	(108,927.27)	30,567,964.00

CONSUMERS ENERGY COMPANY

Gas Utility Depreciation Study, Case U-12999 Historical Net Salvage, Per Page 219 of the MPSC Form P-522

Case No. U-12999 Exhibit A-___ (TLS-3) Page 2 of 2 Witness: TLSimonsen

Date: December 2003

16,236,799.00

1999 MPSC	Form	P-522.	Page	219:

Book Cost of Plant Retired

1998 Total

8,984,035.00

	Cost of Removal	9,430,816.00			
	Salvage (credit)	(90,805.00)			
	Total Net Charges for Plt Ret.	18,324,046.00			
			Cost of		Total
1999 Net	Salvage by Function:	Credit to Plant	Removal	Salvage	Function
108.022	Ntl. Gas Prod.	0.00	0.00	0.00	0.00
108.023	Underground Stg	1,411,817.42	464,772.10	0.00	1,876,589.52
108.029	Transm. Unit of Prod.	29,234.20	26,669.12	0.00	55,903.32
108.026	Distribution	3,646,109.39	8,775,542.15	(10,843.24)	12,410,808.30
108.027	General Structures	667,633.11	67,384.61	(68,487.35)	666,530.37
108.037	General Other Eq.	0.00	0.00	0.00	0.00
108.025	Transmission St. Line	3,229,240.97	96,447.77	(11,474.25)	3,314,214.49
	1999 Total	8,984,035.09	9,430,815.75	(90,804.84)	18,324,046.00
1988 MPS	SC Form P-522, Page 219:				
Net Charg	ges for Plant Retired:				
	Book Cost of Plant Retired	7,048,354.00			
	Cost of Removal	9,445,208.00			
	Salvage (credit)	(256,763.00)			
	Total Net Charges for Plt Ret.	16,236,799.00			
			Cost of		Total
1998 Net	Salvage by Function:	Credit to Plant	Removal	Salvage	Function
108.022	Ntl. Gas Prod.	43,091.48	0.00	0.00	43,091.48
108.023	Underground Stg	1,200,305.92	408,704.96	(34,366.49)	1,574,644.39
108.029	Transm. Unit of Prod.	2,402,360.20	60,883.32	(50,000.00)	2,413,243.52
108.026	Distribution	3,143,570.20	8,225,168.04	(11,496.80)	11,357,241.44
108.027	General Structures	154,945.14	444,243.36	(19,701.94)	579,486.56
108.037	General Other Eq.	0.00	0.00	0.00	0.00
108.025	Transmission St. Line	104,081.63	306,207.75	(141,197.77)	269,091.61

7,048,354.57

9,445,207.43

(256,763.00)

STATE OF MICHIGAN

BEFORE THE MICHIGAN PUBLIC SERVICE COMMISSION

In the Matter of the Applica CONSUMERS ENERGY C for Accounting and Ratemal of Depreciation Rates for G	Case No. U-12999	
	PROOF OF SERVICE	<u>CE</u>
STATE OF MICHIGAN COUNTY OF JACKSON)) SS)	

Margaret Hillman, being first duly sworn, deposes and says that she is employed in the Legal Department of Consumers Energy Company; that on December 8, 2003 she served an electronic copy of the testimony and exhibits of Donald S. Roff and Thomas L. Simonsen upon the persons listed in Attachment 1 hereto, at the e-mail addresses listed therein. She further states that she also served a hard copy of the same documents to the addresses listed in Attachment 1 by depositing the same with United Parcel Service in the City of Jackson, Michigan with postage thereon fully paid, except for Administrative Law Judge Hon. Daniel E. Nickerson, Jr., whose copy was sent by United States first-class mail.

Validity Val

Sammie B. Dalton

Notary Public, Jackson County, Michigan My Commission Expires: 01/04/04

ATTACHMENT 1 -- TO CASE NO. U-12999

Administrative Law Judge

Hon. Daniel E. Nickerson, Jr. Administrative Law Judge 6545 Mercantile Way, Suite 14 P.O. Box 30221 Lansing, MI 48909-8195

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mcalabrese@clarkhill.com

_		REBUTTAL TESTIMONY Kansas Corporation Case solve
1		OF SUSAN K. DUTTA
2		OF DONALD S. ROFF
3		ATMOS ENERGY NOV 1 7 2003
4		DOCKET NO. 03-ATMG-1036-RTS Just Laly Docket Room
5		INTRODUCTION
6		
7	Q.	PLEASE STATE YOUR NAME, TITLE, BUSINESS AFFILIATION AND
8		ADDRESS.
9		
10	A.	My name is Donald S. Roff. I am a Director with the public accounting firm
11		of Deloitte & Touche LLP and my business address is 2200 Ross Avenue,
12		Suite 1600, Dallas, Texas 75201.
13		
13	Q.	ARE YOU THE SAME DONALD S. ROFF WHO PRESENTED DIRECT
	••••	TESTIMONY IN THIS PROCEEDING?
15		LOTHIOM IN THIS I WOULD IN THE PARTY OF THE
16		
17	Α.	Yes.
18		
19	Q.	WHAT WAS THE CONTENT OF THAT TESTIMONY?
20		
21	A.	That testimony presented the results of a depreciation study that I had
22		conducted for Atmos Energy Corporation ("Atmos" or "the Company") and
23		also summarized certain recommendations I had made regarding

depreciation rates and depreciation practices. The depreciation study resulted in a modest increase in annual depreciation expense (approximately 7%) utilizing September 30, 2002, depreciable plant balances, compared with the level of depreciation expense produced by application of the existing approved depreciation rates to the same depreciable balances.

Q. WHAT IS THE PURPOSE OF YOUR REBUTTAL TESTIMONY?

A. My rebuttal testimony has been prepared to address positions taken by Mr. Michael J. Majoros, Jr. on behalf of the Kansas Corporation Commission ("the Commission") and the Citizens' Utility Ratepayer Board ("Citizens" or "the Board") on the topics of depreciation rates and depreciation accounting. My rebuttal testimony will address the magnitude of the depreciation expense reduction proposed by Mr. Majoros and its detrimental effect on Atmos. I will also address the accounting and ratemaking aspects of depreciation and related net salvage allowances. I will address the Equal Life Group ("ELG") depreciation procedure and how, contrary to Mr. Majoros' claims, I have not implemented this procedure in a retroactive manner. Finally, I will address the Simulated Plant Record ("SPR") life analysis methodology and certain misleading statements made by Mr. Majoros.

1	Q.	WHAT DID YOU DO TO DEVELOP	THIS REBUTTAL	TESTIMONY?
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I read Mr. Majoros' testimony and reviewed his schedules and exhibits. I A. reviewed the work papers developed in my depreciation study. I reviewed and analyzed the Information Requests filed by the Company and Mr. Majoros. I attempted to verify the various figures and calculations contained in Mr. Majoros' testimony and exhibits. I also re-examined Order No. 631 of the Federal Energy Regulatory Commission ("FERC") and the provisions and requirements of Statement of Financial Accounting Standards No. 143, Accounting for Asset Retirement Obligations. Lastly, I have reviewed one recent case and related testimonies heard before this Commission, that being Docket No. 03-KGSG-602-RTS. I encourage the Commission to re-read the excellent rebuttal testimonies of Mr. Earl Robinson and Dr. Ronald White specifically addressing some of the same 14 arguments put forth by Mr. Majoros in this proceeding. 15

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HAVE YOU PREPARED ANY EXHIBITS TO ILLUSTRATE YOUR Q. FINDINGS?

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Yes. Rebuttal Exhibit DSR-1 recasts certain of the figures contained in A. Table 3 of Mr. Majoros' testimony and adds another column. 1 My calculations correctly isolate the net salvage and ELG procedure components of the depreciation expense change proposed by Mr.

1		Majoros. I have also quantified the reserve difference portion of the
2		annual depreciation expense. Other Rebuttal Exhibits related to individual
3		topics will be introduced later.
4		
5	Q.	WERE THESE EXHIBITS PREPARED BY YOU OR UNDER YOUR
6		SUPERVISION AND DIRECTION?
7		
8	A.	Yes.
9		
10	Q.	WHAT DOES REBUTTAL EXHIBIT DSR-1 REVEAL?
11		
12	A.	Rebuttal Exhibit DSR-1 reveals that the change in annual depreciation
13		expense proposed by Mr. Majoros compared with the level of depreciation
14		expense that I have recommended is actually comprised of three, roughly
15		equivalent causal elements. The first, treatment of net salvage, the
16		second, the use of the Equal Life Group ("ELG") procedure, and the third,
17		inter-relationships between these two elements. A fourth, relatively minor
18		element is the amortization of reserve differences.
19		
20	Q.	REBUTTAL EXHIBIT DSR-1 INCLUDES A COLUMN ENTITLED
21		"INTER-RELATIONS". CAN YOU PROVIDE AN EXAMPLE THAT
22		EXPLAINS THIS COLUMN?

¹ Testimony of Michael J. Majoros, Jr., page 5, line 8.

1	A.	Yes, I can. Assume that we have an asset category with a balance of
2		\$1,000. Assume that my recommendation is an average service life of 20
3		years and the average service life proposal of the Staff is 25 years.
4		Further assume that I recommend a positive 10% net salvage factor and
5		the Staff proposes a positive 20% net salvage factor. The difference in
6		annual depreciation due to the increase in average service life is
7		(\$1,000/25) minus (\$1,000/20), for a decrease of \$10. The difference due
8		to the change in net salvage would be calculated as ((100%-20%)/20)
9		minus ((100%-10%)/20), times the \$1,000 balance, or a decrease of \$5.
10		The Staff proposed depreciation rate would be ((100%-20%)/25), or
11		3.20%. My recommended depreciation rate would be ((100%-10%)/20),
12		or 4.50%. The total change in depreciation expense is a decrease of \$13.
13		Therefore, the components of the depreciation change are: a decrease of
14		\$10, for an increase average service life; a decrease of \$5 for a more
15		positive net salvage; a total decrease of \$13; and an inter-relationship
16		effect of positive \$2, representing the combination of change in life and
17		change in net salvage. The inter-relationships magnify as the number of
18		changing elements increases, such as the depreciation procedure.
19		
20	Q.	HOW DID YOU QUANTIFY THE EFFECT OF NET SALVAGE ON

21

ANNUAL DEPREPCIATION EXPENSE?

1	A.	I used the same process as described by Mr. Majoros in his testimony at
2		Table 4.2 The details of this calculation are shown on Rebuttal Exhibit
3		DSR-2, in columns [5] and [8]. The difference between these two columns
4		(\$731,852) quantifies the effect of net salvage on annual depreciation
5		expense and is shown at the bottom of Column [8].

7

8

Q. HOW DID YOU QUANTIFY THE EFFECT ON ANNUAL DEPRECIATION OF THE USE OF THE ELG PROCEDURE?

9

10 A. Rebuttal Exhibit DSR-3 has been prepared to summarize these
11 calculations. Column [4] contains the whole life depreciation rate on an
12 Average Life Group ("ALG") basis. Column [6] contains the whole life
13 depreciation rate on an ELG basis. The difference between Column [5]
14 and Column [7] (\$715,580) is the effect on annual depreciation of the use
15 of the ELG procedure, and is shown at the bottom of Column [7].

16

17

18

Q. HOW DID YOU QUANTIFY THE EFFECT OF RESERVE POSITION ON THE ANNUAL DEPRECIATION EXPENSE?

19

20 A. Rebuttal Exhibit DSR-4 has been prepared to summarize these
21 calculations. Column [4] contains the theoretical reserve developed in my
22 study. Column [5] contains the actual book reserve. Column [6] contains
23 the average remaining life for each asset category. Column [7] contains

² Ibid, page 9, line 10.

the annual amortization of the difference between the theoretical reserve and the book reserve. Under the remaining life technique, this difference is allocated to annual accounting periods over the remaining life of each individual asset category. We can see that the reserve difference (Shown at the bottom of Column [7]) has an impact on annual depreciation expense of less than \$100,000.

Q.

A.

THERE IS A COLUMN ON REBUTTAL EXHIBIT DSR-1 LABELED "INTER-RELATIONS". WOULD YOU PLEASE EXPLAIN WHAT THIS COLUMN MEANS?

Certainly. There are three components of a remaining life depreciation rate. The first is related to the service life; the second is related to the net salvage allowance; and the third is related to the status of the accumulated provision for depreciation. Mr. Majoros provides a fundamental discussion of these concepts at pages 9 through 11 of his testimony. Implicit in each of these components is the depreciation procedure. From a technical standpoint, a depreciation procedure refers to the asset groupings or the form of the depreciable base. My study utilized the equal life group procedure and is thoroughly described in the Appendix to Exhibit 3 of my direct testimony. Mr. Majoros utilizes the average life group procedure, sometimes referred to as the broad group procedure. The singular effect on depreciation expense of these two

procedures in this proceeding is quantified above. Since service life is not at issue in this proceeding,³ the inter-relationship shown in Column [13] of Rebuttal Exhibit DSR-1 represents the **combined effect** on annual depreciation expense of changes in net salvage **coupled with** a change in depreciation procedure, as well as the impact of the reserve position shown in Column [12].

б

Q. WHAT ARE THE DIFFERENCES BETWEEN YOUR RECOMMENDED DEPRECIATION RATES AND THE RECOMMENDATIONS OF MR.

MAJOROS?

A.

There are only two primary differences. First, Mr. Majoros has proposed the use of what I would call a "cash basis" for net salvage, contrasted with my use of an "accrual basis" for net salvage. Second, Mr. Majoros opposes what he calls a "retroactive" application of the ELG procedure. It is very interesting to note that Mr. Majoros does not fundamentally object to the use of the ELG procedure. Mr. Majoros also asserts that the Company's depreciation rates are excessive. I will address this issue later in my rebuttal testimony.

MAGNITUDE OF DEPRECIATION EXPENSE ADJUSTMENT

³ Ibid, page 4, line 20.

1	Q.	DO YOU HAVE ANY EVIDENCE TO DEMONSTRATE THE
2		MAGNITUDE OF THE REDUCTION IN DEPRECIATION EXPENSE
3		PROPOSED BY MR. MAJOROS AND ITS DETRIMENTAL IMPACT ON
4		ATMOS?

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Yes. Let us begin with the absolute magnitude of the reduction in depreciation expense proposed by Mr. Majoros. As shown on Rebuttal Exhibit DSR-1, the level of depreciation expense proposed by Mr. Majoros is a decrease of nearly 30% from my study recommendations and nearly 32% below the level of depreciation expense produced by application of the existing depreciation rates to September 30, 2002 depreciable balances. In terms of depreciation expense, the reduction is over \$1.85 million. This amount is equivalent to roughly 5% of annual revenues (exclusive of gas cost)! I urge this Commission to consider the reasonableness of such a significant depreciation expense reduction. While depreciation is a non-cash item as aptly described by Mr. Majoros, it does have significant cash flow impacts. Depreciation expense is a form of internal financing, thus reducing the need for external financing by Atmos. Rebuttal Exhibit DSR-5 has been prepared to show the level of capital activity over the past five years for the six largest asset categories. Clearly depreciation expense alone has not been adequate to finance these additions. While the purpose of depreciation accounting is cost allocation, one purpose of capital recovery in the ratemaking process is to

1		insure financial integrity. Two facts are shown on this Exhibit. First,
2		significant capital activity is occurring, which will result in the recording of
3		increasing depreciation expense going forward. More importantly, if Mr.
4		Majoros' proposal is approved, Atmos will have to externally finance a
5		minimum of \$1,800,000 additionally annually. This has to be detrimental
6		to the Company and more costly to the customer than use of my
7		recommended level of depreciation expense. Moreover, under Mr.
8		Majoros' proposal, rate base will be dramatically higher each year causing
9		increased costs to customers today and into the future. While current
10		revenue requirements are reduced, the total lifetime cost to customers is
11		higher under Mr. Majoros' proposal. For these reasons, Mr. Majoros'
12		proposal should be rejected.
13		
14	Q.	CAN YOU CITE ANY AUTHORITATIVE LITERATURE THAT
15		ADDRESSES THIS TOPIC?
16	A.	Yes. The following statement from the NARUC Public Utility Depreciation
17	Α.	Practices text addresses this issue:
18		Practices text additioned that the
19		"The regulatory body prescribing depreciation rates is thus
20 21		decicion which attects point the situation of the
22		
23		u the commission consistently prescribes (depreciation) rates below
24		the lower limit of the zone of reasonableness, this results immediately in lower revenue requirements. But in the long run the
25		to income tayes and faller income tayes and faller including the income
26 27		apparent savings in depreciation expense, so that rates for service
- 1		· ·

must be higher than if the depreciation rates had been more adequate. If the depreciation rates are set so low as to fail to repay the capital invested in a group of property by the end of its service life, confiscation takes place or the unpaid cost remains in the rate base permanently. If, on the other hand, the regulatory body takes a liberal view of the probable service life of the property and establishes depreciation rates toward the middle or high side of the zone of reasonableness, rates for service will be higher in the short run, but in the long run may be lower. However, depreciation rates are not intended for the purpose of achieving objectives other than the recovery of capital invested in a manner properly related to the useful life of the plant."

Q. HAVE YOU MADE ANY COMPARISONS OF DEPRECIATION RATES FROM WITHIN THE INDUSTRY?

A.

In general, I prefer not to make industry comparisons. Over the course of my thirty-year career, I have found that asset information and related depreciation parameters are impacted by a wide variety of factors and forces, making comparisons precariously specious. These factors and forces include, but are not limited to, capitalization policy, growth, location, construction standards, retirement reporting, pricing conventions, market circumstances, regulatory actions, field conditions, cause of retirement and accounting practices. As such, direct comparisons of individual utilities or select account parameters are misleading at best. Having said all that, the composite depreciation rate of 2.53% proposed by Mr. Majoros would be among the lowest in the industry based upon my experience.

⁴ Public Utility Depreciation Practices, NARUC, 1968, page 33.

1		
2		NET SALVAGE ALLOWANCE AND ACCOUNTING
3		
4	Q.	PLEASE DESCRIBE THE PROPOSAL THAT YOU REFER TO AS
5		CASH ACCOUNTING.
6		
7	A.	Mr. Majoros' proposal develops a level of depreciation expense for net
8		salvage equal to the actual cash outlays for salvage and cost of removal.
9		In practice this is accomplished by developing an annual average of
10		recent experience.
11		
12	Q.	HAS CASH ACCOUNTING FOR NET SALVAGE BEEN UTILIZED BY
13		THE COMPANY IN THE PAST?
14		
15	A.	No. Atmos has utilized and it is my understanding that this Commission
16		has authorized what I would refer to as traditional depreciation accrual
17		accounting for net salvage. Based upon a review of prior depreciation
18		studies and approved depreciation rates, it would appear that such a
19		practice has been in place for several years.
20		
21	Q.	IS ATMOS REQUIRED TO PRACTICE ACCRUAL ACCOUNTING?
22		
23	A.	Yes, in accordance with the Uniform System of Accounts followed by

1		Atmos.
2		
3	Q.	IS ACCRUAL ACCOUNTING SIGNIFICANT TO DEPRECIATION
4		ACCOUNTING?
5		
6	A.	Yes. Accrual accounting reflects the fundamental accounting principle of
7		matching. The matching principle requires the proper determination of
8		costs in each accounting period. This includes the accrual for investment
9		costs as well as the accrual for net salvage costs ⁶ .
10		
11	Q.	ARE THERE REGULATORY REQUIREMENTS RELATED TO NET
12		SALVAGE?
13		
14	A.	Yes. The following excerpt from the 1996 NARUC publication Public
15		Utility Depreciation Practices addresses this concept:
16		
17 18 19 20 21 22		"Under presently accepted concepts, the amount of depreciation to be accrued over the life of an asset is its original cost less net salvage. Net salvage is the difference between the gross salvage that will be realized when the asset is disposed of and the cost of removing it. Positive net salvage occurs when gross salvage exceeds cost of removal, and negative net salvage occurs when
23 24 25 26		cost of retirement exceeds gross salvage. Net salvage is expressed as a percentage of plant retired by dividing the dollars of net salvage by the dollars of original cost of plant retired. The goal of accounting for net salvage is to allocate the net cost of an asset

⁵ 18 CFR Part 201, General Instruction 11. "Accounting to be on an accrual basis. Paragraph A. The utility is required to keep its accounts on the accrual basis."

⁶ Net salvage means gross salvage less cost of removal. When cost of removal exceeds salvage, negative

net salvage occurs.

1 to annual accounting periods, making due allowance for the net salvage, positive or negative, that will be obtained when the asset 2 3 is retired. This concept carries with it the premise that property 4 ownership includes the responsibility for the property's ultimate 5 abandonment or removal. Hence, if current users benefit from its use, they should pay their pro rata share of the costs involved in the 6 abandonment or removal of the property and also receive their pro 7 8 rata share of the benefits of the proceeds realized." 9 10 "This treatment of salvage is in harmony with generally accepted accounting practices and tends to remove from the income 11 statement any fluctuations caused by erratic, although necessary, 12 abandonment and uneconomical removal operations. It also has 13 the advantage that current consumers pay or receive a fair share of 14 costs associated with the property devoted to their service, even 15 though the costs may be estimated."7 16 17 18 Thus under regulatory accounting, it is evident that depreciation is intended to include a component for net salvage. It is important to note 19 that no reference is made in this passage to present value or discounted 20 amounts. In fact, the passage describes how to calculate a net salvage 21 22 allowance. 23 HAVE PAST DEPRECIATION STUDIES INCLUDED AN ALLOWANCE 24 Q. FOR NET SALVAGE IN THE DEPRECIATION RATE CALCULATION? 25 26 Yes. The existing approved depreciation rates include net salvage 27 A. 28 allowances and reflect net salvage in depreciation rates using the same 29 calculation methodology that I have utilized in the most current

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depreciation study and as described above.

Q. WHAT IS THE FUNDAMENTAL DIFFERENCE BETWEEN CASH ACCOUNTING AND ACCRUAL ACCOUNTING?

A. Cash accounting results in the recording of a provision for net salvage equal to the actual cash outlays for net salvage in an accounting period. In the few jurisdictions where such a practice is utilized, the typical calculation uses the most recent five-year average net salvage amount. Accrual accounting, which is practiced or utilized by a majority of companies, recognizes the cause and effect relationship between retirements and net salvage and results in the recording of a net salvage component of the depreciation expense accrual for all retirements.

Q. DO YOU AGREE WITH THE RECOMMENDATION OF MR. MAJOROS?

A.

No. First, cash accounting does not comply with the accrual accounting requirement of the USOA. Second, cash accounting is inconsistent with traditional depreciation accounting and past practices approved by this Commission for Atmos. Third, cash accounting is unfair to customers as only the last generation of customers associated with an asset pays for related net disposal costs. In fact, in the approach presented by Mr. Majoros, costs are charged to customers after the assets which provided benefit are retired.

⁷ Public Utility Depreciation Practices, NARUC, 1996, page 18.

Q. ARE YOU AWARE AS TO WHETHER THE CASH ACCOUNTING APPROACH PROPOSED BY MR. MAJOROS HAS BEEN REJECTED?

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A. Yes. Based upon the testimonies provided by Mr. Majoros in other proceedings, it appears that Mr. Majoros' cash accounting approach was rejected in at least four of those cases. In the Midwest Energy proceeding before this Commission, the Kansas Commission adopted the Company's position stating: "Accrual accounting has been accepted for many years and provides a reasonable and methodical manner of recovering costs over time."8 In the Elizabethtown Gas Company proceeding before thf New Jersey Board of Public Utilities ("BPU"), the Board decided not to change the existing depreciation rates. Those depreciation rates included a provision for net salvage similar to the methodology requested by Atmos in this proceeding. In the Public Service Electric and Gas Company ("PSE&G") case, the Board (also in New Jersey) ordered the continued use of the approved rate which contained a negative 5% net salvage allowance.9 The reason I know this is that I was involved with assisting PSE&G in that proceeding. In the Jersey Central Power & Light Company proceeding (also before the New Jersey BPU), the Board ruled in favor of the Ratepayer Advocate. 10 In the Rockland Electric Company case (also in New Jersey), the Board adopted the Ratepayer Advocate's level of

Case No. 02-MDWG-922-RTS Order, page 18, paragraph 50.
 Docket No. ER02050303 Order, page 5, paragraph 4.

¹⁰ Docket No. ER02080506, page 6, paragraph d.

excess reserve, which reflected a different net salvage level. In the Sierra Pacific Power Company ("SPPC") case, the Nevada Public Service Commission made two rulings on the subject of net salvage. "While no party to this part of the proceeding disagreed that cost of removal should be recovered over the life of the production plant, the BCP ("Bureau of Consumer Protection") raised a concern over the appropriate amount to be recovered. SPPC did not provide sufficient support for the application of a 3 percent escalation rate to the cost of removal. Due to the lack of justification for the proposed escalation rate, the Commission finds that SPPC will not apply an escalation factor in the development of production plant cost of removal." Further, with respect to Transmission and Distribution Plant accounts, "Therefore, the Commission finds that, except for Account No. 364, SPPC's proposed net salvage ratios shall be used. The Commission finds that a 10 percent net negative salvage ratio shall be used for Account No. 364."

Q. WHAT IS YOUR INTERPRETATION OF THESE FINDINGS?

A. At best, it would seem that the use of cash accounting for net salvage has
received a mixed and limited level of acceptance. The conflicting results
in New Jersey should not be taken as an endorsement of cash
accounting. The logic provided for support of accrual accounting in the

Docket No. ER02080614, page 3, paragraph 3.
 Docket No. 01-11031 Order, paragraph 382.

spirit of intergenerational equity carries a great deal of merit. Moreover, it is evident that Mr. Majoros has not been consistent with respect to net salvage advocacy over time. That is, in some cases he proposes cash accounting; in other cases he proposes traditional net salvage depreciation accrual accounting.

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Q. CAN YOU DEMONSTRATE THE EFFECT OF CASH ACCOUNTING?

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Yes. In fact, I will use some of Mr. Majoros' own testimony to illustrate the unfairness of the cash accounting process. At page 23, line 5, Mr. Majoros argues that the original cost price level adjusted cost of removal is only \$436 (for the 1949 vintage year). Use of this \$436 figure produces an allowance for cost of removal of 11%. The life of this \$4,000 asset is 50 years. I have prepared Rebuttal Exhibit DSR-6 to show the pattern of depreciation expense and the effect of cash accounting treatment.

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Q. WHAT DOES REBUTTAL EXHIBIT DSR-6 REVEAL?

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19 A. Rebuttal Exhibit DSR-6 actually reveals a number of facts. First, full
20 recovery of the investment occurs as shown in Column [3]. Second, the
21 life of this asset is 50 years. Third, there is an accrual for cost of removal.
22 Fourth, the cost of removal allowance is 11%. Fifth, the actual "cash" cost

¹³ Ibid, paragraph 393.

of removal is \$5,000. Sixth, there is a shortfall of capital recovery related to cost of removal. And seventh, the last generation of customer (1999) pays the full cost of removal. Thus cash accounting for net salvage is patently unfair to customers and should be rejected by this Commission.

EXCESSIVE DEPRECIATION

Q. AT VARIOUS PLACES THROUGHOUT HIS TESTIMONY, MR.

MAJOROS MAKES NUMEROUS REFERENCES TO THE CONCEPT OF

"EXCESSIVE DEPRECIATION" AND EVEN PROVIDES EXCERPTS

FROM UNITED STATES' SUPREME COURT CASE LAW. DO YOU

HAVE ANY COMMENTS?

Yes. This is a recurrent theme in his testimonies where depreciation is the A. subject. Apparently, Mr. Majoros never met a Company-requested depreciation rate that he did not believe was excessive. It would seem that as long as there is disagreement between depreciation rates recommendations, Mr. Majoros' lower depreciation rates must be correct and all other depreciation rates are excessive. In the Supreme Court case cited, Mr. Majoros confuses the concept of "excessive" depreciation due to past accumulations of depreciation expense with the use of estimated service lives and net salvage allowances used to make prospective

¹⁴ This assumes that the revenue stream associated with this asset includes this level of depreciation expense and is allowed in customer rates.

revisions to depreciation rates. My understanding of the Lindheimer case is that the Supreme Court was addressing a claim of confiscation by the company and that, with "confiscation being the issue", the company had the burden of showing that its past accumulation of depreciation had not been excessive. In Atmos' case, the past accumulation of depreciation could not have been excessive because it was predicated on the application of Commission authorized depreciation rates. Atmos has recorded (accounting) and the customer has paid (ratemaking) precisely what has been allowed through the regulatory process. As the Court indicated, depreciation rates are based on estimates of the future and those estimates must unquestionably be reviewed from time to time, with mid-stream adjustments applied prospectively to reflect the controlling test of experience. A more careful review of the Lindheimer case and decision would reveal that the Supreme Court was reviewing a rate order based on a "fair value" rate base. This means that at least some significant portion of the rate base would reflect the reconstruction cost new ("RCN") value of plant. With such an approach to valuation, the determination of the appropriate depreciation reserve and whether a booked reserve that reflects original cost can be deemed to be "excessive" or "confiscatory" is particularly problematic in Atmos' case. In my view, Mr. Majoros' reliance on the Lindheimer decision is severely misplaced.

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Q. WHY DO YOU SAY THAT EXCESSIVE DEPRECIATION IS A

1	•	RECURRENT THEME IN MR. MAJOROS' TESTIMONIES?
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3	A.	In response to an information request in another proceeding, Mr. Majoros
4		has provided several prior testimonies. These included three testimonies
5		in New Jersey, one in Oklahoma (not really testimony, but more of a
6		position paper and a stipulation agreement), one in Kentucky, two in
7		Kansas, one in Vermont and one in Nevada. The following statements
8		were made in these testimonies:
9		
10		"Yes. In my opinion, the Company's depreciation proposal is
11		unreasonable. It will produce excessive depreciation in this rate
12		case and unnecessarily increase the revenue requirement." 15
13		"Yes. In my opinion, the Company's depreciation proposal is
14		unreasonable. It will produce excessive depreciation expense in
15		this rate case and unnecessarily increase the revenue
16		requirement." ¹⁶
17		"The Company's proposal produces excessive depreciation
18		because it includes an unsupportable and unreasonable request for
19 20		negative net salvage in its depreciation rate calculations."17
21		"The Company filed a depreciation study conducted by Mr. Spanos
22		indicating that the existing depreciation rates are excessive. Mr.
23		Spanos proposed a depreciation rate reduction." Yes, I agree that the Company's depreciation rates are excessive." 18
24		"The proposals are unreasonable because they produce excessive

¹⁵ Direct Testimony of Michael J. Majoros, Jr. BPU Docket No. ER02100724, Rockland Electric Company,

depreciation and thereby unnecessarily increase the revenue requirement." 19

page 3, line 4.

16 Direct Testimony of Michael J. Majoros, Jr. BPU Docket No. ER02080506, Jersey Central Power &

25 26

Light Company, page 2, line 18.

17 Direct Testimony of Michael J. Majoros, Jr. BPU Docket No. GR02040245, Elizabethtown Gas

Company, page 5, line 28.

18 Direct Testimony of Michael J. Majoros, Jr. Kentucky Public Service Commission Docket No. 2002-

00145, Columbia Gas of Kentucky, page 7, lines 16 and 19.

19 Direct Testimony of Michael J. Majoros, Jr. Kansas Corporation Commission Docket No. 02-MDWG-922-RTS, Midwest Energy, Inc., page 2, line 13.

1 2 3 4 5 6 7		"Yes. In my opinion, the Company's depreciation proposal is unreasonable. It will produce excessive depreciation in this rate case and unnecessarily increase the revenue requirement." The Company's depreciation proposal is unreasonable because the proposal produces excessive depreciation expense which will, in turn, be charged to ratepayers in this rate case."
8		It should be apparent that the only non-excessive depreciation rate is one
9		proposed by Citizens. I implore the Commission to view Mr. Majoros'
10		testimony on the subject of excessive depreciation with suspicion.
11		
12	Q.	DID THE REGULATORY BODIES ASSOCIATED WITH THE ABOVE
13		CASES AGREE WITH MR. MAJOROS?
14		
15	A.	I could find no Order that supported the contention by Mr. Majoros that the
16		respective company's depreciation rates were excessive.
17		
18		SIMULATED PLANT RECORD ("SPR") ANALYSIS
19		
20	Q.	MR. MAJOROS HAS TESTIFIED THAT HE HAS DETERMINED A
21		"GLITCH" IN YOUR ANALYSIS FOR THOSE ACCOUNTS USING THE
22		SPR METHODOLOGY. HE REFERS TO IT AS AN "UNEXPLAINED
23		DISCREPANCY". CAN YOU EXPLAIN?
24		

Direct Testimony of Michael J. Majoros, Jr. State of Nevada Public Utilities Commission Docket No. 01-11031, Sierra Pacific Power Company, page 3, line 11.
 Direct Testimony of Michael J. Majoros, Jr. Kansas Corporation Commission Docket No. 02-0391, Kansas Gas Service, page 2, line 22 and page 3, line 1.

Yes. Let me first say that these comments intrigue me as they suggest a lack of understanding regarding unaged data, life analysis of unaged data and depreciation rate calculations using unaged data. Mr. Majoros acknowledges that the SPR method can be utilized in the case where the age of retirements is not known.²² He further acknowledges that the SPR method can be used to develop the age distribution of surviving assets, which in turn can be used to calculate the estimated remaining life of the simulated (aged) balances.²³ He asserts that I have used a different lowa curve and average service life to simulate age, contrasted with the lowa curve and average service life that was used for developing the remaining life and subsequent depreciation rate. He is only partially correct, as I have used the same lowa curve for each calculation, but I have used different average service lives and this was done for a reason.

A.

Q. PLEASE EXPLAIN.

A. The methodology of the SPR method depends on the application of survivor ratios (in the case of the SPR Balances method) to the sequence of historical additions, producing simulated balances. These simulated balances are compared to actual balances for various periods of history.

By varying the average service life for each dispersion pattern, and using a minimum sum of squared differences criterion (between the actual

²³ Ibid, page 41, lines 21-23.

²² Majoros Direct Testimony, page 41, line 8.

balance and the simulated balance), the best match to history can be determined. Using different analysis periods can help to identify trends. Blending these historical indications with future expectations as well as giving due recognition to the type of asset being added and retired results in the lowa curve and average service life selections of my depreciation study, which have not been contested by Mr. Majoros in this proceeding. I then take the information contained in these analyses one step further, and this is the "unexplained discrepancy" that Mr. Majoros claims to have identified.

Q. WHAT IS THIS ADDITIONAL STEP?

A.

The appropriate lowa curve has been selected for each asset category. The next step is to use the information contained in our analysis to develop a set of aged surviving balances for use in the depreciation rate calculation. By using a one-year band analysis, I can determine the precise average service life for each Iowa curve that results in a simulated balance equal to the actual balance at September 30, 2002. That is why Mr. Majoros asserts that I have used different average lives. In fact, I have only used a different average service life for a specific purpose, and that purpose is the development of the very best estimate of the age distribution of surviving balances. My review of literature related to the SPR method of life analysis could find no requirement that the same curve

and average service life as developed from an historical analysis be used to simulate the ageing of past additions. My use of a different average service life for ageing results in a more accurate distribution of aged surviving balances.

RETROACTIVE APPLICATION OF THE ELG PROCEDURE

Q. WHAT IS MR. MAJOROS' POSITION WITH RESPECT TO THE USE OF THE ELG PROCEDURE?

A. Mr. Majoros claims that "retroactive application of ELG leads to a large initial increase in depreciation due to the prior use of the BG/ALG procedure."²⁴ His conclusion is that such a change should be made on a going-forward basis.

Q. IS THIS A VIABLE ARGUMENT?

I think not. My understanding of the word "retroactive" refers to "extending in scope or effect to a prior time" or "made effective as of a date prior to enactment, promulgation or imposition". Under this definition, I am having trouble discerning how my application of the ELG procedure could be considered retroactive, as I have changed <u>no prior</u> recording or

Majoros testimony, page 17, line 2.
 Webster's New Collegiate Dictionary

accumulation of depreciation expense. Ignoring, for the moment, net salvage, I have used the same undepreciated amounts ("future accruals") as Mr. Majoros and have asked for *prospective* use of my recommended depreciation rates.

Q. DO YOU HAVE ANY OTHER COMMENTS REGARDING MR.

MAJOROS' TESTIMONY IN THE ELG PROCEDURE?

A.

Yes. Let me begin with his statement at page 18, line 4: "From a theoretical standpoint ELG has the benefit of providing a more precise allocation cost assuming perfect foresight". Mr. Majoros neglects to admit that the ALG procedure suffers the same infirmity if the curve/average life selection is wrong. In either instance, the first part of the statement is true. ELG does provide a more precise allocation of cost. Mr. Majoros goes on to state that the ELG procedure requires annual rate changes. This is just not so. As additions and retirements are made to each asset category, the ELG depreciation rate changes very little from period to period. Next, Mr. Majoros asserts that ELG is not necessary. It appears that his only argument is that ELG will produce a depreciation expense increase. It is abundantly evident that Mr. Majoros is "depreciation expense increase averse". That, in and of itself, is insufficient reason to reject a better cost allocation process. Mr. Majoros goes on to argue my application of ELG to all prior vintages produces a composite remaining

life for those vintages which is inconsistent with actual past depreciation practices. His proposal does the same, as it is predicated on a new set of parameters (lowa curve and average service life). Finally, he asserts that my implementation proposal creates a significant depreciation reserve deficiency. A review of Rebuttal Exhibit DSR-4 demonstrates that there is no "significant depreciation reserve deficiency". In fact, there is a modest surplus, as the book reserve (Column [5]) exceeds the theoretical reserve (Column [4]). These arguments lack any substantive merit.

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ASSET RETIREMENT OBLIGATIONS

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12 Q. WHAT ARE THE PROVISIONS OF ORDER NO. 631?

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14 As described in the Order's title, Order No. 631 provides guidance and A. 15 direction with respect to the accounting, financial reporting and rate filing requirements of Asset Retirement Obligations ("AROs") defined for financial 16 reporting purposes in SFAS No. 143. In short, Order No. 631 amended the 17 various USOA's promulgated by the FERC, added certain new accounts to 18 record ARO's, asset retirement costs ("ARCs")27 and accretion expense. 19 Contrary to Mr. Majoros' interpretation, Order No. 631 did not address the 20 21 accounting for non-legal obligations, as clearly demonstrated by the 22 following two statements:

23

Majoros Testimony, page 18, line 13.

²⁷ ARCs are the offsetting assets to AROs'.

1 2 3 4		"The Commission did not propose any changes to its existing accounting requirements for cost of removal for non-legal retirement obligations." 28
5 6 7 8 9 10 11 12		"The <u>accounting</u> for removal costs that do not qualify as legal retirement obligations falls outside the scope of this rule. The Commission is aware that there is an ongoing discussion in the accounting community as to whether the cost of removal should be considered as a component of depreciation. However, this issue is beyond the scope of this rule and we are not convinced that there a need to fundamentally change <u>accounting concepts</u> at this time" (Emphasis added)
14		This calls into question the underlying premise of Mr. Majoros' testimony
15		concerning Order No.631 and Statement of Financial Accounting
16		Standards ("SFAS") No. 143. I do not reach the same conclusion that
17		SFAS No. 143 "unbundles" net salvage from depreciation rates. Nothing
18		could be further from the truth.
19		
20	Q.	IN YOUR OPINION HAS ATMOS RECOGNIZED ITS GAAP
21		OBLIGATION TO RECORD THE REGULATORY LIABILITY TO ITS
22		CUSTOMERS FOR NON-ARO ASSETS?
23		
24	A.	While that is probably a better question for Atmos' auditors, there is no
25		GAAP requirement detailing where regulatory assets and liabilities are to
26		be recorded or recognized. As I read SFAS No. 143, it is evident that the
27		FASB understood this issue and allowed some flexibility regarding the
28		accounting. Mr. Maioros is just not correct in his interpretation

²⁸ Order No. 631, Paragraph 36. ²⁹ Ibid, Paragraph 37.

1		
2	C	D. IS MR MAJOROS ALSO INCORRECT REGARDING FERC ORDER NO.
3		631?
4		
5	A.	I believe Mr. Majoros has also reached an incorrect conclusion regarding
6		Order No. 631. Order No 631 merely established some new accounts in
7		which to record activities and transactions relative to qualifying asset
8		retirement obligations. There is no requirement to unbundled net salvage
9		from the depreciation rates. FERC merely iterated its long standing
10		position that depreciation rates under its jurisdiction require adequate
11		support and documentation. Separate underlying records are required for
12		net salvage components, but separate accounting and accounts are NOT
13		required. Also, there is no need for the elaborately worded "going-forward
14		allowance", which is nothing more that another attempt to have cash
15		accounting approved by this Commission. I urge the Commission to
16		remain steadfast in supporting accrual based depreciation accounting.
17		
18		SUMMARY
19		
20	Q.	PLEASE SUMMARIZE YOUR REBUTTAL TESTIMONY.
21		

A. My rebuttal testimony demonstrates the severity of Mr. Majoros'
depreciation proposal. I further demonstrate that cash accounting is

1		inconsistent with accounting principles and regulatory equity. I have
2		demonstrated in both my direct and rebuttal testimony the benefits of the
3		ELG procedure. I have shown where Mr. Majoros has been misleading or
4		attempted to create an issue that does not exist. The Atmos request
5		regarding depreciation in this proceeding is fair and reasonable to all
6		parties and should be endorsed by the Commission.
7		
8	Q.	DOES THIS COMPLETE YOUR REBUTTAL TESTIMONY?
9		
10	A.	Yes. The fact that I have not addressed specific comments or portions of
11		Mr. Majoros' testimony does not signify my agreement.
12		

VERIFICATION

STATE OF TEXAS)
COUNTY OF DALLAS) ss

DONALD S. ROFF, being duly sworn upon his oath, deposes and states that he is a Director with the public accounting firm of Deloitte & Touche LLP; that he has read and is familiar with the foregoing Rebuttal Testimony filed herewith; and that the statements made therein are true to the best of his knowledge, information and belief.

Donald S. Roff

Subscribed and sworn before me this 12th day of November 2003.

NOTARY PUBLIC

My Commission Expires:



Atmos Energy Corporation - Kansas Properties Comparison of Annual Depreciation Amounts By Cause

REBUTTAL EXHIBIT DSR-1

[13] Inter-	Relations \$	(106,257)	(92,536)	(547,728)	174,380	(575,141)
[12]	Reserve	089'66	(83,696)	(2,590)	77,694	91,088
E	S S	(68,673)	14,590	800,131	(27,467)	718,581
[10]	Net Salv.	45,969	18,165	644,024	(26,736)	681,422
[6]	Difference \$	(183,233)	(44,595)	(1,989,293)	150,889	(2,066,232)
[8]	Amount \$	151,184	67,931	3,100,900	873,051	4,193,066
E	Rate %	3.67	0.97	2.12	10.40	2.53
9	Amount \$	334,417	112,526	5,090,193	722,162	6,259,298
ত	Rate %	8.12	1.60	3.49	8.60	3.78
	Annual Amount \$	215,661	228,536	4,627,058	795,921	3.54 5,867,176
ල :	Existing Rate %	5.24	3.25	3.17	9.48	
[2]	9/30/2002 Balance \$	4,119,591	7,031,874	146,055,044	8,395,101	165,601,610
Ξ	Function	Gathering Plant	Transmission Plant	Distribution Plant	General Plant	Total Gas Plant

4,404,952 (1,854,346)

392,122

211,886

211,886

ATMOS ENERGY CORPORATION - KANSAS (DIV. 80 & 81) Book Depreciation Study as of September 30, 2002 Effect of Net Salvage on Annual Amounts

REBUTTAL EXHIBIT DSR-2

[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]
Account		9/30/2002		Annual	ASL	NI-A	A
<u>Number</u>	Description	Balance	ASL	Amount	Weight	Net Salv	Annual
	Section 1	\$	Yrs	\$	vveignt	Salv %	Amount \$
	GATHERING PLANT	•	,,,	•		70	Ψ
325.4	Rights of Way	499	37.0	13	18,463	_	13
328.0	Field M&R Station Structures	17,677	16.0	1,105	282,832	_	1,105
	Field Lines	3,125,909	17.0	183,877	53,140,453	(25.0)	229,846
333.0	Field Compressor Station Equipment	256,809	12.0	21,401	3,081,708	-	21,401
334.0	Field M&R Station Equipment	718,697	14.0	51,336	10,061,758	-	51,336
	Total Gathering Plant	4,119,591	16.2	257,732	66,585,214	•	303,701
	TD 41101100101101					•	
200.0	TRANSMISSION PLANT						
	Structures and Improvements	179,283	45.0	3,984	8,067,735	-	3,984
	Mains	3,633,077	50.0	72,662	181,653,850	(25.0)	90,827
308.0	Compressor Station Equipment	2,568,429	40.0	64,211	102,737,160	-	64,211
	M&R Station Equipment	486,843	30.0	16,228	14,605,290	-	16,228
3/1.0	Other Equipment	164,242	25.0	6,570	4,106,050	-	6,570
	Total Transmission Plant	7,031,874	44.3	163,654	311,170,085		181,819
	DISTRIBUTION PLANT						
375.0	Structures and Improvements	101,010	35.0	0.000	0.505.050	(5.0)	
	Mains	81,046,107		2,886	3,535,350	(5.0)	3,030
	M&R Station Equipment	2,611,086	50.0 30.0	1,620,922	4,052,305,350	(25.0)	2,026,153
	City Gate Equipment	1,802,021	30.0	87,036	78,332,580	-	87,036
	Services	38,543,765	40.0	60,067	54,060,630	(00.0)	60,067
	Meters	4,632,251	40.0 25.0	963,594	1,541,750,600	(30.0)	1,252,672
	Meter Installations	12,896,251	25.0 25.0	185,290	115,806,275	-	185,290
	House Regulators	1,977,734	30.0	515,850	322,406,275	-	515,850
385.0	Industrial M&R Station Equipment	1,436,234	30.0	65,924	59,332,020	-	65,924
387.0	Other Equipment	1,008,585	20.0	47,874 50,429	43,087,020	-	47,874
	Total Distribution Plant	146,055,044	43.1	3,599,874	20,171,700 6,290,787,800		50,429
			70.1	0,000,014	0,290,767,000	-	4,294,327
	GENERAL PLANT						
390.0	Structures and Improvements	2,016,210	35.0	57,606	70,567,350	-	57,606
391.0	Office Furniture and Equipment	554,006	20.0	27,700	11,080,120	_	27,700
	Transportation Equipment	1,373,864	6.0	228,977	8,243,184	10.0	206,080
393.0		24,229	20.0	1,211	484,580	-	1,211
394.0	Tools, Shop and Garage Equipment	808,250	20.0	40,413	16,165,000	-	40,413
	Laboratory Equipment	96,856	35.0	2,767	3,389,960	_	2,767
396.0	Power Operated Equipment	921,040	12.0	76,753	11,052,480	5.0	72,916
397.0	Communication Equipment	401,573	15.0	26,772	6,023,595		26,772
398.0	Miscellaneous Equipment	517,803	20.0	25,890	10,356,060	-	25,890
399.0	Other Tangible Property	1,681,270	8.0	210,159	13,450,160	_	210,159
	Total General Plant	8,395,101	18.0	698,249	150,812,489	-	671,513
	Total Depreciable Plant	165,601,610	41.2	4,719,508	6,819,355,588		5,451,361
			•			=	731,852
						-	

ATMOS ENERGY CORPORATION - KANSAS (DIV. 80 & 81)
Book Depreciation Study as of September 30, 2002
Effect of Procedure on Annual Amounts

REBU	TTAL	EXHIB	IIT	DS	R-3
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[1]	[2]	[3]	[4]	[5]	[6]	[7]
Account		9/30/2002	ALG - WL	Annual	ELG - WL	Annual
Number	Description	Balance	Rates	Amount	Rates	Amount
	The state of the s	\$	<u>/\d\cos</u>	\$	<u>/(ales</u>	\$
	GATHERING PLANT	•	70	Ψ	70	Ψ
325.4		499	2.70	13	2.53	13
328.0	Field M&R Station Structures	17,677	6.25	1,105	3.91	691
	Field Lines	3,125,909	7.35	229,754	5.79	180,990
333.0	Field Compressor Station Equipment	256,809	8.33	21,392	6.56	16,847
	Field M&R Station Equipment	718,697	7.14	51,315	5.06	36,366
	Total Gathering Plant	4,119,591	7.37	303,580		234,907
	•				- 0 –	204,007
	TRANSMISSION PLANT					
366.0	Structures and Improvements	179,283	2.22	3,980	2.27	4,070
367.0	Mains	3,633,077	2.50	90,827	2.78	101,000
368.0	Compressor Station Equipment	2,568,429	2.50	64,211	2.74	70,375
369.0	M&R Station Equipment	486,843	3.33	16,212	3.28	15,968
371.0	Other Equipment	164,242	4.00	6,570	3.03	4,977
	Total Transmission Plant	7,031,874	2.59	181,799	2.79	196,389
			-			
	DISTRIBUTION PLANT					
	Structures and Improvements	101,010	3.00	3,030	2.97	3,000
	Mains	81,046,107	2.50	2,026,153	2.77	2,244,977
	M&R Station Equipment	2,611,086	3.33	86,949	3.55	92,694
	City Gate Equipment	1,802,021	3.33	60,007	3.48	62,710
	Services	38,543,765	3.25	1,252,672	4.24	1,634,256
	Meters	4,632,251	4.00	185,290	3.97	183,900
	Meter Installations	12,896,251	4.00	515,850	5.47	705,425
	House Regulators	1,977,734	3.33	65,859	3.45	68,232
385.0	Industrial M&R Station Equipment	1,436,234	3.33	47,827	4.00	57,449
387.0	Other Equipment	1,008,585	5.00 _	50,429	4.12	41,554
	Total Distribution Plant	146,055,044	2.94	4,294,066	3.49	5,094,197
	OFFICE ALL DI ALIE				_	
200.0	GENERAL PLANT					
	Structures and Improvements	2,016,210	2.86	57,664	3.17	63,914
391.0	Office Furniture and Equipment	554,006	5.00	27,700	5.26	29,141
392.0	Transportation Equipment	1,373,864	15.00	206,080	10.98	150,850
204.0	Stores Equipment	24,229	5.00	1,211	5.43	1,316
205.0	Tools, Shop and Garage Equipment	808,250	5.00	40,413	5.52	44,615
393.0	Laboratory Equipment	96,856	2.86	2,770	3.05	2,954
	Power Operated Equipment	921,040	7.92	72,946	7.95	73,223
	Communication Equipment	401,573	6.67	26,785	6.71	26,946
	Miscellaneous Equipment	517,803	5.00	25,890	7.47	38,680
388.0	Other Tangible Property	1,681,270	12.50 _	210,159	12.64	212,513
	Total General Plant	8,395,101	8.00	671,618	7.67	644,151
	Total Depreciable Plant	165,601,610	3.29	5,451,063	3.73	6,169,643
						718,580

ATMOS ENERGY CORPORATION - KANSAS (DIV. 80 & 81) Book Depreciation Study as of September 30, 2002

REBUTTAL EXHIBIT DSR-4

Effect of Reserve Position on Annual Amounts

[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]
Account		9/30/2002	Theoretical	Book	Remaining	Reserve	Annual
<u>Number</u>	<u>Description</u>	Balance	Reserve	Reserve	Life	Amort.	Rate
		\$	\$	\$	Yrs		
	GATHERING PLANT						
325.4	Rights of Way	499	428	266	5.56	29	5.84
328.0	Field M&R Station Structures	17,677	14,313	14,481	4.86	(35)	(0.20)
332.0	Field Lines	3,125,909	3,026,565	2,562,475	4.86	95,492	3.05
	Field Compressor Station Equipment	256,809	178,797	168,432	4.63	2,239	0.87
334.0	Field M&R Station Equipment	718,697	540,275	530,676	4.91	1,955	0.27
	Total Gathering Plant	4,119,591	3,760,378	3,276,330		99,680	2.42
	TRANSMISSION PLANT						
366.0	Structures and Improvements	179,283	30,491	177,933	36.59	(4,030)	(2.25)
	Mains	3,633,077	1,401,983	2,732,032	31.10	(42,767)	(1.18)
	Compressor Station Equipment	2,568,429	915,700	1,670,414	23.52	(32,088)	(1.25)
	M&R Station Equipment	486,843	229,770	414,387	16.12	(11,453)	(2.35)
	Other Equipment	164,242	123,131	68,208	8.27	6,641	4.04
	Total Transmission Plant	7,031,874	2,701,075	5,062,974		(83,696)	(1.19)
	DISTRIBUTION PLANT						
	Structures and Improvements	101,010	55,231	42,662	16.94	742	0.73
	Mains	81,046,107	27,094,358	29,351,712	33.10	(68,198)	(0.08)
	M&R Station Equipment	2,611,086	1,026,052	1,219,658	17.10	(11,322)	(0.43)
	City Gate Equipment	1,802,021	715,100	841,698	17.32	(7,309)	(0.41)
	Services	38,543,765	11,981,700	12,123,137	23.32	(6,065)	(0.02)
	Meters	4,632,251	2,074,626	2,181,186	13.90	(7,666)	(0.17)
	Meter Installations	12,896,251	1,962,393	1,576,886	15.49	24,887	0.19
	House Regulators	1,977,734	802,225	1,042,531	17.24	(13,939)	(0.70)
	Industrial M&R Station Equipment	1,436,234	383,115	76,115	18.35	16,730	1.16
387.0	Other Equipment	1,008,585	636,217	12,355	8.97	69,550	6.90
	Total Distribution Plant	146,055,044	46,731,017	48,467,940	-	(2,590)	(0.00)
	GENERAL PLANT						
390.0	Structures and Improvements	2,016,210	401,178	570,449	25.26	(6,701)	(0.33)
	Office Furniture and Equipment	554,006	264,477	175,729	9.93	8,937	1.61
	Transportation Equipment	1,373,864	966,283	1,049,128	1.79	(46,282)	(3.37)
	Stores Equipment	24,229	9,655	12,243	11.08	(234)	(0.96)
	Tools, Shop and Garage Equipment	808,250	323,437	267,008	10.87	5,191	0.64
	Laboratory Equipment	96,856	40,871	90,026	18.95	(2,594)	(2.68)
	Power Operated Equipment	921,040	476,929	476,271	5.43	121	0.01
	Communication Equipment	401,573	182,228	123,651	8.14	7,196	1.79
	Miscellaneous Equipment	517,803	58,713	50,084	11.87	727	0.14
	Other Tangible Property	1,681,270	861,613	431,873	3.86	111,332	6.62
223.0	Total General Plant	8,395,101	3,585,384	3,246,462		77,694	0.93
	Total Depreciable Plant	165,601,610	56,777,854	60,053,706	-	91,088	0.06
					•		

ATMOS ENERGY CORPORATION - KANSAS	
RATION -	Activity
CORPO	Addition
ENERGY	of Annual
ATMOS E	Analysis o

REBUTTAL EXHIBIT DSR-5

[8]	Totals	2,273	33,711	15,583,009	14,587,496	155,506	10,947,468	41,309,463	8,261,893	6,259,298	4,404,953	1,854,345
E	Additions	1	•	1,931,630	2,436,503	50,648	700,490	5,119,271	rage =	ion Expense	c. Expense	
[6]	Additions	1	1	4,136,066	2,926,644	•	1,344,294	8,407,004	Five Year Average =	D&T Depreciation Expense	Majoros Deprec. Expense	DECREASE
9	Additions	•	•	2,434,621	2,591,397	90,702	2,159,798	7,276,518				
4	2001 Additions	•	33.711	3.671,304	3,846,162	. •	4,568,227	12.119.404				
[3]	2002 Additions	2.273	i i '	3,409,388	2,786,790	14,156	2.174,659	8.387,266		stints.	Base	
[2]	Description	Gathering - Lines	Transmission - Mains	Distribution - Mains	380 0 Distribution - Services	Distribution - Meters	382 0 Distribution - Meter Install.	Totals		Analysis Rase Includes 6 Lamest Accounts	Commission Nearly 87% of Denreciable Base	
E	Account Number	332.0	367.0	376.0	380.0	381.0	382.0			Analysis B	Comprisin	

REBUTTAL EXHIBIT DSR-6

SHORTFALL DUE TO CASH ACCOUNTING

1949	[1]	[2] Deprec.	[3] Investment	[4] COR	[5] Actual
1949	<u>Year</u>	Base \$	Accrual \$	Accrual \$	COR \$
1950			•	•	•
1951					
1952		•			
1953			2212		
1954 4,000.0 80.0 8.7 1955 4,000.0 80.0 8.7 1956 4,000.0 80.0 8.7 1957 4,000.0 80.0 8.7 1959 4,000.0 80.0 8.7 1960 4,000.0 80.0 8.7 1961 4,000.0 80.0 8.7 1962 4,000.0 80.0 8.7 1963 4,000.0 80.0 8.7 1965 4,000.0 80.0 8.7 1966 4,000.0 80.0 8.7 1967 4,000.0 80.0 8.7 1968 4,000.0 80.0 8.7 1969 4,000.0 80.0 8.7 1970 4,000.0 80.0 8.7 1971 4,000.0 80.0 8.7 1971 4,000.0 80.0 8.7 1972 4,000.0 80.0 8.7 1973 4,000.0 80.0 8.7 1974 4,000.0 80.0 8.7 1975 4,000.0 80.0 8.7 1976 4,000.0 80.0 8.7 1977 4,000.0 80.0 8.7 1978 4,000.0 80.0 8.7 1979 4,000.0 80.0 8.7 1988 4,000.0 80.0 8.7 1989 4,000.0 80.0 8.7 1989 4,000.0 80.0 8.7 1989 4,000.0 80.0 8.7 1989 4,000.0 80.0 8.7 1989 4,000.0 80.0 8.7 1981 4,000.0 80.0 8.7 1982 4,000.0 80.0 8.7 1983 4,000.0 80.0 8.7 1984 4,000.0 80.0 8.7 1985 4,000.0 80.0 8.7 1986 4,000.0 80.0 8.7 1987 4,000.0 80.0 8.7 1989 4,000.0 80.0 8.7 1989 4,000.0 80.0 8.7 1989 4,000.0 80.0 8.7 1989 4,000.0 80.0 8.7 1999 4,000.0 80.0 80.0 8.7 1999 4,000.0 80.0 80.0 8.7 1999 4,000.0 80.0 80.0 8.7 1999 4,000.0 80.0 80.0 8.7 1999 4,000.0 80.0 80.0 8.7 1999 4,000.0 80.0 80.0 8.7 1999 4,000.0 80.0 80.0 80.0 80.0 80.0 80.0 80.					
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In the Matter of the Application of Atmos Energy Corporation for Adjustment of its Natural Gas Rates in the State of Kansas)

DOCKET NO. 03-ATMG-107-RTS

DIRECT TESTIMONY

OF

DONALD S. ROFF

DELOITTE & TOUCHE LLP

ON BEHALF OF

ATMOS ENERGY

DIRECT TESTIMONY

1		OF
2		DONALD S. ROFF
3 4		ATMOS ENERGY DOCKET NO. 03-ATMGRTS
5		
6	Q.	STATE YOUR NAME, OCCUPATION AND BUSINESS ADDRESS.
7		
8	A.	My name is Donald S. Roff and I am a Director with the public accounting firm of Deloitte
9		& Touche LLP. My business address is JPMorgan Chase Tower, Suite 1600, 2200 Ross
10		Avenue, Dallas, Texas 75201-6778.
11		
12	Q.	PLEASE DESCRIBE YOUR BACKGROUND AND EXPERIENCE.
13		
14	A.	My background and experience are described on Exhibit DSR-1.
15		
16	Q.	HAVE YOU EVER TESTIFIED BEFORE THIS OR ANY OTHER REGULATORY BODY?
17		
18	A.	Yes. A list of my regulatory appearances is contained on Exhibit DSR-2.
19		
20	Q.	WHAT IS THE PURPOSE OF YOUR TESTIMONY?
21		

1	A.	I have been asked by Atmos Energy Corporation ("Atmos" or "the Company") to conduct a
2		depreciation study of its Kansas Properties and to provide recommendations regarding
3		depreciation rates and depreciation accounting practices. Exhibit DSR-3 is the report of
4		my findings and recommendations.

5

6 Q. PLEASE DESCRIBE EXHIBIT DSR-3.

7

8 A. Exhibit DSR-3 presents a discussion of depreciation accounting principles, presents the
 9 depreciation study methodology, summarizes the results and itemizes recommendations.

10

11 Q. WHAT WERE YOUR FINDINGS AND RECOMMENDATIONS?

12

13 A. I found that changes were needed to the mortality characteristics (average service life,
14 retirement dispersion and net salvage allowance) of a number of asset categories
15 resulting in revised depreciation rates. A summary comparison of the existing and
16 recommended depreciation rates follows:

17

18

19	<u>Function</u>	Existing	Recommended
20		%	%
21	Gathering	5.24	8.12
22	Transmission	3.25	1.60
23	Distribution	3.17	3.49
24	General	9.48	8.60

1		Total Gas Plant	3.54	3.78	
2					
3	Q.	HAVE YOU QUANTIFIE	D THE IMPACT ON A	NNUAL DEPRECIATION EX	PENSE DUE
4		TO YOUR RECOMMENI	DED CHANGES?		
5					
6	A.	Yes. The above summar	ry is taken from Sched	lule 1 of Exhibit DSR-3. Usino	g September
7		30, 2002 depreciable pla	nt in service balances	, the effect of the above chang	ges in
8		depreciation rates results	in an increase in ann	ual depreciation of about \$39	2,000, or
9		nearly 7%.			
10					
11	Q.	WHAT ARE THE PRIMA	RY FORCES THAT [PRIVE THIS CHANGE IN ANI	NUAL
12		DEPRECIATION EXPEN	ISE?		
13					
14	A.	In one sense, it is difficult	to isolate specific fac	tors due to the fact that the ex	isting
15		mortality characteristics a	are not known. The in	crease in annual depreciation	expense is
16		affected by implied chang	ges in average service	life; by implied changes in re	tirement
17		dispersion; by the deprec	iation procedure utiliz	ed; by implied changes in net	salvage
18		allowances; and the resp	ective reserve position	n for each asset category. Ga	thering Plant
19		is affected by the relative	ly short recovery perio	d for the net un-depreciated in	nvest m ent.
20		These facilities are being	phased out as the ga	s supply at these locations dw	indles. The
21		Transmission, Distribution	n and General Plant fu	ınctional categories are impac	ted by a
22		combination of these fact	ors		

23

1	Q.	HAVE YOU ATTEMPTED TO QUANTIFY THE EFFECT OF EACH OF THESE
2		FACTORS ON ANNUAL DEPRECIATION EXPENSE?
3		
4	A.	Yes, but only in the very broadest sense. For Gathering Plant, the effect on annual
5		depreciation expense of the shorter recovery period is approximately \$119,000. For
6		Transmission, Distribution and General Plant, the combined effects of the various factors
7		mentioned above are an increase of approximately \$273,000.
8		
9	Q.	WHAT ARE MORTALITY CHARACTERISTICS?
10	A.	Mortality characteristics are the basic parameters necessary to calculate
11		depreciation rates. They encompass average service life, retirement dispersion
12		(the various ages at which assets within a group retire) defined by lowa type
13		curves, and net salvage allowance. Net salvage is the difference between salvage
14		and cost of removal. If cost of removal exceeds salvage, negative net salvage
15		occurs.
16		
17	Q.	WHAT IS DEPRECIATION?
18	A.	The most widely recognized accounting definition of depreciation is that of the
19		American Institute of Certified Public Accountants, which states:
20 21 22 23 24		Depreciation accounting is a system of accounting which aims to distribute the cost or other basic value of tangible capital assets, less salvage (if any), over the estimated useful life of the unit (which may be a group of assets) in a systematic and rational manner. It is a process of allocation, not of valuation. 1

1 **Q**.

¹ Accounting Research Bulletin No. 43, Chapter 9, Paragraph 5 (June 1953).

2 Q. WHAT IS THE SIGNIFICANCE OF THIS DEFINITION?

This definition of depreciation accounting forms the accounting framework under which my depreciation study was conducted. Several aspects of this definition are particularly significant. Salvage (net salvage) is to be recognized. The allocation of costs is over the useful life of the assets. Grouping of assets is permissible.

Depreciation accounting is not a valuation process. And the cost allocation must be both systematic and rational.

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12 A.

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10 Q. PLEASE EXPLAIN THE IMPORTANCE OF THE TERMS "SYSTEMATIC AND RATIONAL".

Systematic implies the use of a formula. The formula used for calculating the recommended depreciation rates is shown on Page 13 of Exhibit 3. Rational means that the pattern of depreciation, in this case, the depreciation rate itself, must match either the pattern of revenues produced by the asset, or match the consumption of the asset. Since revenues are determined through regulation (versus produced by the asset), asset consumption is directly measured and reflected in the calculation of depreciation rates. This measurement of asset consumption is accomplished by conducting a depreciation study.

20

21 Q. ARE THERE OTHER DEFINITIONS OF DEPRECIATION?

1 A. Yes. The Federal Energy Regulatory Commission ("FERC") Uniform System of 2 Accounts provides a series of definitions related to depreciation as shown on Page 3 3 of Exhibit DSR-3. These definitions of depreciation make reference to asset 4 consumption, and therefore relate very well to the accounting framework for 5 depreciation. These definitions form the regulatory framework under which my 6 depreciation study was conducted.

7

8 Q. WHY ARE YOU RECOMMENDING REMAINING LIFE DEPRECIATION RATES?

9 A. Remaining life depreciation rates are recommended because such depreciation rates provide for full recovery of net investment adjusted for net salvage over the future useful life of each asset category. Use of the remaining life technique is consistent with the technique utilized in developing the existing depreciation rates.

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14 Q. HOW DOES YOUR **DEPRECIATION** STUDY **ASSET** RECOGNIZE 15 **CONSUMPTION?**

16 A. Asset consumption (retirement dispersion) is defined by the use of lowa type 17 curves and related average service lives.

18

19 **Q**. WHAT IS RETIREMENT DISPERSION?

20 A. Retirement dispersion merely recognizes that groups of assets have individual 21 assets of different lives, i.e., each asset retires at differing ages.

	dispersion is the scattering of retirements by age around the average service life
2	for each group of assets.

Q. PLEASE DESCRIBE HOW THESE ELEMENTS WERE DETERMINED AND UTILIZED IN YOUR DEPRECIATION STUDY.

A. A depreciation study consists of four distinct, yet related phases - data collection, analysis, evaluation and rate calculation. Data collection refers to the gathering of historical accounting information for use in the other phases. Company personnel were responsible for this effort. Analysis refers to the statistical processing of the data collected in the first phase. There are two separate analysis procedures, one for life, and one for salvage and cost of removal, and was conducted by Deloitte & Touche personnel. The evaluation phase incorporates the information developed in the data collection and analysis phases to determine the applicability of the historical relationships developed in these phases to the future, and was conducted jointly by Deloitte & Touche personnel and Company personnel. The rate calculation phase merely utilizes the parameters developed in the other phases in the computation of the recommended depreciation rates, and was accomplished by Deloitte & Touche personnel.

20 Q. PLEASE DISCUSS THE LIFE ANALYSIS PROCESS UTILIZED FOR 21 GATHERING, TRANSMISSION, DISTRIBUTION AND GENERAL PLANT.

A. Life analysis was conducted using two different approaches, depending upon the type of data available. Where the age of retirements was known, the Actuarial

Method of Life analysis was employed. In general, for actuarial analysis, retirement experience was collected for the period 1987 through 2002 updating the historical data files used for the prior depreciation study. These data were arrayed into a format suitable for life analysis. Life tables were developed and lowa type curves were fitted to the historical summaries.

Where the age of retirement was not known, the Simulated Plant Record ("SPR") Method of life analysis was utilized. The SPR method determines retirement dispersion and average service life combinations for various bands of years which best match the actual retirements and balances for each asset category. The simulated balances procedure consists of applying survivor ratios (portion surviving at each age) from lowa-type dispersion patterns in order to calculate annual balances, and then comparing the calculated balances with the actual balances for several periods, followed by statistical comparisons of differences in balances. The simulated retirements procedure is similar, except that the retirement frequency rates of the lowa patterns are utilized to calculate annual retirements, and the comparisons are to actual retirements rather than to balances. Tabulations of the best ranking curves were made and this became the starting point for the evaluation phase of my review. In most cases, retirement history for a thirty-year period was available.

- Q. PLEASE DESCRIBE THE LIFE ANALYSIS PHASE OF YOUR DEPRECIATION STUDY FOR TRANSMISSION, DISTRIBUTION AND GENERAL PLANT.
- A. Life analysis measures history and results in the determination of an estimate of average service life for each asset category. The actual analysis involves "converting" historical accounting data into mortality tables. In very simple terms, one is looking at the portion (or

percent) surviving at each age for every asset category. This is true for which aged accounting data are available.

Q. HOW IS THIS "CONVERSION" ACCOMPLISHED?

Because the age of retirement is known, as well as the age of the surviving balances, retirements of like ages are related to the asset amounts available to be retired at the same age. These retirement ratios are then related to the portion (percent) surviving at the beginning of each successive age, thus building what is known as the observed life table. When converted to a graphical format, this plot becomes the observed survivor curve. For example, let us assume that ten items are all placed in service in the same year. Further assume that one item is retired every year for the next ten years. The observed life table would be developed as follows:

			Retirement	Survivor	Life
<u>Age</u>	Retireme nts	Exposures	Ratio	Ratio	<u>Table</u>
C)				
1	1	10	10.0%	90.0%	100.%
2	1	9	11.1%	88.9%	90.0%
3	1	8	12.5%	87.5%	80.0%
4		7	14.3%	85.7%	70.0%
5		6	16.7%	83.3%	60.0%
6	-	5	20.0%	80.0%	50.0%
7	-	4	25.0%	75.0%	40.0%
8		3	33.3%	66.7%	30.0%
9		2	50.0%	50.0%	20.0%
10	1	1	100.0%	0.0%	10.0%
					0.0%
			ASL =		5.50

2

	Q.	WHAT IS	AN OBSERVED	SURVIVOR	CURVE?
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A. An observed survivor curve is a plot, or graph of the recorded retirement and survivor history as a function of age. This observed curve is essentially a graphical representation of history and is developed from the observed life table shown above.

6

7

Q. HOW IS THE OBSERVED CURVE USEFUL?

A. The observed curve is useful for two reasons. The area underneath the survivor curve is,
by definition, equal to average service life. First, if one could find a matching empirical
curve, such as the lowa-type curves, an estimate of average service life can be made.
Second, this estimate then becomes the starting point in the evaluation phase of a
depreciation study.

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Q. WHY DO YOU SAY THAT THIS OBSERVED CURVE IS ONLY THE STARTING POINT IN THE EVALUATION PROCESS?

A. The observed curve is only the starting point in the evaluation process because it only represents a pictorial view of history. In order to develop appropriate average service lives for depreciation rate calculation purposes, this history must be understood, and combined with expectations for the future.

20

21

Q. HOW IS THE SURVIVOR CURVE USED IN YOUR STUDY?

A. The observed survivor curve derived from the Company history is matched to generalized known curves, such as the lowa-type curves to provide an estimate of average service life.

Survivor curves were also utilized in the Simulated Plant Balances Method analysis process.

A.

Q. WHAT ARE IOWA-TYPE CURVES?

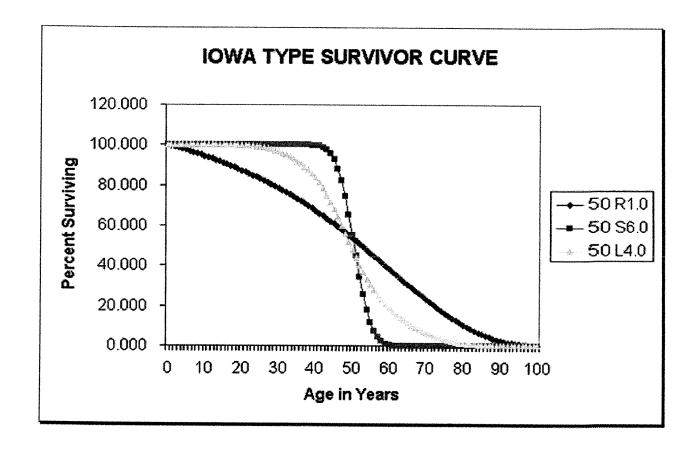
The lowa-type curves were devised empirically over 60 years ago by the Engineering Research Institute at what is now lowa State University to provide a set of standard definitions of retirement dispersion. Retirement dispersion merely recognizes that groups of assets have individual assets of different lives, i.e., each asset retires at differing ages. Retirement dispersion is the scattering of retirements by age around the average service life for each group of assets. Standard dispersion patterns are useful because they make calculations of the remaining life of existing property possible and allow life characteristics to be compared.

The Engineering Research Institute collected dated retirement information on many types of industrial and utility property and devised empirical curves that matched the range of patterns found. A total of 18 curves were defined. There were six left-skewed, seven symmetrical and five right-skewed curves, varying from wide to narrow dispersion patterns. The lowa-curve naming convention allows the analyst to relate easily to the patterns. The left-skewed curves are known as the "L series", the symmetrical as the "S series" and the right-skewed as the "R series." A number identifies the range of dispersion. A low number represents a wide pattern and a high number a narrow pattern. The combination of one letter and one number defines a unique dispersion pattern.

Q. HOW DO IOWA-TYPE CURVES PROVIDE AN ESTIMATE OF AVERAGE SERVICE LIFE?

lowa-type curves and average service lives are inseparable. That is, the shape of the survivor curve defines the average service life. As mentioned above, the area underneath the survivor curve is equal to average service life. Thus the average service life cannot be described without also defining an lowa-type curve, i.e., shape. An example is shown below:

A.



Q. WHAT DOES THIS CHART ILLUSTRATE?

- 1 A. This chart illustrates that lowa type survivor curves are composed of two elements, 2 the curve shape and the average service life. Each of the above survivor curves
- 3 (R1, S6 and L4) has the same average service life, in this case 50 years.

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5 Q. HOW WERE THE IOWA CURVE SHAPES AND AVERAGE SERVICE LIFE 6 SELECTIONS MADE?

A. Summaries of the individual asset category life analysis indications were prepared and discussed with Atmos personnel. Anomalies and trends were identified and engineering and operations input were requested where necessary. A single average service life and lowa curve was selected for each asset category reflecting the combination of the historical results and the additional information obtained from the engineering, accounting and operations personnel. This process is a part of the evaluation phase of the depreciation study.

14

15

Q. WHAT IS THE EVALUATION PHASE OF A DEPRECIATION STUDY?

16 A. The evaluation phase of a depreciation study combines the results of historical 17 analyses with information regarding the age of property retired, the age of property 18 surviving, knowledge of the types of assets surviving and being retired, and 19 Company experience and expectations, all coupled with the knowledge, 20 experience and judgment of the depreciation analyst. The goal is to give 21 recognition to these factors and their influence upon historical indications and the 22 applicability of such historical indications to plant surviving into the future. Both 23 Atmos and Deloitte & Touche personnel participated in this process.

2	Q.	WHAT TYPES OF INFORMATION ARE DISCERNED IN THIS PHASE OF THE
3		DEPRECIATION STUDY?

A. Information discerned includes the specific types of equipment being retired and added, the relative age of property surviving and retiring and Company plans and expectations regarding the property being evaluated, as well as forces influencing the salvage obtainable and removal costs associated with retired assets.

8

9 Q. CAN YOU PROVIDE SPECIFIC EXAMPLES OF THE INFORMATION THAT 10 WAS UTILIZED IN YOUR STUDY?

11 A. Yes. One example would be the effect of diminishing gas supplies for the
12 Gathering Plant and the use of an estimated future life span to reflect this
13 eventuality.

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Q. HOW WAS NET SALVAGE DETERMINED FOR GATHERING, TRANSMISSION, DISTRIBUTION AND GENERAL PLANT?

A. Historical retirement, salvage and cost of removal activity was collected and analyzed for the period 1992-2002 for each asset category. Both salvage and cost of removal were divided by retirements on an annual basis to develop salvage and cost of removal percentages. Shrinking and rolling band analyses were also conducted to illustrate any trends that might exist. A single net salvage percentage

1	was developed for each asset category reflecting the history, trends and Company
2	expectations.

4 Q. WHAT ARE SHRINKING AND ROLLING BAND ANALYSES?

A. There are two techniques to help discern trends in the historical data. A shrinking band begins with the full experience period and successively eliminates the oldest year's activity, thus illustrating trends as one moves through time. Rolling bands are useful because salvage, cost of removal and retirements are not always recorded in the same accounting period. Rolling band analysis combines activity for fixed periods, in the case of this study, three years. Three years was selected because virtually all salvage and cost of removal activity occurs within three years of the recording of the retirement. These three-year combined activities are then "rolled" forward one year at a time, and similarly aid in identifying trends as with the shrinking bands. Examples of rolling bands would be 1992-1994, 1993-1995, 1994-1996, etc.

Q. WERE THERE ANY TRENDS EVIDENT FROM THE DATA CONTAINED IN THE SALVAGE AND COST OF REMOVAL ANALYSYES?

19 A. In general, salvage is declining and cost of removal is increasing.

21 Q. WHY IS THIS THE CASE?

I believe that there are two reasons for this occurrence. First, both salvage and cost of removal are a function of the age of property retired. Younger property is more valuable as it can be reused. In general, we have seen longer lives for most of the mass assets contained in the Transmission and Distribution Plant functions. Older property retirements have less salvage value and cost more to remove relative to their original cost due to cost escalation over time. The second reason is there are just more environmental requirements that impact the level of cost of removal. This creates additional costs that are not reflected in the existing depreciation rates.

A.

11 Q. WHAT ARE THE RESULTS OF YOUR DEPFRECIATION STUDY FOR 12 GATHERING PLANT?

A. As mentioned earlier, the gathering system is being impacted by dwindling gas supplies. In my study, we estimated average service lives for each asset category which would develop an average remaining life of approximately five years. This is the estimated period over which the remaining supplies should be utilized at current depletion rates. The effect upon annual depreciation expense is an increase of about \$119,000.

20 Q. WHAT ARE THE RESULTS OF YOUR DEPRECIATION STUDY FOR TRANSMISSION PLANT?

A. For the Transmission Plant function, the depreciation rate decreases from 3.25% to 1.60%. A portion of the decrease in depreciation rate is attributable to the

1		reserve position, whereby the accumulated depreciation to date is higher than it
2		should be, presuming that assets retiring in the future follow the selected patterns.
3		The net dollar impact of the change in depreciation rate is a decrease in annual
4		depreciation expense of approximately \$116,000.
5		
6	Q.	WHAT ARE THE RESULTS OF YOUR DEPRECIATION STUDY FOR
7		DISTRIBUTION PLANT?
8	A.	For the Distribution Plant function, the depreciation rate increases from 3.17% to
9		3.49%. It is difficult to isolate the cause of the increase. Based upon a review of
10		the 1990 depreciation study, both average service lives and net salvage factors
11		have changed. The impact of the change in rate is an increase in annual
12		depreciation expense of approximately \$463,000.
13		
14	Q.	WHAT ARE YOUR DEPRECIATION STUDY RESULTS FOR GENERAL PLANT?
15		
16	A.	The composite depreciation rate decreases from 9.48% to 8.60%. Two accounts
17		contribute the majority of the decrease, Account 392 - Transportation Equipment and
18		Account 396 - Power Operated Equipment. The impact of the change in rate is a
19		decrease in annual depreciation expense of approximately \$74,000.
20		
21	Q.	WHAT DEPRECIATION PROCEDURE ARE YOU RECOMMENDING IN THIS
22		PROCEEDING?
23	A.	I am recommending the use of the Equal Life Group ("ELG) procedure.

1		
2	Q.	WHY ARE YOU RECOMMENDING THE ELG PROCEDURE?
3		
4	A.	There are two reasons for recommending the ELG procedure. First, the ELG procedure
5		provides the best matching of the recording of depreciation with the consumption of the
6		depreciable assets. Such a matching is desirable from both an accounting and a
7		regulatory perspective. The second reason is to provide consistency with the
8		methodology used by Atmos in other jurisdictions. The actual decision regarding the use
9		of the ELG procedure was made by Atmos management, after careful review and
10		consideration of the concepts, advantages and shortcomings of various depreciation
11		methodologies.
12		
13	Q.	PLEASE BRIEFLY EXPLAIN THE ELG PROCEDURE.
14		
15	A.	Certainly. The ELG procedure merely recognizes that assets within a group have different
16		service lives. The ELG calculation procedure divides each category of assets into
17		components of estimated equal life and depreciates these components over their
18		respective lives.
19		
20	Q.	CAN YOU PROVIDE A SIMPLE EXAMPLE OF THE DIFFERENCE BETWEEN THE ELG
21		PROCEDURE AND THE EXISTING PROCEDURE?
22		
23	A.	Yes, I can. But first let me describe the existing procedure. The existing procedure is
24		referred to as the broad group procedure or average life group ("ALG") procedure. The

broad group is generally the primary asset account, e.g., Account 376, Mains. This

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procedure effectively treats all the assets within the group as if they have the same life, that is, the average life.

Let us assume that we have a two unit asset group. Each unit costs \$10 and were installed in the same period. Unit 1 has a life of 2 years and Unit 2 has a life of 8 years. The average service life of this group is 5 years. The ALG depreciation rate is 20.00% (100% / 5 years). For purposes of this example, we shall ignore salvage and/or cost of removal. The following Table illustrates the difference between the ALG procedure and the ELG procedure:

		ALG				ELG		
	<u>Accrual</u>		<u>EOY</u>		<u>Accrual</u>		EOY	
D			Reserve				Reserve	
<u>Period</u>	Asset "A"	<u>Asset</u>	Asset "A"	<u>Asset</u>	Asset "A"	Asset	Asset "A"	Asset
		<u>"B"</u>		<u>"B"</u>		<u>"B"</u>		<u>"B"</u>
1	2	2	2	2	5	1.25	5	1.25
2	2	2	-6	4	5	1.25	Ö	2.50
3	0	2	-6	6	0	1.25	0	3.75
4	0	2	-6	8	0	1.25	0	5.00
5	0	2	-6	10	0	1.25	0	6.25
6	0	2	-6	12	0	1.25	0	7.50
7	0	2	-6	14	0	1.25	0	8.75
8	0	2	-6	6	0	1.25	0	_

Q. WHAT DOES THIS EXAMPLE ILLUSTRATE?

A. This example illustrates a number of facts. First, there is retirement dispersion, which is recognized in the determination of the average service life. Second, neither asset has a life equal to the average service life. Third, and most important, there is a deferral of depreciation under the ALG procedure. The longer lived asset must over-accrue to make up for the under-accrual on the shorter lived asset. This is evident by the reserve position

at the end of period two for the ALG procedure. It is negative! Fourth, the depreciation
under the ELG procedure reflects the life of each asset appropriately and effectively
replicates item depreciation. Fifth, the ELG depreciation rate declines over time and
changes to match the mix of assets surviving.

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6 Q. DOES THE USE OF THE ELG PROCEDURE VERSUS THE ALG PROCEDURE HAVE 7 ANY IMPACT ON REVENUE REQUIREMENTS?

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9 A. Yes. The above example is expanded below to include the impact on revenue requirements:

	Rate	ALG Return @		Rate	ELG Return @	
<u>Period</u>	Base	12%	<u>Rev.</u> Regs.	<u>Base</u>	<u>12%</u>	Rev. Regs.
1	20.00	2.40	6.40	20.00	2.40	8.65
2	16.00	1.92	5.92	13.75	1.65	7.90
3	12.00	1.44	3.44	7.50	0.90	2.15
4	10.00	1.20	3.20	6.25	0.75	2.00
5	8.00	0.96	2.96	5.00	0.60	1.85
6	6.00	0.72	2.72	3.75	0.45	1.70
7	4.00	0.48	2.48	2.50	0.30	1.55
8	2.00	0.24	2.24	1.25	0.15	1.40
Totals		-	29.36			27.20

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Thus, the ELG procedure produces a lower, total-life revenue requirement of approximately 7.5% in this example.

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Q. WHAT ARE THE BENEFITS OF THE ELG PROCEDURE?

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A. First and foremost, the individual asset categories are depreciated over their respective lives. This is consistent with item depreciation, and this allocation of cost provides the

most appropriate matching between the recording of depreciation and asset consumption. Second, the ELG procedure gives appropriate recognition to the fact that assets within a group retire at different ages. Third, the ELG procedure produces a lower total life revenue requirement to the benefit of customers. Fourth, the ELG procedure produces a systematic and rational allocation of cost in a straight-line method over the life of each asset, consistent with generally accepted accounting principles ("GAAP").

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ARE THERE CRITICIMS OF THE ELG PROCEDURE?

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8 Q.

10 A. Yes, there are, but in my view these criticisms are either misplaced or asserted due to a 11 lack of understanding of the ELG procedure.

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13 **Q**. WHAT ARE THESE CRITICISMS AND WHY ARE THEY MISPLACED OR DUE TO MISUNDERSTANDING?

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16 A. One common criticism is that the ELG procedure is not widely accepted. This may be true for certain segments of the utility environment, but should certainly not be used as a basis for denying its use. The beneficial features of the ELG procedure as described above should be the basis for its acceptance and approval. A second common criticism is that the ELG procedure results in accelerated depreciation. This is patently incorrect and is demonstrated in the above example. While the ELG depreciation rate in early years may be higher than the ALG depreciation rate, this does not equate to accelerated depreciation. In fact, the ELG rate in later years is less than the ALG rate. Using the same logic, this would say that the ALG procedure produces accelerated depreciation. I believe that the ELG procedure produces the correct depreciation expense.

Q. ARE THERE OTHER FEATURES OF THE ELG PROCEDURE THAT ARE

DESIRABLE?

- Yes. Robley Winfrey, the "father" of the Iowa curves, in a letter dated February 1, 1975 to
 Dr. W. Chester Fitch, Center for Depreciation Studies, Western Michigan University,
 - wrote:

"In the 43 years, 1932 to 1975, that have passed since I developed the concepts and procedures that led to the publication in 1942 of *Depreciation of Group Properties*, I have continued to have faith that the unit summation procedure of applying the concept of the so-called average life method of computing annual depreciation cost for accounting purposes would someday prevail. Now, the discussion and publications of the past ten years are giving evidence that my 1932 expectations are being upheld.

The beginning of my study of group property depreciation was undertaken in the belief that the commonly applied method of applying the straight line method to group properties, as contrasted to single units of property in which terms the method is usually defined and explained, results in inappropriate answers. But the analysts and accountants were not aware of the true character of their results and their effects on the depreciation reserve balance. But the publication in 1942 created no awareness and made no impression on the legal and business actions involving depreciation within the subjects of accounting, property valuation, utility rate making, income tax, and depreciation reserves.

What kept me on course 1928 to 1932 was the firm conviction that any depreciation procedure using a zero discount rate and the concept of average life as applied to single units of property, should produce for a fully stabilized property, a depreciation reserve credit balance of 50 percent of the cost new (depreciation base) of the surviving property. The unit summation procedure (ELG) (emphasis by Mr. Roff) gives that 50 percent result for all properties regardless of the character of the distribution of the retirement over total life of a vintage group.

I think of no reasons why the unit summation method should not be used by public utilities, private industries, for income tax returns, and other uses. On the other hand, I can think of good reasons for using the unit summation procedure in cost accounting applications to the preference of other methods and procedures. Now that we are in the computer age, the details of the calculation can no longer be supported as an administrative objection to using the unit summation procedure.

The Portland (Oregon) General Electric Court Case and the recent proposal by the American Telephone and Telegraph Company of their equal life group (a different name for unit summation) procedure are evidence that the unit summation procedure is now an accepted and legally approved method of cost accounting for

2 3		public utility regulation and in private business." ²
4		
5	Q.	PLEASE SUMMARIZE AGAIN WHY THE COMPANY IS SEEKING THE APPROVAL OF
6		THE USE OF THE ELG PROCEDURE.
7	A.	First, Atmos Energy believes that the ELG procedure provides the best matching between
8		the recording of depreciation with asset consumption. This was the finding before the
9		Railroad Commission of Texas in the Lone Star Pipeline Case (Docket No. GUD 8664).
10		Second, Atmos Energy desires consistency in depreciation methodology for each of its
11		jurisdictions. Finally, I believe that the ELG procedure more correctly allocates cost over
12		the life of the assets.
13		
14	Q.	WHAT ARE THE RESULTS OF YOUR STUDY FOR THE TOTAL COMPANY?
15	A.	At the total Company depreciable level, the composite depreciation rate increases from
16		3.54% to 3.78%, or approximately \$392,000 more depreciation expense on an annual
17		basis.
18		
19	Q.	PLEASE SUMMARIZE YOUR RECOMMENDATIONS.
20	A.	I recommend that Atmos adopt the depreciation rates shown on Schedule 1 of
21		Exhibit DSR-3 and that this Commission approves their use. I base this
22		recommendation on the fact that I have conducted a comprehensive depreciation
23		study, giving appropriate recognition to historical experience, recent trends and
24		Company expectations. My study results in a fair and reasonable level of

² The Estimation of Depreciation, Fitch, Wolf and Bissinger, Center for Depreciation Studies, Western Michigan University, 1975, pages 45 and 46.

- depreciation expense which, when incorporated into a revenue stream, will provide
 the Company with adequate capital recovery until such time as a new depreciation
 study indicates a need for change.
- 4
- 5 Q. DOES THIS COMPLETE YOUR DIRECT TESTIMONY?
- 6 A. Yes, it does.

Academic Background

Donald S. Roff graduated from Rensselaer Polytechnic Institute with a Bachelor of Science degree in Management Engineering in 1972.

Mr. Roff has also received specialized training in the area of depreciation from Western Michigan University's Institute of Technological Studies. This training involved three forty-hour seminars on depreciation entitled "Fundamentals of Depreciation", "Fundamentals of Service Life Forecasting" and "Making a Depreciation Study" and included such topics as accounting for depreciation, estimating service life, and estimating salvage and cost of removal.

Employment and Professional Experience

Following graduation, Mr. Roff was employed for eleven and one-half years by Gilbert Associates, Inc., as an engineer in the Management Consulting Division. In this capacity, he held positions of increasing responsibility related to the conduct and preparation of various capital recovery and valuation assignments.

In 1984, Mr. Roff was employed by Ernst & Whinney and was involved in several depreciation rate studies and utility consulting assignments.

In 1985, Mr. Roff joined Deloitte Haskins & Sells (DH&S), which, in 1989, merged with Touche Ross & Co. to form Deloitte & Touche. In 1995, Mr. Roff was appointed as a Director with Deloitte & Touche.

During his tenure with Gilbert Associates, Inc., Ernst & Whinney, DH&S and Deloitte & Touche, Mr. Roff has participated in or directed depreciation studies for electric, gas, water and steam heat utilities, pipelines, railroad and telecommunication companies in over 30 states, several Canadian provinces and Puerto Rico. This work requires an indepth knowledge of depreciation accounting and regulatory principles, mortality analysis techniques and financial practices. At these firms, Mr. Roff has had varying degrees of responsibility for valuation studies, development of depreciation accrual rates, consultation on the unitization of property records, and other studies concerned with the inspection and appraisals of utility property, preparation of rate case testimony and support exhibits, data responses and rebuttal testimony, in addition to appearing as an expert witness.

Industry and Technical Affiliations

Mr. Roff is a registered Professional Engineer in Pennsylvania (by examination).

Mr. Roff is a member of the Society of Depreciation Professionals and a Certified Depreciation Professional, and a Technical Associate of the American Gas Association (A.G.A.) Depreciation Committee. He currently serves as the lead instructor for the A.G.A.'s Principles of Depreciation Course.

DONALD S. ROFF

TESTIMONY EXPERIENCE

SUBJECT	Gas Depreciation Rates Gas Depreciation Rates Electric Depreciation Rates Gas Depreciation Rates and Accounting Electric Depreciation Rates Gas Depreciation Rates	Electric Depreciation Rates Gas Depreciation Rates Gas Depreciation Rates Electric Depreciation Rates/Competitive Issue Electric Depreciation Rates/Competitive Issue Electric Depreciation Rates Gas Depreciation Rates Electric Depreciation Rates Electric Depreciation Rates Electric Depreciation Rates	Electric Depreciation Rates Gas Depreciation Rates Gas Depreciation Rates Gas Depreciation Rates Gas Depreciation Rates and Accounting Electric Depreciation Rates Electric Depreciation Rates Electric Depreciation Rates Gas Depreciation Rates Gas Depreciation Rates Gas Depreciation Rates and Accounting Electric Depreciation Rates and Accounting Gas Depreciation Rates and Accounting Electric Depreciation Rates
JURISDICTION	Nevada Nevada Texas Michigan Indiana Michigan Texas Tennessee South Carolina	Indiana Texas Arkansas Texas Texas Missouri Louisiana Indiana Michigan Indiana Indiana Indiana	Nevada Texas Texas Texas Texas Texas Louisiana New Jersey Michigan Nevada Georgia Nevada Georgia New Orleans Oklahoma Arkansas Utah Wyoming Washington Oregon
COMPANY		Wacasan Valley Power Association, inc. Lone Star Pipeline Company Entergy Arkansas Inc. Entergy Gulf States Inc. Missouri Public Service Entergy Gulf States Inc. Chattanooga Gas Company Wabash Valley Power Association, Inc. Consumers Energy Company Long Island Lighting Company Atlanta Gas Light Company Wabash Valley Power Association, Inc. Detroit Edison Company	
DATE	July 1993 June 1994 Dec 1994 April 1995 July 1995 Sept 1995 Oct 1995 Feb 1996	Cet 1996 Nov 1996 Nov 1996 Nar 1997 Mar 1997 May 1997 June 1997 Sept 1997 Sept 1997 Sept 1998 Oct 1998	
CASE NO.	Docket No. 93-3005 Docket No. 93-3025 Docket No. 12820 Case No. U-10380 Case No. U-10754 Docket No. U-10754 Docket No. 95-02116 Docket No. 95-0216 Cause No. 14965 Cause No. 40395 (I)	Galls No. 10353 (1) Galls No. 10353 (1) Galls No. 8664 Docket No. 96-360-U Docket No. 16705 Docket No. U-22092 Docket No. 40395 (II) Case No. U-11509 Docket No. 8390-U Cause No. 41118 Case No. U-11722 Docket No. 98-2035-03	Docket No. 99-4006 GUD Docket No. 9030 GUD Docket No. 9145 GIUD Docket No. 9145 City of Tyler Docket No. U-24993 Docket No. U-24993 Docket No. U-12999 Docket No. 14618-U Docket No. 01-10002 Docket No. 01-11311 Docket No. 01-1431-U Docket No. UD-00-2 Cause No. UD-200200166 Docket No. UD-201201 Docket No. UD-201211 Docket No. 01-243-U Docket No. UB-01-243-U Docket No. UB-01-2121 Docket No. UB-01-2121 Docket No. UB-01-271