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SOAH DOCKET NO. 473-21-2606
PUC DOCKET NO. 52195

APPLICATION OF EL PASO ELECTRIC COMPANY TO CHANGE RATES		BEFORE THE STATE OFFICE OF ADMINISTRATIVE HEARINGS

WORKPAPERS TO

DIRECT TESTIMONY AND EXHIBITS

OF

DAVID J. GARRETT

ON BEHALF OF

THE CITY OF EL PASO

David J. Garrett
Resolve Utility Consulting PLLC
101 Park Avenue, Suite 1125
Oklahoma City, OK 73102

OCTOBER 25, 2021

Summary Accrual Adjustment

Plant Function	Plant Balance 12/31/2019	Company Proposed Accrual	City Proposed Accrual	City Accrual Adjustment
Steam Production	$ 565,455,715	$ 18,397,949	$ 14,784,009	$ (3,613,940)
Gas Turbine	518,021,063	15,143,974	11,561,033	(3,582,941)
Transmission	532,343,334	9,023,893	8,275,788	(748,105)
Distribution	1,347,787,849	29,846,554	28,149,622	(1,696,932)
General	171,715,519	6,601,194	6,616,766	15,572
Total Depreciable Plant	$ 3,135,323,480	$ 79,013,564	$ 69,387,217	$ (9,626,347)

Mass Property Parameter Comparison

Account No.	Description	Company Proposal Iowa Curve Type - AL	Company Proposal NS Rate	Company Proposal Depr Rate	Company Proposal Annual Accrual	City Proposal Iowa Curve Type - AL	City Proposal NS Rate	City Proposal Depr Rate	City Proposal Annual Accrual
	TRANSMISSION PLANT								
353.00	STATION EQUIPMENT	R4 - 50	-5%	1.56%	2,948,962	R3 - 58	-5%	1.40%	2,647,195
355.00	WOOD AND STEEL POLES	S3 - 55	-20%	1.91%	3,115,165	S3 - 55	-15%	1.79%	2,918,845
356.00	OVERHEAD CONDUCTORS AND DEVICES	R5 - 60	-15%	1.61%	1,579,563	R4 - 65	-10%	1.35%	1,329,527
	DISTRIBUTION PLANT								
362.00	STATION EQUIPMENT	R2 - 65	-5%	1.43%	4,102,971	R1.5 - 71	0%	1.24%	3,568,711
364.00	POLES, TOWERS AND FIXTURES	R3 - 45	-30%	3.11%	5,697,660	R3 - 45	-25%	2.94%	5,396,941
366.00	UNDERGROUND CONDUIT	R4 - 65	-5%	1.50%	2,124,461	R4 - 71	0%	1.27%	1,804,272
368.00	LINE TRANSFORMERS	R3 - 52	-15%	2.34%	6,629,377	R3 - 52	-10%	2.21%	6,260,694
369.00	SERVICES	S3 - 65	-15%	1.38%	779,571	S3 - 65	0%	1.08%	607,181

			[1]	[2]		[3]		[4]	
				Company Proposal		**City Proposal**		**Difference**	
Account			**Plant**		**Annual**		**Annual**		**Annual**
No.	**Description**		**12/31/2019**	**Rate**	**Accrual**	**Rate**	**Accrual**	**Rate**	**Accrual**
	STEAM PRODUCTION PLANT								
311.00	STRUCTURES AND IMPROVEMENTS								
	RIO GRANDE UNIT 6		1,290,817	4.87%	62,880	0.37%	4,744	-4.50%	-58,136
	RIO GRANDE UNIT 7		1,269,983	3.00%	38,120	0.00%	0	-3.00%	-38,120
	RIO GRANDE UNIT 8		2,311,211	2.15%	49,684	1.49%	34,492	-0.66%	-15,192
	RIO GRANDE COMMON		4,433,409	6.36%	281,794	5.70%	252,765	-0.66%	-29,029
	NEWMAN UNIT 1		1,269,946	1.65%	20,984	0.00%	0	-1.65%	-20,984
	NEWMAN UNIT 2		1,035,405	11.26%	116,618	9.24%	95,722	-2.02%	-20,896
	NEWMAN UNIT 3		1,097,187	4.29%	47,086	3.42%	37,573	-0.87%	-9,513
	NEWMAN UNIT 4		15,848,533	6.25%	989,904	5.33%	845,069	-0.92%	-144,835
	NEWMAN UNIT 5		25,932,328	2.00%	519,409	1.82%	472,089	-0.18%	-47,320
	NEWMAN COMMON		18,900,582	2.42%	458,120	2.25%	425,597	-0.17%	-32,523
	Total Account 311.00		73,389,401	3.52%	2,584,599	2.95%	2,168,052	-0.57%	-416,547
312.00	BOILER PLANT EQUIPMENT								
	RIO GRANDE UNIT 6		2,973,008	2.03%	60,345	0.00%	0	-2.03%	-60,345
	RIO GRANDE UNIT 7		4,604,495	3.02%	139,002	0.00%	0	-3.02%	-139,002
	RIO GRANDE UNIT 8		15,577,498	2.92%	454,804	2.25%	350,852	-0.67%	-103,952
	RIO GRANDE COMMON		939,445	5.75%	54,061	5.11%	47,985	-0.64%	-6,076
	NEWMAN UNIT 1		8,696,638	5.03%	437,616	3.03%	263,683	-2.00%	-173,933
	NEWMAN UNIT 2		8,916,414	13.54%	1,206,859	11.48%	1,023,316	-2.06%	-183,543
	NEWMAN UNIT 3		6,743,234	4.69%	316,152	3.80%	256,399	-0.89%	-59,753
	NEWMAN UNIT 4		3,303,062	7.77%	256,498	6.91%	228,120	-0.86%	-28,378
	NEWMAN UNIT 5		112,841,612	1.97%	2,221,976	1.78%	2,013,325	-0.19%	-208,651
	NEWMAN COMMON		6,752,670	2.31%	155,686	2.13%	143,736	-0.18%	-11,950
	Total Account 312.00		171,348,075	3.09%	5,302,999	2.53%	4,327,418	-0.57%	-975,581
313.00	ENGINES AND ENGINE-DRIVEN GENERATORS								
	NEWMAN UNIT 1		327,497	0.00%	0	0.00%	0	0.00%	0
	NEWMAN UNIT 4		24,780,032	7.19%	1,780,675	7.08%	1,754,283	-0.11%	-26,392
	NEWMAN UNIT 5		48,432,717	2.39%	1,158,343	2.12%	1,026,283	-0.27%	-132,060
	Total Account 313.00		73,540,247	4.00%	2,939,018	3.78%	2,780,566	-0.22%	-158,452
314.00	TURBOGENERATOR UNITS								
	RIO GRANDE UNIT 6		3,559,998	2.07%	73,825	0.00%	0	-2.07%	-73,825
	RIO GRANDE UNIT 7		4,204,367	3.73%	156,647	0.69%	28,951	-3.04%	-127,696

			[1]	[2]		[3]		[4]	
				Company Proposal		**City Proposal**		**Difference**	
Account		Plant			Annual		Annual		Annual
No.	Description	12/31/2019	Rate	Accrual	Rate	Accrual	Rate	Accrual
	RIO GRANDE UNIT 8	11,776,648	2.10%	247,615	1.41%	166,522	-0.69%	-81,093
	NEWMAN UNIT 1	13,716,383	7.36%	1,010,167	5.35%	733,281	-2.01%	-276,886
	NEWMAN UNIT 2	11,439,310	7.69%	879,152	5.67%	648,513	-2.02%	-230,639
	NEWMAN UNIT 3	12,089,865	7.09%	857,278	6.18%	747,750	-0.91%	-109,528
	NEWMAN UNIT 4	33,968,975	2.28%	774,735	1.41%	479,887	-0.87%	-294,848
	NEWMAN UNIT 5	61,650,972	2.27%	1,400,181	2.02%	1,243,728	-0.25%	-156,453
	NEWMAN COMMON	58,097	0.00%	0	0.00%	0	0.00%	0
	Total Account 314.00	152,464,615	3.54%	5,399,600	2.66%	4,048,632	-0.89%	-1,350,968
315.00	ACCESSORY ELECTRIC EQUIPMENT							
	RIO GRANDE UNIT 6	784,259	7.63%	59,851	2.88%	22,614	-4.75%	-37,237
	RIO GRANDE UNIT 7	856,688	11.39%	97,562	8.16%	69,925	-3.23%	-27,637
	RIO GRANDE UNIT 8	6,535,523	5.62%	367,315	4.95%	323,791	-0.67%	-43,524
	NEWMAN UNIT 1	1,148,175	2.11%	24,241	0.02%	209	-2.09%	-24,032
	NEWMAN UNIT 2	1,052,955	2.09%	22,021	0.00%	0	-2.09%	-22,021
	NEWMAN UNIT 3	1,150,892	5.52%	63,543	4.54%	52,217	-0.98%	-11,326
	NEWMAN UNIT 4	6,332,763	0.89%	56,266	0.00%	3	-0.89%	-56,263
	NEWMAN UNIT 5	24,098,577	1.98%	477,670	1.82%	437,660	-0.16%	-40,010
	NEWMAN COMMON	157,237	2.53%	3,976	2.38%	3,744	-0.15%	-232
	Total Account 315.00	42,117,069	2.78%	1,172,445	2.16%	910,164	-0.62%	-262,281
316.00	MISCELLANEOUS POWER PLANT EQUIPMENT							
	RIO GRANDE UNIT 6	1,489,364	4.51%	67,097	0.00%	0	-4.51%	-67,097
	RIO GRANDE UNIT 7	1,851,433	2.18%	40,407	0.00%	0	-2.18%	-40,407
	RIO GRANDE UNIT 8	5,951,707	2.12%	125,977	1.45%	86,121	-0.67%	-39,856
	RIO GRANDE COMMON	1,938,696	4.84%	93,906	4.20%	81,357	-0.64%	-12,549
	NEWMAN UNIT 1	2,177,691	2.02%	44,023	0.02%	400	-2.00%	-43,623
	NEWMAN UNIT 2	2,829,108	2.01%	56,724	0.00%	1	-2.01%	-56,723
	NEWMAN UNIT 3	5,645,296	1.50%	84,453	0.63%	35,732	-0.87%	-48,721
	NEWMAN UNIT 4	11,495,252	0.86%	98,730	0.00%	0	-0.86%	-98,730
	NEWMAN UNIT 5	1,771,257	1.55%	27,489	1.34%	23,754	-0.21%	-3,735
	NEWMAN ZERO LIQUID DISCHARGE	14,375,574	2.06%	296,134	1.84%	264,343	-0.22%	-31,791
	NEWMAN COMMON	3,070,930	2.10%	64,348	1.87%	57,469	-0.23%	-6,879
	Total Account 316.00	52,596,308	1.90%	999,288	1.04%	549,177	-0.86%	-450,111
	Total Steam Production Plant	565,455,715	3.25%	18,397,949	2.61%	14,784,009	-0.64%	-3,613,940

Detailed Rate Comparison

		[1]	[2]		[3]		[4]	
			Company Proposal		**City Proposal**		**Difference**	
Account		Plant		Annual		Annual		Annual
No.	Description	12/31/2019	Rate	Accrual	Rate	Accrual	Rate	Accrual
	GAS TURBINE PLANT							
341.00	STRUCTURES AND IMPROVEMENTS							
	COPPER POWER STATION	791,864	2.10%	16,598	1.32%	10,489	-0.78%	-6,109
	RIO GRANDE UNIT 9	22,158,133	2.55%	565,958	2.33%	517,007	-0.22%	-48,951
	MONTANA POWER STATION UNIT 1	315,347	2.40%	7,553	2.21%	6,965	-0.19%	-588
	MONTANA POWER STATION UNIT 2	257,181	2.39%	6,155	2.21%	5,680	-0.18%	-475
	MONTANA POWER STATION UNIT 3	206,815	2.35%	4,855	2.16%	4,473	-0.19%	-382
	MONTANA POWER STATION UNIT 4	237,486	2.37%	5,630	2.19%	5,189	-0.18%	-441
	MONTANA POWER STATION COMMON	18,007,977	2.43%	436,896	2.20%	395,873	-0.23%	-41,023
	SOLAR FACILITIES	91,868	4.84%	4,449	4.61%	4,233	-0.23%	-216
	Total Account 341.00	42,066,673	2.49%	1,048,094	2.26%	949,910	-0.23%	-98,184
342.00	FUEL HOLDERS							
	COPPER POWER STATION	511,691	1.42%	7,248	0.55%	2,798	-0.87%	-4,450
	RIO GRANDE UNIT 9	3,768,778	2.54%	95,879	2.25%	84,940	-0.29%	-10,939
	MONTANA POWER STATION COMMON	20,877,428	2.53%	528,536	2.23%	465,060	-0.30%	-63,476
	Total Account 342.00	25,157,897	2.51%	631,663	2.20%	552,797	-0.31%	-78,866
343.00	PRIME MOVERS							
	RIO GRANDE UNIT 9	59,555,058	3.09%	1,838,029	2.24%	1,331,516	-0.85%	-506,513
	MONTANA POWER STATION UNIT 1	78,609,841	2.92%	2,174,179	2.18%	1,711,597	-0.74%	-462,582
	MONTANA POWER STATION UNIT 2	73,503,725	2.93%	2,038,250	2.18%	1,600,484	-0.75%	-437,766
	MONTANA POWER STATION UNIT 3	63,009,557	2.99%	2,028,005	2.18%	1,372,607	-0.81%	-655,398
	MONTANA POWER STATION UNIT 4	62,425,439	3.01%	2,024,234	2.20%	1,373,306	-0.81%	-650,928
	MONTANA POWER STATION COMMON	34,687,535	2.96%	983,374	2.12%	733,894	-0.84%	-249,480
	Total Account 343.00	371,791,155	2.98%	11,086,071	2.18%	8,123,404	-0.80%	-2,962,667
344.00	GENERATORS							
	COPPER POWER STATION	10,369,392	4.27%	442,451	3.45%	357,417	-0.82%	-85,034
	RIO GRANDE UNIT 9	8,420,577	2.75%	231,923	2.33%	195,862	-0.42%	-36,061
	MONTANA POWER STATION UNIT 1	6,122,691	2.70%	165,547	2.28%	139,610	-0.42%	-25,937
	MONTANA POWER STATION UNIT 2	6,122,691	2.70%	165,464	2.28%	139,454	-0.42%	-26,010
	MONTANA POWER STATION UNIT 3	6,241,096	2.62%	163,335	2.21%	137,665	-0.41%	-25,670
	MONTANA POWER STATION UNIT 4	6,126,228	2.63%	161,282	2.22%	135,957	-0.41%	-25,325
	MONTANA POWER STATION COMMON	63	3.17%	2	1.59%	1	-1.58%	-1

			[1]	[2]		[3]		[4]	
				Company Proposal		City Proposal		Difference	
Account No.	Description	Plant 12/31/2019	Rate	Annual Accrual	Rate	Annual Accrual	Rate	Annual Accrual	
	SOLAR FACILITIES	1,187,262	5.23%	62,103	4.60%	54,636	-0.63%	-7,467
	Total Account 344.00	44,590,001	3.12%	1,392,107	2.60%	1,160,603	-0.52%	-231,504
345.00	ACCESSORY ELECTRIC EQUIPMENT							
	COPPER POWER STATION	2,306,861	7.43%	171,293	6.53%	150,677	-0.90%	-20,616
	RIO GRANDE UNIT 9	5,186,611	2.81%	145,846	2.21%	114,540	-0.60%	-31,306
	MONTANA POWER STATION UNIT 1	3,115,518	2.80%	87,129	2.23%	69,357	-0.57%	-17,772
	MONTANA POWER STATION UNIT 2	3,029,962	2.79%	84,673	2.22%	67,330	-0.57%	-17,343
	MONTANA POWER STATION UNIT 3	2,686,650	2.78%	74,780	2.21%	59,378	-0.57%	-15,402
	MONTANA POWER STATION UNIT 4	2,250,774	2.81%	63,194	2.23%	50,294	-0.58%	-12,900
	MONTANA POWER STATION COMMON	9,316,081	2.73%	254,615	2.11%	196,589	-0.62%	-58,026
	SOLAR FACILITIES	167,360	5.30%	8,862	4.54%	7,604	-0.76%	-1,258
	Total Account 345.00	28,059,816	3.17%	890,392	2.55%	715,767	-0.62%	-174,625
346.00	MISCELLANEOUS POWER PLANT EQUIPMENT							
	COPPER POWER STATION	4,170,624	1.04%	43,243	0.30%	12,387	-0.74%	-30,856
	RIO GRANDE UNIT 9	410,060	2.53%	10,363	2.23%	9,155	-0.30%	-1,208
	MONTANA POWER STATION UNIT 1	297,569	2.43%	7,240	2.17%	6,453	-0.26%	-787
	MONTANA POWER STATION UNIT 2	275,751	2.42%	6,679	2.16%	5,947	-0.26%	-732
	MONTANA POWER STATION UNIT 3	229,358	2.42%	5,557	2.15%	4,941	-0.27%	-616
	MONTANA POWER STATION UNIT 4	231,228	2.45%	5,662	2.18%	5,040	-0.27%	-622
	MONTANA POWER STATION COMMON	740,931	2.28%	16,903	1.97%	14,629	-0.31%	-2,274
	Total Account 346.00	6,355,521	1.50%	95,647	0.92%	58,552	-0.58%	-37,095
	Total Gas Turbine Plant	518,021,063	2.92%	15,143,974	2.23%	11,561,033	-0.69%	-3,582,941
	TRANSMISSION PLANT							
350.10	LAND RIGHTS	18,917,746	1.02%	192,753	1.02%	192,848	0.00%	95
350.10	LAND RIGHTS - ISLETA	16,824,156	3.79%	636,818	3.79%	636,818	0.00%	0
352.00	STRUCTURES AND IMPROVEMENTS	12,463,443	1.16%	144,867	1.16%	144,810	0.00%	-57
353.00	STATION EQUIPMENT	188,643,566	1.56%	2,948,962	1.40%	2,647,195	-0.16%	-301,767
354.00	STEEL TOWERS AND FIXTURES	30,170,782	1.19%	359,891	1.19%	359,839	0.00%	-52
355.00	WOOD AND STEEL POLES	163,484,540	1.91%	3,115,165	1.79%	2,918,845	-0.12%	-196,320
356.00	OVERHEAD CONDUCTORS AND DEVICES	98,265,749	1.61%	1,579,563	1.35%	1,329,527	-0.26%	-250,036
359.00	ROADS AND TRAILS	3,573,353	1.28%	45,874	1.28%	45,905	0.00%	31

Detailed Rate Comparison

			[1]	[2]		[3]		[4]	
				Company Proposal		**City Proposal**		**Difference**	
Account			**Plant**		**Annual**		**Annual**		**Annual**
No.	**Description**		**12/31/2019**	**Rate**	**Accrual**	**Rate**	**Accrual**	**Rate**	**Accrual**
	Total Transmission Plant		532,343,334	1.70%	9,023,893	1.55%	8,275,788	-0.14%	-748,105
	DISTRIBUTION PLANT								
360.10	LAND RIGHTS		2,578,795	1.32%	33,963	1.32%	33,955	0.00%	-8
361.00	STRUCTURES AND IMPROVEMENTS		21,788,555	1.46%	317,742	1.46%	317,870	0.00%	128
362.00	STATION EQUIPMENT		287,622,780	1.43%	4,102,971	1.24%	3,568,711	-0.19%	-534,260
364.00	POLES, TOWERS AND FIXTURES		183,367,772	3.11%	5,697,660	2.94%	5,396,941	-0.17%	-300,719
365.00	OVERHEAD CONDUCTORS AND DEVICES		117,036,296	2.35%	2,747,955	2.35%	2,749,335	0.00%	1,380
366.00	UNDERGROUND CONDUIT		141,830,292	1.50%	2,124,461	1.27%	1,804,272	-0.23%	-320,189
367.00	UNDERGROUND CONDUCTORS AND DEVICES		166,797,046	3.07%	5,117,534	3.07%	5,117,987	0.00%	453
368.00	LINE TRANSFORMERS		283,609,012	2.34%	6,629,377	2.21%	6,260,694	-0.13%	-368,683
369.00	SERVICES		56,297,452	1.38%	779,571	1.08%	607,181	-0.30%	-172,390
370.00	METERS		61,010,255	2.62%	1,598,992	2.62%	1,596,396	0.00%	-2,596
371.00	INSTALLATIONS ON CUSTOMERS' PREMISES		14,098,584	3.22%	454,004	3.22%	453,868	0.00%	-136
373.00	STREET LIGHTING AND SIGNAL SYSTEMS		11,751,010	2.06%	242,324	2.06%	242,411	0.00%	87
	Total Distribution Plant		1,347,787,849	2.21%	29,846,554	2.09%	28,149,622	-0.13%	-1,696,932
	GENERAL PLANT								
390.00	STRUCTURES AND IMPROVEMENTS								
	SYSTEMS OPERATIONS BUILDING		15,318,735	3.66%	560,769	3.66%	561,272	0.00%	503
	STANTON TOWER		38,933,123	2.30%	896,927	2.30%	896,115	0.00%	-812
	EASTSIDE OPERATIONS CENTER		42,631,420	2.11%	898,410	2.11%	897,875	0.00%	-535
	OTHER STRUCTURES		17,628,831	2.97%	524,165	2.97%	524,014	0.00%	-151
	Total Account 390.00		114,512,108	2.52%	2,880,271	2.51%	2,879,276	0.00%	-995
391.00	OFFICE FURNITURE AND EQUIPMENT		6,751,956	0.49%	32,752	0.49%	32,779	0.00%	27
393.00	STORES EQUIPMENT		53,348	0.37%	195	0.37%	196	0.00%	1
394.00	TOOLS, SHOP AND GARAGE EQUIPMENT		5,680,076	3.44%	195,583	3.44%	195,258	0.00%	-325
395.00	LABORATORY EQUIPMENT		5,226,132	6.65%	347,704	6.68%	349,056	0.03%	1,352
396.00	POWER OPERATED EQUIPMENT		4,300,329	3.86%	165,782	3.85%	165,754	-0.01%	-28
397.00	COMMUNICATION EQUIPMENT		30,616,208	8.43%	2,580,060	8.48%	2,595,737	0.05%	15,677
398.00	MISCELLANEOUS EQUIPMENT		4,575,362	8.72%	398,847	8.71%	398,711	-0.01%	-136

Account No.	Description	[1] Plant 12/31/2019	[2] Company Proposal		[3] City Proposal		[4] Difference	
			Rate	Annual Accrual	Rate	Annual Accrual	Rate	Annual Accrual
	Total General Plant	171,715,519	3.84%	6,601,194	3.85%	6,616,766	0.01%	15,572
	TOTAL DEPRECIABLE PLANT	$ 3,135,323,480	2.52%	$ 79,013,564	2.21%	$ 69,387,217	-0.31%	$ (9,626,347)

[1], [2] From depreciation study

[3] From Depreciation Rate Development exhibit

[4] = [3] - [2]

Account No.	Description	[1] Plant 12/31/2019	[2] Iowa Curve Type	AL	[3] Net Salvage	[4] Depreciable Base	[5] Book Reserve	[6] Future Accruals	[7] Remaining Life	[8] Service Life Accrual	[9] Rate	[10] Net Salvage Accrual	[11] Rate	[12] Total Accrual	[13] Rate
	STEAM PRODUCTION PLANT														
311.00	STRUCTURES AND IMPROVEMENTS														
	RIO GRANDE UNIT 6	1,290,817			0.0%	1,290,817	1,281,328	9,489	2.00	4,744	0.37%	0	0.00%	4,744	**0.37%**
	RIO GRANDE UNIT 7	1,269,983			0.0%	1,269,983	1,269,984	-1							
	RIO GRANDE UNIT 8	2,311,211			0.0%	2,311,211	1,828,321	482,891	14.00	34,492	1.49%	0	0.00%	34,492	**1.49%**
	RIO GRANDE COMMON	4,433,409			0.0%	4,433,409	894,702	3,538,707	14.00	252,765	5.70%	0	0.00%	252,765	**5.70%**
	NEWMAN UNIT 1	1,269,946			0.0%	1,269,946	1,283,433	-13,486							
	NEWMAN UNIT 2	1,035,405			0.0%	1,035,405	748,238	287,167	3.00	95,722	9.24%	0	0.00%	95,722	**9.24%**
	NEWMAN UNIT 3	1,097,187			0.0%	1,097,187	834,174	263,013	7.00	37,573	3.42%	0	0.00%	37,573	**3.42%**
	NEWMAN UNIT 4	15,848,533			0.0%	15,848,533	9,933,049	5,915,484	7.00	845,069	5.33%	0	0.00%	845,069	**5.33%**
	NEWMAN UNIT 5	25,932,328			0.0%	25,932,328	6,104,581	19,827,747	42.00	472,089	1.82%	0	0.00%	472,089	**1.82%**
	NEWMAN COMMON	18,900,582			0.0%	18,900,582	1,025,528	17,875,054	42.00	425,597	2.25%	0	0.00%	425,597	**2.25%**
	Total Account 311.00	73,389,401			0.0%	73,389,401	25,203,337	48,186,064	22.23	2,168,052	2.95%	0	0.00%	2,168,052	**2.95%**
312.00	BOILER PLANT EQUIPMENT														
	RIO GRANDE UNIT 6	2,973,008			0.0%	2,973,008	3,121,658	-148,650	0.00						
	RIO GRANDE UNIT 7	4,604,495			0.0%	4,604,495	4,604,496	-1							
	RIO GRANDE UNIT 8	15,577,498			0.0%	15,577,498	10,665,565	4,911,932	14.00	350,852	2.25%	0	0.00%	350,852	**2.25%**
	RIO GRANDE COMMON	939,445			0.0%	939,445	267,650	671,795	14.00	47,985	5.11%	0	0.00%	47,985	**5.11%**
	NEWMAN UNIT 1	8,696,638			0.0%	8,696,638	7,905,587	791,050	3.00	263,683	3.03%	0	0.00%	263,683	**3.03%**
	NEWMAN UNIT 2	8,916,414			0.0%	8,916,414	5,846,465	3,069,949	3.00	1,023,316	11.48%	0	0.00%	1,023,316	**11.48%**
	NEWMAN UNIT 3	6,743,234			0.0%	6,743,234	4,948,440	1,794,795	7.00	256,399	3.80%	0	0.00%	256,399	**3.80%**
	NEWMAN UNIT 4	3,303,062			0.0%	3,303,062	1,706,224	1,596,838	7.00	228,120	6.91%	0	0.00%	228,120	**6.91%**
	NEWMAN UNIT 5	112,841,612			0.0%	112,841,612	28,281,943	84,559,669	42.00	2,013,325	1.78%	0	0.00%	2,013,325	**1.78%**
	NEWMAN COMMON	6,752,670			0.0%	6,752,670	715,753	6,036,918	42.00	143,736	2.13%	0	0.00%	143,736	**2.13%**
	Total Account 312.00	171,348,075			0.0%	171,348,075	68,063,781	103,284,294	23.87	4,327,418	2.53%	0	0.00%	4,327,418	**2.53%**
313.00	ENGINES AND ENGINE-DRIVEN GENERATORS														
	NEWMAN UNIT 1	327,497			0.0%	327,497	327,497	0							
	NEWMAN UNIT 4	24,780,032			0.0%	24,780,032	12,500,053	12,279,980	7.00	1,754,283	7.08%	0	0.00%	1,754,283	**7.08%**
	NEWMAN UNIT 5	48,432,717			0.0%	48,432,717	5,328,814	43,103,903	42.00	1,026,283	2.12%	0	0.00%	1,026,283	**2.12%**
	Total Account 313.00	73,540,247			0.0%	73,540,247	18,156,364	55,383,883	19.92	2,780,566	3.78%	0	0.00%	2,780,566	**3.78%**
314.00	TURBOGENERATOR UNITS														
	RIO GRANDE UNIT 6	3,559,998			0.0%	3,559,998	3,734,067	-174,069							
	RIO GRANDE UNIT 7	4,204,367			0.0%	4,204,367	4,117,514	86,853	3.00	28,951	0.69%	0	0.00%	28,951	**0.69%**
	RIO GRANDE UNIT 8	11,776,648			0.0%	11,776,648	9,445,338	2,331,310	14.00	166,522	1.41%	0	0.00%	166,522	**1.41%**
	NEWMAN UNIT 1	13,716,383			0.0%	13,716,383	11,516,540	2,199,844	3.00	733,281	5.35%	0	0.00%	733,281	**5.35%**
	NEWMAN UNIT 2	11,439,310			0.0%	11,439,310	9,493,772	1,945,538	3.00	648,513	5.67%	0	0.00%	648,513	**5.67%**
	NEWMAN UNIT 3	12,089,865			0.0%	12,089,865	6,855,613	5,234,253	7.00	747,750	6.18%	0	0.00%	747,750	**6.18%**
	NEWMAN UNIT 4	33,968,975			0.0%	33,968,975	30,609,768	3,359,207	7.00	479,887	1.41%	0	0.00%	479,887	**1.41%**
	NEWMAN UNIT 5	61,650,972			0.0%	61,650,972	9,414,378	52,236,594	42.00	1,243,728	2.02%	0	0.00%	1,243,728	**2.02%**
	NEWMAN COMMON	58,097			0.0%	58,097	107,629	-49,532	0.00						
	Total Account 314.00	152,464,615			0.0%	152,464,615	85,294,619	67,169,996	16.59	4,048,632	2.66%	0	0.00%	4,048,632	**2.66%**
315.00	ACCESSORY ELECTRIC EQUIPMENT														
	RIO GRANDE UNIT 6	784,259			0.0%	784,259	739,032	45,227	2.00	22,614	2.88%	0	0.00%	22,614	**2.88%**
	RIO GRANDE UNIT 7	856,688			0.0%	856,688	646,912	209,776	3.00	69,925	8.16%	0	0.00%	69,925	**8.16%**
	RIO GRANDE UNIT 8	6,535,523			0.0%	6,535,523	2,002,447	4,533,076	14.00	323,791	4.95%	0	0.00%	323,791	**4.95%**
	NEWMAN UNIT 1	1,148,175			0.0%	1,148,175	1,147,547	628	3.00	209	0.02%	0	0.00%	209	**0.02%**
	NEWMAN UNIT 2	1,052,955			0.0%	1,052,955	1,052,959	-4							
	NEWMAN UNIT 3	1,150,892			0.0%	1,150,892	785,370	365,522	7.00	52,217	4.54%	0	0.00%	52,217	**4.54%**
	NEWMAN UNIT 4	6,332,763			0.0%	6,332,763	6,332,739	24	8.00	3	0.00%	0	0.00%	3	**0.00%**
	NEWMAN UNIT 5	24,098,577			0.0%	24,098,577	5,716,844	18,381,733	42.00	437,660	1.82%	0	0.00%	437,660	**1.82%**
	NEWMAN COMMON	157,237			0.0%	157,237	4	157,233	42.00	3,744	2.38%	0	0.00%	3,744	**2.38%**
	Total Account 315.00	42,117,069			0.0%	42,117,069	18,423,853	23,693,216	26.03	910,164	2.16%	0	0.00%	910,164	**2.16%**
316.00	MISCELLANEOUS POWER PLANT EQUIPMENT														
	RIO GRANDE UNIT 6	1,489,364			0.0%	1,489,364	1,489,365	-1							
	RIO GRANDE UNIT 7	1,851,433			0.0%	1,851,433	1,896,993	-45,560							
	RIO GRANDE UNIT 8	5,951,707			0.0%	5,951,707	4,746,012	1,205,695	14.00	86,121	1.45%	0	0.00%	86,121	**1.45%**
	RIO GRANDE COMMON	1,938,696			0.0%	1,938,696	799,702	1,138,994	14.00	81,357	4.20%	0	0.00%	81,357	**4.20%**

Account No.	Description	[1] Plant 12/31/2019	[2] Iowa Curve Type AL	[3] Net Salvage	[4] Depreciable Base	[5] Book Reserve	[6] Future Accruals	[7] Remaining Life	[8] Service Life Accrual	[9] Rate	[10] Net Salvage Accrual	[11] Rate	[12] Total Accrual	[13] Rate
	NEWMAN UNIT 1	2,177,691		0.0%	2,177,691	2,176,490	1,201	3.00	400	0.02%	0	0.00%	400	0.02%
	NEWMAN UNIT 2	2,829,108		0.0%	2,829,108	2,829,106	2	2.00	1	0.00%	0	0.00%	1	0.00%
	NEWMAN UNIT 3	5,645,296		0.0%	5,645,296	5,395,175	250,121	7.00	35,732	0.63%	0	0.00%	35,732	0.63%
	NEWMAN UNIT 4	11,495,252		0.0%	11,495,252	11,495,252	-1							
	NEWMAN UNIT 5	1,771,257		0.0%	1,771,257	773,576	997,681	42.00	23,754	1.34%	0	0.00%	23,754	1.34%
	NEWMAN ZERO LIQUID DISCHARGE	14,375,574		0.0%	14,375,574	3,273,166	11,102,408	42.00	264,343	1.84%	0	0.00%	264,343	1.84%
	NEWMAN COMMON	3,070,930		0.0%	3,070,930	657,238	2,413,692	42.00	57,469	1.87%	0	0.00%	57,469	1.87%
	Total Account 316.00	52,596,308		0.0%	52,596,308	35,532,076	17,064,233	31.07	549,177	1.04%	0	0.00%	549,177	1.04%
	Total Steam Production Plant	565,455,715		0.0%	565,455,715	250,674,029	314,781,685	21.29	14,784,009	2.61%	0	0.00%	14,784,009	2.61%
	GAS TURBINE PLANT													
341.00	STRUCTURES AND IMPROVEMENTS													
	COPPER POWER STATION	791,864		0.0%	791,864	676,484	115,380	11.00	10,489	1.32%	0	0.00%	10,489	1.32%
	RIO GRANDE UNIT 9	22,158,133		0.0%	22,158,133	2,511,851	19,646,282	38.00	517,007	2.33%	0	0.00%	517,007	2.33%
	MONTANA POWER STATION UNIT 1	315,347		0.0%	315,347	29,788	285,559	41.00	6,965	2.21%	0	0.00%	6,965	2.21%
	MONTANA POWER STATION UNIT 2	257,181		0.0%	257,181	24,321	232,860	41.00	5,680	2.21%	0	0.00%	5,680	2.21%
	MONTANA POWER STATION UNIT 3	206,815		0.0%	206,815	18,930	187,885	42.00	4,473	2.16%	0	0.00%	4,473	2.16%
	MONTANA POWER STATION UNIT 4	237,486		0.0%	237,486	19,541	217,945	42.00	5,189	2.19%	0	0.00%	5,189	2.19%
	MONTANA POWER STATION COMMON	18,007,977		0.0%	18,007,977	1,381,319	16,626,658	42.00	395,873	2.20%	0	0.00%	395,873	2.20%
	SOLAR FACILITIES	91,868		0.0%	91,868	28,369	63,499	15.00	4,233	4.61%	0	0.00%	4,233	4.61%
	Total Account 341.00	42,066,673		0.0%	42,066,673	4,690,603	37,376,069	39.35	949,910	2.26%	0	0.00%	949,910	2.26%
342.00	FUEL HOLDERS													
	COPPER POWER STATION	511,691		0.0%	511,691	480,918	30,773	11.00	2,798	0.55%	0	0.00%	2,798	0.55%
	RIO GRANDE UNIT 9	3,768,778		0.0%	3,768,778	541,045	3,227,734	38.00	84,940	2.25%	0	0.00%	84,940	2.25%
	MONTANA POWER STATION COMMON	20,877,428		0.0%	20,877,428	1,344,928	19,532,500	42.00	465,060	2.23%	0	0.00%	465,060	2.23%
	Total Account 342.00	25,157,897		0.0%	25,157,897	2,366,890	22,791,006	41.23	552,797	2.20%	0	0.00%	552,797	2.20%
343.00	PRIME MOVERS													
	RIO GRANDE UNIT 9	59,555,058		0.0%	59,555,058	8,957,443	50,597,615	38.00	1,331,516	2.24%	0	0.00%	1,331,516	2.24%
	MONTANA POWER STATION UNIT 1	78,609,841		0.0%	78,609,841	8,434,351	70,175,490	41.00	1,711,597	2.18%	0	0.00%	1,711,597	2.18%
	MONTANA POWER STATION UNIT 2	73,503,725		0.0%	73,503,725	7,883,880	65,619,845	41.00	1,600,484	2.18%	0	0.00%	1,600,484	2.18%
	MONTANA POWER STATION UNIT 3	63,009,557		0.0%	63,009,557	5,360,075	57,649,482	42.00	1,372,607	2.18%	0	0.00%	1,372,607	2.18%
	MONTANA POWER STATION UNIT 4	62,425,439		0.0%	62,425,439	4,746,607	57,678,832	42.00	1,373,306	2.20%	0	0.00%	1,373,306	2.20%
	MONTANA POWER STATION COMMON	34,687,535		0.0%	34,687,535	3,863,968	30,823,567	42.00	733,894	2.12%	0	0.00%	733,894	2.12%
	Total Account 343.00	371,791,155		0.0%	371,791,155	39,246,324	332,544,832	40.94	8,123,404	2.18%	0	0.00%	8,123,404	2.18%
344.00	GENERATORS													
	COPPER POWER STATION	10,369,392		0.0%	10,369,392	6,437,801	3,931,591	11.00	357,417	3.45%	0	0.00%	357,417	3.45%
	RIO GRANDE UNIT 9	8,420,577		0.0%	8,420,577	977,806	7,442,771	38.00	195,862	2.33%	0	0.00%	195,862	2.33%
	MONTANA POWER STATION UNIT 1	6,122,691		0.0%	6,122,691	398,681	5,724,010	41.00	139,610	2.28%	0	0.00%	139,610	2.28%
	MONTANA POWER STATION UNIT 2	6,122,691		0.0%	6,122,691	405,064	5,717,627	41.00	139,454	2.28%	0	0.00%	139,454	2.28%
	MONTANA POWER STATION UNIT 3	6,241,096		0.0%	6,241,096	459,179	5,781,917	42.00	137,665	2.21%	0	0.00%	137,665	2.21%
	MONTANA POWER STATION UNIT 4	6,126,228		0.0%	6,126,228	416,026	5,710,202	42.00	135,957	2.22%	0	0.00%	135,957	2.22%
	MONTANA POWER STATION COMMON	63		0.0%	63	10	53	53.00	1	1.59%	0	0.00%	1	1.59%
	SOLAR FACILITIES	1,187,262		0.0%	1,187,262	367,724	819,538	15.00	54,636	4.60%	0	0.00%	54,636	4.60%
	Total Account 344.00	44,590,001		0.0%	44,590,001	9,462,291	35,127,709	30.27	1,160,603	2.60%	0	0.00%	1,160,603	2.60%
345.00	ACCESSORY ELECTRIC EQUIPMENT													
	COPPER POWER STATION	2,306,861		0.0%	2,306,861	649,418	1,657,443	11.00	150,677	6.53%	0	0.00%	150,677	6.53%
	RIO GRANDE UNIT 9	5,186,611		0.0%	5,186,611	834,096	4,352,515	38.00	114,540	2.21%	0	0.00%	114,540	2.21%
	MONTANA POWER STATION UNIT 1	3,115,518		0.0%	3,115,518	271,887	2,843,632	41.00	69,357	2.23%	0	0.00%	69,357	2.23%
	MONTANA POWER STATION UNIT 2	3,029,962		0.0%	3,029,962	269,436	2,760,527	41.00	67,330	2.22%	0	0.00%	67,330	2.22%
	MONTANA POWER STATION UNIT 3	2,686,650		0.0%	2,686,650	192,777	2,493,873	42.00	59,378	2.21%	0	0.00%	59,378	2.21%
	MONTANA POWER STATION UNIT 4	2,250,774		0.0%	2,250,774	138,436	2,112,338	42.00	50,294	2.23%	0	0.00%	50,294	2.23%
	MONTANA POWER STATION COMMON	9,316,081		0.0%	9,316,081	1,059,360	8,256,721	42.00	196,589	2.11%	0	0.00%	196,589	2.11%
	SOLAR FACILITIES	167,360		0.0%	167,360	53,304	114,056	15.00	7,604	4.54%	0	0.00%	7,604	4.54%
	Total Account 345.00	28,059,816		0.0%	28,059,816	3,468,713	24,591,104	34.36	715,767	2.55%	0	0.00%	715,767	2.55%

Depreciation Rate Development

Account No.	Description	[1] Plant 12/31/2019	[2] Iowa Curve Type - AL	[3] Net Salvage	[4] Depreciable Base	[5] Book Reserve	[6] Future Accruals	[7] Remaining Life	[8] Service Life Accrual	[9] Rate	[10] Net Salvage Accrual	[11] Rate	[12] Total Accrual	[13] Rate
346.00	MISCELLANEOUS POWER PLANT EQUIPMENT													
	COPPER POWER STATION	4,170,624		0.0%	4,170,624	4,034,370	136,254	11.00	12,387	0.30%	0	0.00%	12,387	**0.30%**
	RIO GRANDE UNIT 9	410,060		0.0%	410,060	62,171	347,889	38.00	9,155	2.23%	0	0.00%	9,155	**2.23%**
	MONTANA POWER STATION UNIT 1	297,569		0.0%	297,569	32,999	264,570	41.00	6,453	2.17%	0	0.00%	6,453	**2.17%**
	MONTANA POWER STATION UNIT 2	275,751		0.0%	275,751	31,927	243,823	41.00	5,947	2.16%	0	0.00%	5,947	**2.16%**
	MONTANA POWER STATION UNIT 3	229,358		0.0%	229,358	21,831	207,528	42.00	4,941	2.15%	0	0.00%	4,941	**2.15%**
	MONTANA POWER STATION UNIT 4	231,228		0.0%	231,228	19,538	211,690	42.00	5,040	2.18%	0	0.00%	5,040	**2.18%**
	MONTANA POWER STATION COMMON	740,931		0.0%	740,931	126,522	614,409	42.00	14,629	1.97%	0	0.00%	14,629	**1.97%**
	Total Account 346.00	6,355,521		0.0%	6,355,521	4,329,358	2,026,163	34.60	58,552	0.92%	0	0.00%	58,552	**0.92%**
	Total Gas Turbine Plant	518,021,063		0.0%	518,021,063	63,564,180	454,456,883	39.31	11,561,033	2.23%	0	0.00%	11,561,033	**2.23%**
	TRANSMISSION PLANT													
350.10	LAND RIGHTS	18,917,746	R3 - 80	0.0%	18,917,746	6,016,208	12,901,538	66.90	192,848	1.02%	0	0.00%	192,848	**1.02%**
350.10	LAND RIGHTS - ISLETA	16,824,156	SQ -	0.0%	16,824,156	1,540,524	15,283,632	24.00	636,818	3.79%	0	0.00%	636,818	**3.79%**
352.00	STRUCTURES AND IMPROVEMENTS	12,463,443	R4 - 75	-5.0%	13,086,615	4,224,229	8,862,386	61.20	134,628	1.08%	10,183	0.08%	144,810	**1.16%**
353.00	STATION EQUIPMENT	188,643,566	R3 - 58	-5.0%	198,075,744	88,164,203	109,911,541	41.52	2,420,023	1.28%	227,172	0.12%	2,647,195	**1.40%**
354.00	STEEL TOWERS AND FIXTURES	30,170,782	R4 - 75	-10.0%	33,187,860	14,800,075	18,387,784	51.10	300,797	1.00%	59,043	0.20%	359,839	**1.19%**
355.00	WOOD AND STEEL POLES	163,484,540	S3 - 55	-15.0%	188,007,221	64,248,195	123,759,026	42.40	2,340,480	1.43%	578,365	0.35%	2,918,845	**1.79%**
356.00	OVERHEAD CONDUCTORS AND DEVICES	98,265,749	R4 - 65	-10.0%	108,092,324	54,924,539	53,167,785	39.99	1,083,801	1.10%	245,726	0.25%	1,329,527	**1.35%**
359.00	ROADS AND TRAILS	3,573,353	R3 - 70	0.0%	3,573,353	662,951	2,910,402	63.40	45,905	1.28%	0	0.00%	45,905	**1.28%**
	Total Transmission Plant	532,343,334		-8.9%	579,765,018	234,580,925	345,184,094	41.71	7,155,300	1.34%	1,120,488	0.21%	8,275,788	**1.55%**
	DISTRIBUTION PLANT													
360.10	LAND RIGHTS	2,578,795	R4 - 70	0.0%	2,578,795	622,987	1,955,808	57.60	33,955	1.32%	0	0.00%	33,955	**1.32%**
361.00	STRUCTURES AND IMPROVEMENTS	21,788,555	R3 - 70	-5.0%	22,877,983	2,820,363	20,057,620	63.10	300,605	1.38%	17,265	0.08%	317,870	**1.46%**
362.00	STATION EQUIPMENT	287,622,780	R1.5 - 71	0.0%	287,622,780	70,431,015	217,191,765	60.86	3,568,711	1.24%	0	0.00%	3,568,711	**1.24%**
364.00	POLES, TOWERS AND FIXTURES	183,367,772	R3 - 58	-25.0%	229,209,715	61,904,538	167,305,177	31.00	3,918,169	2.14%	1,478,772	0.81%	5,396,941	**2.94%**
365.00	OVERHEAD CONDUCTORS AND DEVICES	117,036,296	R2.5 - 48	-15.0%	134,591,740	35,065,798	99,525,943	36.20	2,264,378	1.93%	484,957	0.41%	2,749,335	**2.35%**
366.00	UNDERGROUND CONDUIT	141,830,292	R4 - 71	0.0%	141,830,292	40,502,369	101,327,924	56.16	1,804,272	1.27%	0	0.00%	1,804,272	**1.27%**
367.00	UNDERGROUND CONDUCTORS AND DEVICES	166,797,046	S2 - 41	-20.0%	200,156,456	48,664,055	151,492,400	29.60	3,990,979	2.39%	1,127,007	0.68%	5,117,987	**3.07%**
368.00	LINE TRANSFORMERS	283,609,012	R3 - 52	-10.0%	311,969,913	67,802,856	244,167,057	39.00	5,533,491	1.95%	727,203	0.26%	6,260,694	**2.21%**
369.00	SERVICES	56,297,452	S3 - 65	0.0%	56,297,452	26,484,850	29,812,602	49.10	607,181	1.08%	0	0.00%	607,181	**1.08%**
370.00	METERS	61,010,255	R2.5 - 35	-15.0%	70,161,794	28,815,140	41,346,653	25.90	1,243,055	2.04%	353,341	0.58%	1,596,396	**2.62%**
371.00	INSTALLATIONS ON CUSTOMERS' PREMISES	14,098,584	R2 - 35	-15.0%	16,213,371	5,638,247	10,575,125	23.30	363,105	2.58%	90,763	0.64%	453,868	**3.22%**
373.00	STREET LIGHTING AND SIGNAL SYSTEMS	11,751,010	R3 - 55	-20.0%	14,101,212	6,077,418	8,023,794	33.10	171,408	1.46%	71,003	0.60%	242,411	**2.06%**
	Total Distribution Plant	1,347,787,849		-10.4%	1,487,611,503	394,829,634	1,092,781,869	38.82	23,799,310	1.77%	4,350,312	0.32%	28,149,622	**2.09%**
	GENERAL PLANT													
390.00	STRUCTURES AND IMPROVEMENTS													
	SYSTEMS OPERATIONS BUILDING	15,318,735	R2.5 - 80	0.0%	15,318,735	3,475,891	11,842,845	21.10	561,272	3.66%	0	0.00%	561,272	**3.66%**
	STANTON TOWER	38,933,123	R2.5 - 80	0.0%	38,933,123	5,776,854	33,156,269	37.00	896,115	2.30%	0	0.00%	896,115	**2.30%**
	EASTSIDE OPERATIONS CENTER	42,631,420	R2.5 - 80	0.0%	42,631,420	3,214,715	39,416,705	43.90	897,875	2.11%	0	0.00%	897,875	**2.11%**
	OTHER STRUCTURES	17,628,831	S0.5 - 40	0.0%	17,628,831	3,113,647	14,515,184	27.70	524,014	2.97%	0	0.00%	524,014	**2.97%**
	Total Account 390.00	114,512,108		0.0%	114,512,108	15,581,106	98,931,002	34.36	2,879,276	2.51%	0	0.00%	2,879,276	**2.51%**
391.00	OFFICE FURNITURE AND EQUIPMENT	6,751,956	SQ - 20	0.0%	6,751,956	6,175,042	576,914	17.60	32,779	0.49%	0	0.00%	32,779	**0.49%**
393.00	STORES EQUIPMENT	53,348	SQ - 25	0.0%	53,348	51,489	1,858	9.50	196	0.37%	0	0.00%	196	**0.37%**
394.00	TOOLS, SHOP AND GARAGE EQUIPMENT	5,680,076	SQ - 25	0.0%	5,680,076	1,853,025	3,827,051	19.60	195,258	3.44%	0	0.00%	195,258	**3.44%**
395.00	LABORATORY EQUIPMENT	5,226,132	SQ - 15	0.0%	5,226,132	1,910,104	3,316,028	9.50	349,056	6.68%	0	0.00%	349,056	**6.68%**
396.00	POWER OPERATED EQUIPMENT	4,300,329	R2.5 - 21	15.0%	3,655,279	1,036,366	2,618,914	15.80	206,580	4.80%	-40,826	-0.95%	165,754	**3.85%**
397.00	COMMUNICATION EQUIPMENT	30,616,208	SQ - 15	0.0%	30,616,208	12,705,626	17,910,582	6.90	2,595,737	8.48%	0	0.00%	2,595,737	**8.48%**
398.00	MISCELLANEOUS EQUIPMENT	4,575,362	SQ - 15	0.0%	4,575,362	1,385,677	3,189,685	8.00	398,711	8.71%	0	0.00%	398,711	**8.71%**
	Total General Plant	171,715,519		0.4%	171,070,469	40,698,436	130,372,033	19.70	6,657,591	3.88%	-40,826	-0.02%	6,616,766	**3.85%**
	TOTAL DEPRECIABLE PLANT	$ 3,135,323,480		-6.0%	$ 3,321,923,768	$ 984,347,203	$ 2,337,576,565	33.69	$ 63,957,243	2.04%	$ 5,429,974	0.17%	$ 69,387,217	**2.21%**

		[1]	[2]		[3]	[4]	[5]	[6]	[7]	[8]	[9]	[10]	[11]	[12]	[13]
Account No.	Description	Plant 12/31/2019	Iowa Curve Type	AL	Net Salvage	Depreciable Base	Book Reserve	Future Accruals	Remaining Life	Service Life Accrual	Rate	Net Salvage Accrual	Rate	Total Accrual	Rate

[1] From depreciation study

[2] Average life and Iowa curve shape developed through statistical analysis and professional judgment

[3] Mass net salvage rates developed through statistical analysis and professional judgment; see response to CEP 7-37, Attach 1 for mass property salvage rates used assuming no interim retirements or net salvage

[4] = [1]*(1-[3])

[5] From depreciation study

[6] = [4] - [5]

[7] Composite remaining life based on Iowa cuve in [2]; see remaining life exhibit for detailed calculations

[8] = ([1] - [5]) / [7]

[9] = [8] / [1]

[10] = [12] - [8]

[11] = [13] - [9]

[12] = [6] / [7]

[13] = [12] / [1]

13

[1]	[2]	[3]	[4]	[5]	[6]	[7]
Age (Years)	Exposures (Dollars)	Observed Life Table (OLT)	Company R4-50	City R3-58	Company SSD	Garrett SSD
0.0	124,971,285	100.00%	100.00%	100.00%	0.0000	0.0000
0.5	123,285,263	100.00%	100.00%	99.99%	0.0000	0.0000
1.5	119,973,354	100.00%	100.00%	99.96%	0.0000	0.0000
2.5	114,067,017	100.00%	99.99%	99.92%	0.0000	0.0000
3.5	106,098,721	99.99%	99.99%	99.88%	0.0000	0.0000
4.5	98,012,081	99.99%	99.99%	99.84%	0.0000	0.0000
5.5	98,507,346	99.98%	99.98%	99.79%	0.0000	0.0000
6.5	93,945,324	99.68%	99.97%	99.73%	0.0000	0.0000
7.5	90,095,080	99.68%	99.96%	99.66%	0.0000	0.0000
8.5	108,423,856	99.68%	99.95%	99.59%	0.0000	0.0000
9.5	107,733,043	99.68%	99.93%	99.51%	0.0000	0.0000
10.5	99,773,471	99.51%	99.91%	99.41%	0.0000	0.0000
11.5	87,162,295	99.45%	99.88%	99.31%	0.0000	0.0000
12.5	88,268,362	99.41%	99.85%	99.19%	0.0000	0.0000
13.5	87,576,947	99.34%	99.81%	99.06%	0.0000	0.0000
14.5	91,177,671	99.34%	99.76%	98.92%	0.0000	0.0000
15.5	89,422,538	99.06%	99.70%	98.76%	0.0000	0.0000
16.5	81,791,927	99.03%	99.62%	98.59%	0.0000	0.0000
17.5	80,820,992	99.03%	99.53%	98.39%	0.0000	0.0000
18.5	81,053,283	99.01%	99.43%	98.18%	0.0000	0.0001
19.5	76,601,021	99.01%	99.30%	97.95%	0.0000	0.0001
20.5	77,068,074	98.20%	99.14%	97.70%	0.0001	0.0000
21.5	77,510,512	98.20%	98.96%	97.42%	0.0001	0.0001
22.5	70,282,388	98.06%	98.75%	97.12%	0.0000	0.0001
23.5	70,034,193	97.83%	98.50%	96.79%	0.0000	0.0001
24.5	68,442,289	96.09%	98.20%	96.44%	0.0004	0.0000
25.5	67,603,103	96.06%	97.87%	96.06%	0.0003	0.0000
26.5	66,668,069	94.73%	97.47%	95.64%	0.0008	0.0001
27.5	66,330,609	94.60%	97.02%	95.20%	0.0006	0.0000
28.5	65,772,107	94.49%	96.51%	94.72%	0.0004	0.0000
29.5	64,567,954	94.49%	95.92%	94.20%	0.0002	0.0000
30.5	46,253,006	94.48%	95.25%	93.65%	0.0001	0.0001
31.5	46,137,531	94.32%	94.50%	93.06%	0.0000	0.0002
32.5	42,338,532	94.18%	93.65%	92.42%	0.0000	0.0003
33.5	41,712,188	93.60%	92.70%	91.75%	0.0001	0.0003
34.5	41,239,758	93.54%	91.65%	91.02%	0.0004	0.0006
35.5	10,632,523	92.47%	90.48%	90.25%	0.0004	0.0005
36.5	10,564,176	92.47%	89.18%	89.43%	0.0011	0.0009
37.5	9,990,821	91.60%	87.76%	88.56%	0.0015	0.0009
38.5	9,522,704	91.48%	86.20%	87.63%	0.0028	0.0015
39.5	7,704,316	90.82%	84.51%	86.65%	0.0040	0.0017
40.5	7,408,332	89.36%	82.67%	85.60%	0.0045	0.0014
41.5	4,031,385	86.73%	80.69%	84.49%	0.0037	0.0005
42.5	3,951,237	85.00%	78.55%	83.31%	0.0042	0.0003
43.5	3,291,692	85.00%	76.25%	82.07%	0.0076	0.0009
44.5	3,279,082	85.00%	73.76%	80.74%	0.0126	0.0018
45.5	2,821,871	85.00%	71.02%	79.35%	0.0195	0.0032
46.5	1,991,746	85.00%	68.03%	77.88%	0.0288	0.0051

Account 353 Curve Fitting

[1]	[2]	[3]	[4]	[5]	[6]	[7]
Age (Years)	Exposures (Dollars)	Observed Life Table (OLT)	Company R4-50	City R3-58	Company SSD	Garrett SSD
47.5	526,623	85.00%	64.75%	76.32%	0.0410	0.0075
48.5	0	85.00%	61.20%	74.68%	0.0567	0.0107
49.5	0	85.00%	57.38%	72.95%	0.0763	0.0145
50.5			53.33%	71.14%		
Sum of Squared Differences				[8]	0.2684	0.0537
Up to 1% of Beginning Exposures				[9]	0.0944	0.0209

[1] Age in years using half-year convention

[2] Dollars exposed to retirement at the beginning of each age interval

[3] Observed life table based on the Company's property records. These numbers form the original survivor curve.

[4] The Company's selected Iowa curve to be fitted to the OLT.

[5] My selected Iowa curve to be fitted to the OLT.

[6] = ([4] - [3])^2. This is the squared difference between each point on the Company's curve and the observed survivor curve.

[7] = ([5] - [3])^2. This is the squared difference between each point on my curve and the observed survivor curve.

[8] = Sum of squared differences. The smallest SSD represents the best mathematical fit.

[1]	[2]	[3]	[4]	[5]	[6]	[7]
Age (Years)	Exposures (Dollars)	Observed Life Table (OLT)	Company R5-60	City R4-65	Company SSD	Garrett SSD
0.0	37,130,703	100.00%	100.00%	100.00%	0.0000	0.0000
0.5	36,274,644	100.00%	100.00%	100.00%	0.0000	0.0000
1.5	36,881,807	100.00%	100.00%	100.00%	0.0000	0.0000
2.5	36,735,606	100.00%	100.00%	100.00%	0.0000	0.0000
3.5	63,229,141	100.00%	100.00%	99.99%	0.0000	0.0000
4.5	56,982,661	100.00%	100.00%	99.99%	0.0000	0.0000
5.5	57,783,965	99.99%	100.00%	99.99%	0.0000	0.0000
6.5	52,500,290	99.99%	100.00%	99.98%	0.0000	0.0000
7.5	52,548,878	99.99%	100.00%	99.98%	0.0000	0.0000
8.5	62,700,553	99.99%	100.00%	99.97%	0.0000	0.0000
9.5	62,310,752	99.96%	100.00%	99.96%	0.0000	0.0000
10.5	61,916,385	99.96%	100.00%	99.95%	0.0000	0.0000
11.5	57,020,862	99.93%	100.00%	99.94%	0.0000	0.0000
12.5	57,295,950	99.93%	100.00%	99.93%	0.0000	0.0000
13.5	57,409,383	99.93%	100.00%	99.91%	0.0000	0.0000
14.5	63,722,385	99.93%	100.00%	99.89%	0.0000	0.0000
15.5	62,164,974	99.93%	100.00%	99.87%	0.0000	0.0000
16.5	61,816,251	99.91%	100.00%	99.84%	0.0000	0.0000
17.5	62,027,451	99.91%	100.00%	99.81%	0.0000	0.0000
18.5	62,128,749	99.91%	100.00%	99.77%	0.0000	0.0000
19.5	62,079,752	99.91%	100.00%	99.73%	0.0000	0.0000
20.5	61,975,597	99.91%	100.00%	99.68%	0.0000	0.0000
21.5	61,350,363	99.90%	100.00%	99.62%	0.0000	0.0000
22.5	60,087,186	99.90%	100.00%	99.55%	0.0000	0.0000
23.5	62,761,294	99.90%	100.00%	99.47%	0.0000	0.0000
24.5	62,517,012	99.90%	100.00%	99.38%	0.0000	0.0000
25.5	62,463,173	99.89%	100.00%	99.28%	0.0000	0.0000
26.5	59,404,758	99.88%	99.99%	99.16%	0.0000	0.0001
27.5	59,505,121	99.88%	99.99%	99.03%	0.0000	0.0001
28.5	58,023,920	99.86%	99.98%	98.87%	0.0000	0.0001
29.5	57,515,559	99.85%	99.96%	98.70%	0.0000	0.0001
30.5	25,352,994	99.85%	99.94%	98.51%	0.0000	0.0002
31.5	25,371,981	99.83%	99.90%	98.29%	0.0000	0.0002
32.5	24,071,047	99.78%	99.85%	98.04%	0.0000	0.0003
33.5	24,117,396	99.76%	99.78%	97.76%	0.0000	0.0004
34.5	24,129,708	99.75%	99.69%	97.46%	0.0000	0.0005
35.5	14,373,832	99.67%	99.57%	97.11%	0.0000	0.0007
36.5	14,669,872	99.66%	99.41%	96.73%	0.0000	0.0009
37.5	14,746,512	99.61%	99.20%	96.31%	0.0000	0.0011
38.5	14,654,961	99.55%	98.95%	95.84%	0.0000	0.0014
39.5	14,380,984	99.50%	98.64%	95.33%	0.0001	0.0017
40.5	14,261,057	99.49%	98.25%	94.77%	0.0002	0.0022
41.5	8,044,440	98.92%	97.80%	94.15%	0.0001	0.0023
42.5	8,002,933	98.89%	97.25%	93.47%	0.0003	Exhibit0.0029
43.5	7,715,623	96.35%	96.59%	92.74%	0.0000	0.0013
44.5	7,426,012	95.40%	95.83%	91.94%	0.0000	0.0012
45.5	7,173,179	93.56%	94.92%	91.08%	0.0002	0.0006
46.5	7,071,433	93.35%	93.86%	90.14%	0.0000	0.0010

Account 356 Curve Fitting

[1]	[2]	[3]	[4]	[5]	[6]	[7]
Age (Years)	Exposures (Dollars)	Observed Life Table (OLT)	Company R5-60	City R4-65	Company SSD	Garrett SSD
47.5	7,060,264	93.26%	92.63%	89.13%	0.0000	0.0017
48.5	6,912,388	93.13%	91.20%	88.04%	0.0004	0.0026
49.5	6,656,994	92.93%	89.53%	86.87%	0.0012	0.0037
50.5	2,260,928	92.65%	87.61%	85.63%	0.0025	0.0049
51.5	2,191,311	92.51%	85.41%	84.30%	0.0050	0.0067
52.5	2,133,882	92.21%	82.90%	82.88%	0.0087	0.0087
53.5	1,923,329	91.58%	80.08%	81.39%	0.0132	0.0104
54.5	1,818,010	91.25%	76.90%	79.80%	0.0206	0.0131
55.5	1,739,384	91.22%	73.38%	78.12%	0.0318	0.0172
56.5	1,317,527	91.11%	69.52%	76.34%	0.0466	0.0218
57.5	1,257,211	91.06%	65.32%	74.44%	0.0662	0.0276
58.5	1,225,741	90.98%	60.82%	72.42%	0.0909	0.0344
59.5	1,051,041	90.83%	56.07%	70.23%	0.1208	0.0424
60.5	990,508	90.73%	51.11%	67.90%	0.1570	0.0521
61.5	854,819	90.66%	46.01%	65.40%	0.1994	0.0638
62.5	146,908	90.34%	40.85%	62.73%	0.2449	0.0762
63.5	0	89.95%	35.72%	59.90%	0.2941	0.0903
64.5			30.72%	56.92%		

Sum of Squared Differences				[8]	1.3043	0.4972
Up to 1% of Beginning Exposures				[9]	0.7653	0.3306

[1] Age in years using half-year convention

[2] Dollars exposed to retirement at the beginning of each age interval

[3] Observed life table based on the Company's property records. These numbers form the original survivor curve.

[4] The Company's selected Iowa curve to be fitted to the OLT.

[5] My selected Iowa curve to be fitted to the OLT.

[6] = ([4] - [3])^2. This is the squared difference between each point on the Company's curve and the observed survivor curve.

[7] = ([5] - [3])^2. This is the squared difference between each point on my curve and the observed survivor curve.

[8] = Sum of squared differences. The smallest SSD represents the best mathematical fit.

Account 362 Curve Fitting

	[1]	[2]	[3]	[4]	[5]	[6]	[7]
	Age (Years)	Exposures (Dollars)	Observed Life Table (OLT)	Company R2-65	City R1.5-71	Company SSD	Garrett SSD
	0.0	248,828,114	100.00%	100.00%	100.00%	0.0000	0.0000
	0.5	201,849,775	100.00%	99.93%	99.88%	0.0000	0.0000
	1.5	176,409,889	100.00%	99.78%	99.62%	0.0000	0.0000
	2.5	165,161,928	99.98%	99.62%	99.36%	0.0000	0.0000
	3.5	161,826,959	99.98%	99.45%	99.10%	0.0000	0.0001
	4.5	154,548,514	99.95%	99.27%	98.82%	0.0000	0.0001
	5.5	139,248,866	99.90%	99.09%	98.54%	0.0001	0.0002
	6.5	126,903,879	99.88%	98.89%	98.25%	0.0001	0.0003
	7.5	112,196,449	99.82%	98.69%	97.95%	0.0001	0.0003
	8.5	108,902,705	99.69%	98.47%	97.65%	0.0001	0.0004
	9.5	104,297,485	99.42%	98.25%	97.34%	0.0001	0.0004
	10.5	91,740,879	99.29%	98.01%	97.02%	0.0002	0.0005
	11.5	81,733,466	99.15%	97.77%	96.69%	0.0002	0.0006
	12.5	82,480,744	98.99%	97.51%	96.35%	0.0002	0.0007
	13.5	75,916,167	97.23%	97.24%	96.01%	0.0000	0.0001
	14.5	72,817,079	96.99%	96.95%	95.65%	0.0000	0.0002
	15.5	63,288,093	96.26%	96.66%	95.29%	0.0000	0.0001
	16.5	59,875,959	96.15%	96.35%	94.92%	0.0000	0.0002
	17.5	59,670,008	95.75%	96.02%	94.54%	0.0000	0.0001
	18.5	57,375,543	95.59%	95.68%	94.15%	0.0000	0.0002
	19.5	52,939,249	95.41%	95.33%	93.75%	0.0000	0.0003
	20.5	52,603,940	95.18%	94.96%	93.34%	0.0000	0.0003
	21.5	49,537,435	95.16%	94.58%	92.93%	0.0000	0.0005
	22.5	47,755,815	90.33%	94.17%	92.50%	0.0015	0.0005
	23.5	44,599,419	89.56%	93.75%	92.06%	0.0018	0.0006
	24.5	42,812,608	88.88%	93.32%	91.61%	0.0020	0.0007
	25.5	37,854,351	87.94%	92.86%	91.15%	0.0024	0.0010
	26.5	33,965,172	87.44%	92.39%	90.68%	0.0025	0.0011
	27.5	33,459,976	86.81%	91.90%	90.20%	0.0026	0.0011
	28.5	31,712,819	86.47%	91.39%	89.71%	0.0024	0.0010
	29.5	29,127,131	85.97%	90.85%	89.20%	0.0024	0.0010
	30.5	31,869,456	85.68%	90.30%	88.68%	0.0021	0.0009
	31.5	32,202,120	84.76%	89.72%	88.15%	0.0025	0.0012
	32.5	30,513,599	84.35%	89.13%	87.61%	0.0023	0.0011
	33.5	30,495,791	83.95%	88.50%	87.05%	0.0021	0.0010
	34.5	29,497,777	83.19%	87.86%	86.48%	0.0022	0.0011
	35.5	29,199,281	82.91%	87.19%	85.90%	0.0018	0.0009
	36.5	26,795,173	82.52%	86.50%	85.30%	0.0016	0.0008
	37.5	27,537,745	82.23%	85.78%	84.68%	0.0013	0.0006
	38.5	26,911,602	81.57%	85.03%	84.05%	0.0012	0.0006
	39.5	25,096,668	80.89%	84.26%	83.40%	0.0011	0.0006
	40.5	25,010,695	80.38%	83.45%	82.74%	0.0009	0.0006
	41.5	23,825,171	80.09%	82.63%	82.06%	0.0006	0.0004
	42.5	23,705,122	79.77%	81.77%	81.36%	0.0004	0.0003
	43.5	21,787,906	79.36%	80.88%	80.65%	0.0002	0.0002
	44.5	20,026,479	78.92%	79.96%	79.92%	0.0001	0.0001
	45.5	19,198,028	78.48%	79.01%	79.17%	0.0000	0.0000
	46.5	18,948,452	77.96%	78.03%	78.40%	0.0000	0.0000

[1]	[2]	[3]	[4]	[5]	[6]	[7]
Age (Years)	Exposures (Dollars)	Observed Life Table (OLT)	Company R2-65	City R1.5-71	Company SSD	Garrett SSD
47.5	17,890,985	76.73%	77.02%	77.61%	0.0000	0.0001
48.5	17,128,820	76.32%	75.97%	76.81%	0.0000	0.0000
49.5	16,435,498	76.04%	74.90%	75.98%	0.0001	0.0000
50.5	15,602,745	75.42%	73.78%	75.14%	0.0003	0.0000
51.5	14,512,462	75.24%	72.64%	74.27%	0.0007	0.0001
52.5	13,619,252	72.26%	71.46%	73.39%	0.0001	0.0001
53.5	12,853,322	70.85%	70.25%	72.48%	0.0000	0.0003
54.5	12,431,615	70.14%	69.01%	71.56%	0.0001	0.0002
55.5	11,939,540	69.63%	67.73%	70.61%	0.0004	0.0001
56.5	11,796,546	69.30%	66.42%	69.65%	0.0008	0.0000
57.5	5,749,888	68.95%	65.07%	68.66%	0.0015	0.0000
58.5	4,769,299	68.05%	63.70%	67.66%	0.0019	0.0000
59.5	4,133,619	66.14%	62.29%	66.63%	0.0015	0.0000
60.5	3,582,340	65.19%	60.85%	65.58%	0.0019	0.0000
61.5	3,349,527	64.32%	59.38%	64.52%	0.0024	0.0000
62.5	2,942,965	63.71%	57.89%	63.43%	0.0034	0.0000
63.5	2,273,680	63.49%	56.36%	62.32%	0.0051	0.0001
64.5	1,120,932	63.01%	54.81%	61.20%	0.0067	0.0003
65.5	877,104	62.23%	53.23%	60.06%	0.0081	0.0005
66.5	485,016	61.90%	51.64%	58.89%	0.0105	0.0009
67.5	301,737	61.53%	50.02%	57.72%	0.0133	0.0015
68.5	287,268	61.52%	48.38%	56.52%	0.0173	0.0025
69.5	132,785	61.52%	46.73%	55.31%	0.0219	0.0039
70.5			45.07%	54.08%		
Sum of Squared Differences				[8]	0.1372	0.0338
Up to 1% of Beginning Exposures				[9]	0.0544	0.0241

[1] Age in years using half-year convention

[2] Dollars exposed to retirement at the beginning of each age interval

[3] Observed life table based on the Company's property records. These numbers form the original survivor curve.

[4] The Company's selected Iowa curve to be fitted to the OLT.

[5] My selected Iowa curve to be fitted to the OLT.

[6] = ([4] - [3])^2. This is the squared difference between each point on the Company's curve and the observed survivor curve.

[7] = ([5] - [3])^2. This is the squared difference between each point on my curve and the observed survivor curve.

[8] = Sum of squared differences. The smallest SSD represents the best mathematical fit.

[1]	[2]	[3]	[4]	[5]	[6]	[7]
Age (Years)	Exposures (Dollars)	Observed Life Table (OLT)	Company R4-65	City R4-71	Company SSD	Garrett SSD
0.0	123,775,207	100.00%	100.00%	100.00%	0.0000	0.0000
0.5	117,342,859	99.98%	100.00%	100.00%	0.0000	0.0000
1.5	112,780,532	99.92%	100.00%	100.00%	0.0000	0.0000
2.5	108,800,246	99.86%	100.00%	100.00%	0.0000	0.0000
3.5	103,589,990	99.79%	99.99%	99.99%	0.0000	0.0000
4.5	100,716,580	99.74%	99.99%	99.99%	0.0000	0.0000
5.5	96,218,297	99.66%	99.99%	99.99%	0.0000	0.0000
6.5	92,916,643	99.59%	99.98%	99.99%	0.0000	0.0000
7.5	89,570,213	99.53%	99.98%	99.98%	0.0000	0.0000
8.5	88,157,941	99.48%	99.97%	99.98%	0.0000	0.0000
9.5	86,590,707	99.42%	99.96%	99.97%	0.0000	0.0000
10.5	82,364,298	99.35%	99.95%	99.96%	0.0000	0.0000
11.5	77,698,441	99.29%	99.94%	99.95%	0.0000	0.0000
12.5	71,522,842	99.21%	99.93%	99.94%	0.0001	0.0001
13.5	67,174,028	99.16%	99.91%	99.93%	0.0001	0.0001
14.5	61,129,159	99.13%	99.89%	99.92%	0.0001	0.0001
15.5	53,571,898	99.06%	99.87%	99.90%	0.0001	0.0001
16.5	48,879,296	98.98%	99.84%	99.88%	0.0001	0.0001
17.5	44,198,503	98.86%	99.81%	99.86%	0.0001	0.0001
18.5	40,960,411	98.80%	99.77%	99.83%	0.0001	0.0001
19.5	37,436,926	98.73%	99.73%	99.80%	0.0001	0.0001
20.5	33,253,414	98.68%	99.68%	99.76%	0.0001	0.0001
21.5	28,806,342	98.54%	99.62%	99.72%	0.0001	0.0001
22.5	26,647,700	98.44%	99.55%	99.67%	0.0001	0.0002
23.5	24,046,716	98.29%	99.47%	99.62%	0.0001	0.0002
24.5	21,586,692	98.14%	99.38%	99.56%	0.0002	0.0002
25.5	20,067,013	98.01%	99.28%	99.49%	0.0002	0.0002
26.5	18,986,208	97.87%	99.16%	99.41%	0.0002	0.0002
27.5	17,975,477	97.63%	99.03%	99.31%	0.0002	0.0003
28.5	16,938,469	97.41%	98.87%	99.21%	0.0002	0.0003
29.5	15,803,917	97.20%	98.70%	99.09%	0.0002	0.0004
30.5	14,635,597	97.09%	98.51%	98.97%	0.0002	0.0004
31.5	13,385,775	96.96%	98.29%	98.82%	0.0002	0.0003
32.5	11,981,315	96.92%	98.04%	98.65%	0.0001	0.0003
33.5	10,766,242	96.85%	97.76%	98.47%	0.0001	0.0003
34.5	9,452,771	96.80%	97.46%	98.27%	0.0000	0.0002
35.5	7,911,386	96.77%	97.11%	98.04%	0.0000	0.0002
36.5	7,020,899	96.71%	96.73%	97.79%	0.0000	0.0001
37.5	6,327,334	96.65%	96.31%	97.51%	0.0000	0.0001
38.5	5,502,588	96.52%	95.84%	97.20%	0.0000	0.0000
39.5	4,597,122	96.23%	95.33%	96.87%	0.0001	0.0000
40.5	3,869,267	96.04%	94.77%	96.50%	0.0002	0.0000
41.5	3,140,855	95.95%	94.15%	96.09%	0.0003	0.0000
42.5	2,784,009	95.60%	93.47%	95.64%	0.0005	0.0000
43.5	2,094,506	95.16%	92.74%	95.15%	0.0006	0.0000
44.5	1,766,345	94.45%	91.94%	94.62%	0.0006	0.0000
45.5	986,344	93.94%	91.08%	94.05%	0.0008	0.0000
46.5	682,270	93.49%	90.14%	93.42%	0.0011	0.0000

Account 366 Curve Fitting

[1]	[2]	[3]	[4]	[5]	[6]	[7]
Age (Years)	Exposures (Dollars)	Observed Life Table (OLT)	Company R4-65	City R4-71	Company SSD	Garrett SSD
47.5	661,912	91.22%	89.13%	92.75%	0.0004	0.0002
48.5	631,803	90.01%	88.04%	92.02%	0.0004	0.0004
49.5	508,909	88.93%	86.87%	91.24%	0.0004	0.0005
50.5	336,089	88.58%	85.63%	90.39%	0.0009	0.0003
51.5	300,922	87.21%	84.30%	89.49%	0.0008	0.0005
52.5	282,699	85.43%	82.88%	88.52%	0.0006	0.0010
53.5	252,967	84.41%	81.39%	87.49%	0.0009	0.0009
54.5	172,372	84.20%	79.80%	86.39%	0.0019	0.0005
55.5	159,640	81.81%	78.12%	85.23%	0.0014	0.0012
56.5	138,762	77.97%	76.34%	83.99%	0.0003	0.0036
57.5	62,391	74.73%	74.44%	82.68%	0.0000	0.0063
58.5	57,499	74.57%	72.42%	81.30%	0.0005	0.0045
59.5	48,225	74.17%	70.23%	79.85%	0.0015	0.0032
60.5	45,322	71.28%	67.90%	78.32%	0.0011	0.0050
61.5	21,596	70.90%	65.40%	76.70%	0.0030	0.0034
62.5	3,438	69.58%	62.73%	75.00%	0.0047	0.0029
63.5	3,317	67.13%	59.90%	73.17%	0.0052	0.0037
64.5	3,313	67.04%	56.92%	71.24%	0.0102	0.0018
65.5	3,309	66.97%	53.81%	69.17%	0.0173	0.0005
66.5	72	66.90%	50.59%	66.97%	0.0266	0.0000
67.5	0	64.94%	47.29%	64.63%	0.0311	0.0000
68.5			43.95%	62.14%		

Sum of Squared Differences				[8]	0.1168	0.0454
Up to 1% of Beginning Exposures				[9]	0.0053	0.0050

[1] Age in years using half-year convention

[2] Dollars exposed to retirement at the beginning of each age interval

[3] Observed life table based on the Company's property records. These numbers form the original survivor curve.

[4] The Company's selected Iowa curve to be fitted to the OLT.

[5] My selected Iowa curve to be fitted to the OLT.

[6] = ([4] - [3])^2. This is the squared difference between each point on the Company's curve and the observed survivor curve.

[7] = ([5] - [3])^2. This is the squared difference between each point on my curve and the observed survivor curve.

[8] = Sum of squared differences. The smallest SSD represents the best mathematical fit.