CASCADE NATURAL GAS CORPORATION

Depreciation Accrual Rate Study
As of December 31, 2013

AUS Consultants
8555 West Forest Home Avenue, Suite 201
Greenfield, Wisconsin 53228
Telephone 414-529-5755 Fax 414-529-5750
weinertj@auswest.net
Cell 414-698-8371

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Jerome C. Weinert
Principal and Director

AUS Consultants
Depreciation and Valuation Services
8555 West Forest Home Avenue
Suite 201
Greenfield, WI 53228
Telephone 414-529-5755
Fax 414-529-5750
Cell: 414-698-8371
E-Mail weinertj@auswest.net

April 15, 2015

Cascade Natural Gas Corporation
Kennewick, Washington

Gentlemen:

At your request, we have conducted a study of the annual depreciation accrual requirement for the gas plant of Cascade Natural Gas Corporation. These studies were performed on Cascade total combined plant (Oregon, Washington, & Inter-state) as of December 31, 2013, and we submit our results in this report. The purpose of this study was to update the depreciation parameters and rates established by the Company in its last depreciation study as of September 1997 prepared by Deloitte & Touche, LLP. The depreciation rates proposed in this study are those appropriate to be applied to the Company's plant in service to enable recovery of its investment, adjusted for net salvage, over its useful life.

The term Depreciation, as used in this report, is defined by the National Association of Regulatory Utility Commissioners as:

> "Depreciation, as applied to depreciable gas plant, means the loss in service value not restored by current maintenance, incurred in connection with the consumption or prospective retirement of gas plant in the course of service from causes which are known to be in current operation, against which the company is not protected by insurance. Among the causes to be given consideration are wear and tear, decay, action of the elements, inadequacy, obsolescence, changes in the art, changes in demand, and requirements of public authorities, and, in the case of natural gas companies exhaustion of natural resources."...
>
> "Service value means the difference between original cost and the net salvage value (or the salvage value of the property retired less the cost of removal or abandonment) of the utility plant."

It is the intent of this study to measure the rate at which the above-described depreciation, including a provision for net salvage, is taking place. Once measured, the depreciation accrual rates are then calculated to allocate to accounting periods, as an expense, the cost of the property consumed in the form of depreciation.

The depreciation accrual rates in this report were calculated using the Company's plant investment and accumulated reserve for depreciation, as of December 31, 2013. The studies were based on the Company's historical accounting records for both plant investment and the accumulated reserve for depreciation. The service lives for the various categories of plant were determined using the statistical life analysis technique of simulated plant balance analysis. Salvage, net of removal costs, was analyzed as a percentage of the retirements which produced the net salvage experience; the salvage analysis was based on data obtained from the company's accounting entries to its accumulated reserve for depreciation.

Discussions were held with Company personnel to ascertain Company plans and the condition of the gas industry in general and specific to the Company's service area. The historical service life indications and net salvage experience were reviewed with company personnel to gain an understanding of the Company's construction and retirement activities which lead to those indications as well as the Company's plans for the future.

Based on the above-described procedures, the capital recovery parameters of retirement dispersion, average service life, average age, average remaining life, gross salvage, cost of removal, and salvage-net-of-removal-cost were determined. Each account's theoretical reserve position was also determined based on the recommended capital recovery parameters. The average service life and average remaining life were calculated using the proposed service lives and the current age distribution of the company's surviving investment for each of the company's various account categories. It was based on these parameters which the depreciation accrual rates were developed.

The calculated depreciation accrual rates are based on the above-described capital recovery parameters and the Company's current overall capital recovery position. The capital recovery accrual rates recommended in this study are based on the remaining life method of capital recovery. The remaining life method of capital recovery attempts to recover the Company's capital investment less previously accumulated depreciation, with an allowance for net salvage, over the investment's average remaining life. As such, the remaining life method has a feedback mechanism to evaluate and fine tune the progress of the capital recovery process.

These study procedures are those recommended by National Association of Regulatory Commissioners in their publications, Depreciation Practices for Small Gas Distribution Companies, published in 1984, and Public Utility Depreciation Practices, published in 1996.

Based on our analysis, the Company should establish its annual accrual rates as follows:

Plant Investment and Reserve	Balances 12-31-2013
Plant Investment	$741,702,876
Reserved Investment	381,670,863
Reserve as a % of Plant	51.46%
Present Accruals	
Accrual Rate (%/year)	2.77%
Accruals ($s/year)	20,514,902
Proposed Accruals	
Accrual Rate (%/year)	3.04%
Accruals ($s/year)	22,533,134
Change in Accruals ($s/year)	$2,018,232

This report comprises the following:

This letter, identifying the subject and purpose of our study and summarizing the results. Section 1 of this report was written in such a fashion as to present the rationale and philosophy which formed the basis of these studies and to present the results of those studies. Section 2 of this report presents the study results in detail comprising:

Net change in Depreciation Rates and Accruals
Proposed Depreciation parameters, rates, and accruals
Theoretical Reserve based on the proposed depreciation parameters
Present Depreciation parameters, rates, and accruals

Periodic studies of the Company's depreciation parameters, accrual rates, and practices are recommended in order that its most current service life experience, construction and replacement programs, and the applicable technological and regulatory trends may be properly reflected in the annual depreciation accruals.

Respectfully submitted,

Jerome C. Weinert

Jerome C. Weinert, P.E., C.D.P., ASA
Principal and Director

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AUS CONSULTANTS

INTRODUCTION

This report summarizes our studies of the annual depreciation accrual requirement for the gas plant of Cascade Natural Gas Company. The purpose of the study was to update the depreciation parameters and rates established by the Company in its last depreciation study prepared in late 1997. The depreciation rates proposed in this study are those appropriate to be applied to the Company's plant in service to enable recovery of its investment, adjusted for net salvage, over its useful life.

The term Depreciation, as used in this report, is defined by the National Association of Regulatory Utility Commissioners as:

> "Depreciation, as applied to depreciable gas plant, means the loss in service value not restored by current maintenance, incurred in connection with the consumption or prospective retirement of gas plant in the course of service from causes which are known to be in current operation, against which the company is not protected by insurance. Among the causes to be given consideration are wear and tear, decay, action of the elements, inadequacy, obsolescence, changes in the art, changes in demand, and requirements of public authorities, and, in the case of natural gas companies exhaustion of natural resources."...
>
> Service value means the difference between original cost and the net salvage value of the utility plant, i.e., the salvage value of the property retired less the costs associated with the removal or safe abandonment of the utility plant.

It is the intent of this study to measure the rate at which the above-described depreciation is taking place, including a provision for salvage net of removal costs. Once these attributes are measured, the depreciation accrual rates are then calculated to allocate to accounting periods, as an expense, the cost of the property consumed in the form of depreciation.

The depreciation accrual rates in this report were calculated using the company's plant investment and accumulated reserve for depreciation as of December 31, 2013. The studies were based on the company's historical accounting records for both plant and net salvage. The

service lives for the various categories of plant were determined using the statistical life analysis technique of actuarial retirement rate analysis. The salvage, net of removal costs, was analyzed as a percentage of the retirements which produced the net salvage experience.

Discussions were held with company personnel to ascertain company plans and the condition of the gas industry in general and specific to the Company's service areas. The historical service life indications and net salvage experience were reviewed with company personnel to gain an understanding of the construction and retirement activities which lead to those indications, as well as the company's plans for the future. Based on the above-described procedures, the capital recovery parameters of retirement dispersion, the service life projection for the future and the future net salvage expectations were determined. Based on these recommended capital recovery parameters, each accounts' average service life, average age, average remaining life, average net salvage, and theoretical reserve position were calculated based on weighting the future service life and net salvage projections with the plant's past survival and retirement experience using the age distribution of the property surviving investment at the study date. It was based on these parameters which the depreciation accrual rates were developed. The depreciation accrual rates were calculated using the remaining life method of capital recovery.

These study procedures are those recommended by National Association of Regulatory Commissioners in their publications, Depreciation Practices for Small Gas Distribution Companies, published in 1984, and the 1996 edition of Public Utility Depreciation Practices.

The Company provides gas distribution services to the portions of Oregon and Washington. The following map details the Company's service areas:

The Company serves more than 260,000 customers in 96 communities – 68 of which are in Washington and 28 in Oregon. Cascade's service areas are concentrated in western and central Washington and central and eastern Oregon.

STUDY PROCEDURES

These studies were made based on accounting data through December 31, 2013. Several major steps were important to the completion of the current studies:

1. Assembly of historical plant accounting data for plant additions, retirements, transfers and balances. Survivor data was collected for back to the earliest placement of plant (1953) and retirement information back to 1974 or when the plant was first placed through 2013.

2. Computerized processing of the plant accounting data to establish historical retirement experience, retirement dispersion and service life indications, using the actuarial life analysis technique of retirement rate analysis.

3. Assembly of historical gross salvage, cost of removal, and retirement data over a period of 1978 to 2013.

4. Computerized processing of the historical retirement, gross salvage, and cost of removal data to establish net salvage experience using ratio analysis.

5. Interviews with company personnel to review company plans and practices, as well as to gain an understanding of the facts and circumstances which lead to the above-described historical life indications and net salvage experience.

6. Consideration of all other factors affecting the determination of future service life and future net salvage expectancies including physical, functional, environmental, and regulatory obsolescence.

7. Selection of the capital recovery parameters of retirement dispersion, service life projections for the future, salvage, and cost of removal projections for the future.

8. Calculation of the remaining capital recovery parameters which are dependent on the above-selected parameters. These calculations resulted in each account's average age, average service life, average remaining life, average net salvage, and the calculated reserve. The average service and remaining service lives were calculated using vintage group service life calculation techniques.

9. Calculation of depreciation accrual rates and accruals based on the above-derived capital recovery parameters. The accrual rates and annual accruals were determined using the remaining life method of capital recovery.

ANALYSIS OF CAPITAL RECOVERY PARAMETERS

Historical Life and Net Salvage Analysis

The historical life and salvage experience was based on analysis of the company's accounting data through 2013. For the service life analysis these data extended back to the 1950s and 60s. For the salvage data the analysis included data back to near 1974 depending on the account.

Service Life Analysis

The historical service life experience was analyzed using the actuarial method of retirement rate analysis. The Company's aged additions and retirements were banded over several retirement periods for life analysis using the retirement rate method. Generally, in retirement rate analysis, the property's survival and retirement is studied as a function of its age, thus providing indications of the plant's survival/retirement characteristics, as depicted by an Iowa-type survivor curve, and indications of the plant's historical service life. The service life indications for most of the plant accounts were analyzed for the retirement experience bands of:

Band Name	Retirement Experience Years	Placement Years
Total Data	1974-2013	1953-2013
30-years	1984-2013	1953-2013
20-years	1994-2013	1953-2013
10-years	2004-2013	1953-2013
5-years	2009-2013	1953-2013

In making final service life recommendations, the historical life analysis results were integrated with the company's and the industry expectations for the future.

The following table is an example of the actuarial retirement rate analysis used in the the life analysis portion of the depreciation study:

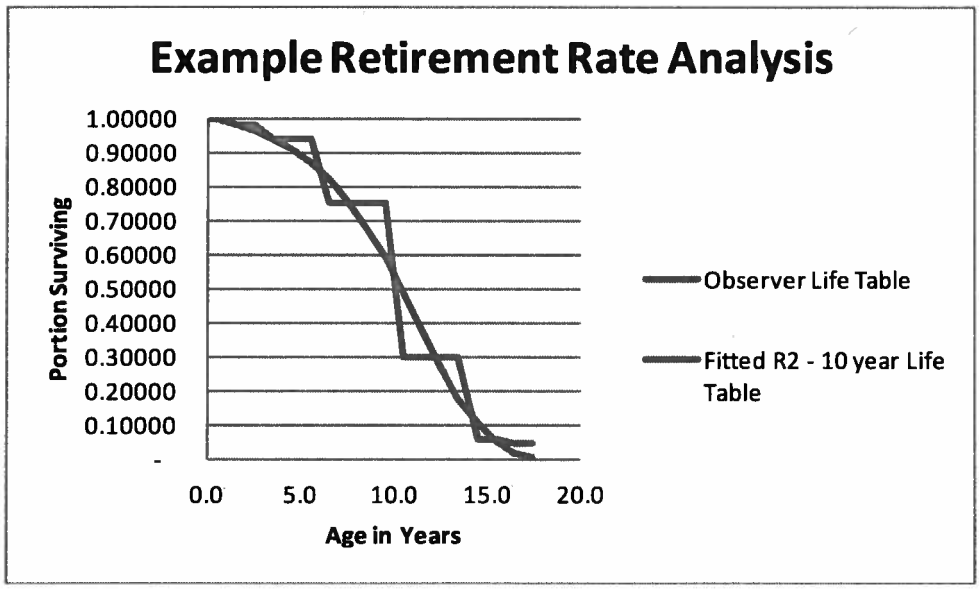
Cascade Natural Gas Corporation
Depreciation Study
As of December 31, 2013

Example Actuarial Retirement Rate Analysis

Account:	Description	Fitted Survivor Curve	Fitted Life
400.00	Example Retirement Rate Analysis	R2.0	10

(1)	(2)	(3)	(4)	(5)	(6)	(7)
Age	Exposures	Retirement	Retirement Rate	Survivor RateRate	Portion Surviving (PS)	Fitted Curve
Input	Input	Input	(3) / (2)	1.00000 - (4)	PS_{age-1} * PS_{age}	Iowa Curve Fit
years	OC $s	OC $s				
0.0					1.00000	1.00000
0.5	10,000	0	0.00000	1.00000	1.00000	0.99492
1.5	10,000	182	0.01820	0.98180	0.98180	0.98192
2.5	10,000		0.00000	1.00000	0.98180	0.96425
3.5	10,000	424	0.04240	0.95760	0.94017	0.94071
4.5	10,000		0.00000	1.00000	0.94017	0.90990
5.5	10,000		0.00000	1.00000	0.94017	0.87020
6.5	10,000	2000	0.20000	0.80000	0.75214	0.81985
7.5	10,000		0.00000	1.00000	0.75214	0.75707
8.5	10,000		0.00000	1.00000	0.75214	0.68054
9.5	10,000		0.00000	1.00000	0.75214	0.59012
10.5	10,000	6000	0.60000	0.40000	0.30086	0.48794
11.5	10,000		0.00000	1.00000	0.30086	0.37930
12.5	10,000		0.00000	1.00000	0.30086	0.27266
13.5	10,000		0.00000	1.00000	0.30086	0.17782
14.5	10,000	8000	0.80000	0.20000	0.06017	0.10252
15.5	10,000		0.00000	1.00000	0.06017	0.04961
16.5	10,000	2000	0.20000	0.80000	0.04814	0.01749
17.5	10,000		0.00000	1.00000	0.04814	0.00280

In the above table the property's retirement rate (column 4) is analyzed by age based on the property's exposure to retirement (column 2) by age (column 1) and the retirements by age (column 3). The property's survivor curve (column 6)is developed based on the retirement rate (column 4) and survival rate (column 5). In the chart below the property's survival curve is shown entitled "Observed Life Table". In order to standardize the life study results a Iowa-type survivor curve and associated life is fitted to the observed life table. In the example, a R2 Iowa-type survivor curve with a life of 10 year was fitted to the observed life table. The fit criteria used I the life study was least squared differences of the fitted curve and life to the observed life table. The fitted curve and life is the life indication of the life analysis. This type of analysis was performed for each of the previously described retirement bands.



Net Salvage Analysis

The historical salvage net of removal cost for each plant account was analyzed using ratio analysis of retirements, gross salvage, and cost of removal. The salvage analysis was performed as follows:

Salvage Analysis Periods

Annually, as well as a five-year rolling band for the period 1995 through 2013
1978 through 2013 banded together
1984 through 2013 banded together (20-year band)
1994 through 2013 banded together (15-year band)
2004 through 2013 banded together (10-year band)
2009 through 2013 banded together (5-year band)

The following is an example of the salvage and removal costs analysis:

Cascade Natural Gas Corporation
Depreciation Study
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Net Salvage Analysis

Account: 400.0 Example Net Salvage Analysis

Annual Analysis

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Year	Retirement	Salvage	% of Retirement	Cost of Removal	% of Retirement	Net Salvage	% of Retirement
	$s	$s	$s	$s	$s	$s	$s
Input	Input	Input	(3) / (2)	Input	(5) / (2)	(3) - (5)	(7) / (2)
2000	38,374	-	0.0%	67,601	176.2%	(67,601)	-176.2%
2001	206,933	-	0.0%	28,561	13.8%	(28,561)	-13.8%
2002	46,805	-	0.0%	10,911	23.3%	(10,911)	-23.3%
2003	5,689	-	0.0%	1,885	33.1%	(1,885)	-33.1%
2004	9,922	-	0.0%	6,988	70.4%	(6,988)	-70.4%
2005	331,738	-	0.0%	208,809	62.9%	(208,809)	-62.9%
2006	68,978	-	0.0%	92,233	133.7%	(92,233)	-133.7%
2007	39,086	-	0.0%	53,462	136.8%	(53,462)	-136.8%
2008	64,679	-	0.0%	59,396	91.8%	(59,396)	-91.8%
2009	84,345	-	0.0%	44,502	52.8%	(44,502)	-52.8%
2010	42,011	-	0.0%	75,464	179.6%	(75,464)	-179.6%
2011	115,023	-	0.0%	108,194	94.1%	(108,194)	-94.1%
2012	121,595	-	0.0%	206,769	170.0%	(206,769)	-170.0%
2013	204,986	-	0.0%	322,026	157.1%	(322,026)	-157.1%
Total Data	1,380,163	-	0.0%	1,286,803	93.2%	(1,286,803)	-93.2%
Last 10-years	1,082,362	-	0.0%	1,177,844	108.8%	(1,177,844)	-108.8%
Last 5 years	567,960	-	0.0%	756,956	133.3%	(756,956)	-133.3%

Rolling Band Analysis

(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)
Year	Retirement	Salvage	% of Retirement	Cost of Removal	% of Retirement	Net Salvage	% of Retirement
	$s	$s	$s	$s	$s	$s	$s
	∑ (2)	∑ (3)	(11) / (10)	∑ (5)	(13) / (10)	(11) - (13)	(15) / (10)
2004-2000	307,723	-	0.0%	115,947	37.7%	(115,947)	-37.7%
2005-2001	601,086	-	0.0%	257,155	42.8%	(257,155)	-42.8%
2006-2002	463,132	-	0.0%	320,826	69.3%	(320,826)	-69.3%
2007-2003	455,413	-	0.0%	363,377	79.8%	(363,377)	-79.8%
2008-2004	514,402	-	0.0%	420,888	81.8%	(420,888)	-81.8%
2009-2005	588,825	-	0.0%	458,402	77.9%	(458,402)	-77.9%
2010-2006	299,098	-	0.0%	325,057	108.7%	(325,057)	-108.7%
2011-2007	345,143	-	0.0%	341,019	98.8%	(341,019)	-98.8%
2012-2008	427,652	-	0.0%	494,326	115.6%	(494,326)	-115.6%
2013-2009	567,960	-	0.0%	756,956	133.3%	(756,956)	-133.3%

Future Service Lives and Net Salvage

Before making recommendations as to the appropriate future service lives and net salvage factors for capital recovery purposes, the analyst must consider the above-described historical service life and net salvage indications and the effects that obsolescence and changing

economic and competitive factors will have on the future service life and net salvage of the property.

Future Service Lives

The service live used to project the life experience in future periods which will be weighted with the plant's past life experience were based on the historical life analysis and considerations of the future life expectations based on discussion with the Company.

Future Net Salvage

Net salvage (gross salvage less cost of removal) is becoming increasingly more important in the gas industry. Gross salvage has generally been minimal due to the retiring property being essentially scrap.

Cost of removal in the gas industry is most pronounced in the area of outside plant. Mains, service measuring and regulating equipment all experience significant removal costs. In the past, plant has been retired and abandoned in place; however, liability concerns and strict environmental regulations require removal or making the retiring plant safe for abandonment. The cost of removal (in current dollars) is related to the original cost in the historical dollars of the plant being removed. In many cases, the placement of plant and its ultimate removal can be separated by decades. Cost of removal, as a percent of that plant's historical original cost can range from 50% to 150% or more. Generally, removal costs increase due to increasing equipment and labor costs caused by rising price trends.

SERVICE LIFE AND NET SALVAGE WEIGHTING

Service Lives

Once the life analysis has been performed and the historical service life indications and any obsolescence factors are considered, the service lives to project future life expectations of the property are recommended. Given the selection of a standard Iowa-type survivor/retirement curve and appropriate service lives to project the property's life expectation, each account's average service life and average remaining life was calculated based on the age distribution of the surviving investment as of the December 31, 2013 study date using the vintage life group (VG). The following is an example of the determination of VG service lives and remaining lives using a 10-year projection life and a survival/retirement distribution as depicted by an R2.0 Iowa-type survivor curve:

Cascade Natural Gas Corporation
Depreciation Study
As of December 31, 2013

Development of Equal Life Group and Vintage Life Group Remaining Lives

Account: 400.00 Example Generation Arrangement

Service Life Calculations	Percentage of Survivors	Calculation	Survivor Curve	Projection Life		AYFR
Inputs	100.0%	Full Mortality	R2.0	10	years	Not Used

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
Age	Age as % of Projection Life	Age	Iowa Portion Surviving	Portion Retired during Age Interval	Age at Retirement	Annual Accrual for Age Group	Annual Accrual All Remaining Age Groups	Age Group's Probable Life	Equal Life Group Average Service Life	Equal Life Group Average Remaining Life	Vintage Life Group Average Remaining Life
Input	Input	Iowa Lookup	Iowa Tables	Note 1	Interval Midpoint	(5) / (6)	Note 2	(1)+(12)	(4) / (8)	(10)-(3)	Note 3
years	% of PL	Lookup	%	%	years	% / years	% / years	years	years	years	years
0.0	-	R2.0000	1.00000	0.00508	0.0			10.1	7.11	7.11	10.00
0.5	5	R2.0005	0.99492	0.01300	0.5	0.01016	0.1407	10.1	7.11	7.11	9.55
1.5	15	R2.0015	0.98192	0.01767	1.0	0.013	0.13054	10.2	7.62	7.12	8.67
2.5	25	R2.0025	0.96425	0.02354	2.0	0.00884	0.11754	10.3	8.35	6.85	7.82
3.5	35	R2.0035	0.94071	0.03081	3.0	0.00785	0.1087	10.5	8.87	6.37	7.00
4.5	45	R2.0045	0.90990	0.03969	4.0	0.0077	0.10085	10.7	9.33	5.83	6.22
5.5	55	R2.0055	0.87020	0.05035	5.0	0.00794	0.09315	11.0	9.77	5.27	5.48
6.5	65	R2.0065	0.81985	0.06278	6.0	0.00839	0.08521	11.3	10.21	4.71	4.79
7.5	75	R2.0075	0.75707	0.07653	7.0	0.00897	0.07682	11.7	10.67	4.17	4.15
8.5	85	R2.0085	0.68054	0.09042	8.0	0.00957	0.06785	12.1	11.16	3.66	3.56
9.5	95	R2.0095	0.59012	0.10218	9.0	0.01005	0.05828	12.5	11.68	3.18	3.03
10.5	105	R2.0105	0.48794	0.10864	10.0	0.01022	0.04823	13.1	12.24	2.74	2.55
11.5	115	R2.0115	0.37930	0.10664	11.0	0.00988	0.03801	13.6	12.84	2.34	2.14
12.5	125	R2.0125	0.27266	0.09484	12.0	0.00889	0.02813	14.3	13.48	1.98	1.78
13.5	135	R2.0135	0.17782	0.07530	13.0	0.0073	0.01924	15.0	14.17	1.67	1.47
14.5	145	R2.0145	0.10252	0.05292	14.0	0.00538	0.01194	15.7	14.89	1.39	1.18
15.5	155	R2.0155	0.04961	0.03212	15.0	0.00353	0.00656	16.4	15.63	1.13	0.91
16.5	165	R2.0165	0.01749	0.01469	16.0	0.00201	0.00303	17.2	16.37	0.87	0.66
17.5	175	R2.0175	0.00280	0.00280	17.0	0.00086	0.00102	18.0	17.15	0.65	0.50
18.5	185	R2.0185	-	-	18.0	0.00016	0.00016	19.0	17.52	0.50	0.50
Total Life Table			9.99962								

The following continues the above example using the vintage VG service lives and remaining lives to calculate composite account service and remaining lives:

Cascade Natural Gas Corporation
Depreciation Study
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Calculation of Average Service and Remaining Lives

								Notes:					Full Mortality Columns (13)
								1			ELG vintages:		(3) + (12)
Account:		400.00	Example Generation Arrangement					2			VG vintages:		(10) + (8) * (12)
Service Life Calculations		Percentage of Survivors	Calculation	Survivor Curve	Projection Life			AYFR			First ELG Year		
Inputs		100.0%	Full Mortality	R2.0	10			Not Used			Not Used		

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
Year	Service Life Calculation	Age	Surviving Investment	Wtd Age	Age as % of Projection Life	Iowa Curve Lookup	Iowa Portion Surviving	Iowa Realized Life	Cascade Realized Life	Iowa Percent Condition	Remaining Life	Vintage Average Life	Average Life Weights	Average Remaining Life Weights
Input	Input	2014-[(1)+.5]	Input	(3) * (4)	(3) / 10 years	R2.0 plus (6)	Iowa Lookup	Iowa Lookup	(3) * (9) / (6)	Iowa Lookup	10 years * (11)	Notes 1	(4) / (14)	(13) * (15)
		years	$s	$s * years			Fraction of OC	% of Age % of PL	years	% of PL	years	years	$s / years	years * ($s/years)
2008	VG	5.5	10,000	55,000	55	R2.0055	0.87020	52.38873	5.23	0.54805	5.48	10.00	1,000	5,480
2009	VG	4.5	10,000	45,000	45	R2.0045	0.90990	43.40021	4.34	0.62205	6.22	10.00	1,000	6,220
2010	VG	3.5	10,000	35,000	35	R2.0035	0.94071	34.14056	3.41	0.70011	7.00	9.99	1,001	7,007
2011	VG	2.5	10,000	25,000	25	R2.0025	0.96425	24.61040	2.46	0.78185	7.82	10.00	1,000	7,820
2012	VG	1.5	10,000	15,000	15	R2.0015	0.98192	14.87525	1.49	0.86692	8.67	10.00	1,000	8,670
2013	VG	0.5	10,000	5,000	5	R2.0005	0.99492	4.98765	0.50	0.95497	9.55	10.00	1,000	9,550
2014	VG	0.0	-	-	-	R2.0000	1.00000	-	-	1.00000	10.00	10.00	-	-
Total Account		3.00	60,000	180,000							7.46	10.00	6,001	44,747

Net Salvage

The results of the salvage analysis are estimates of the gross salvage and cost of removal that are to be expected in the future. Since the depreciation rates in this study are based on remaining life capital recovery concepts, which look forward to the ultimate recovery of the property in the future, the future net salvage was utilized in all of the depreciation and theoretical reserve calculations, i.e., average net salvage (ANS) was assumed to equal future net salvage (FNS). This assumption has no impact on the results of the deprecation rates or expenses in these studies.

THEORETICAL RESERVE

The theoretical or calculated reserve analysis was used to investigate problem areas in the company's capital recovery. A problem area is defined as an account in which the book reserve level is significantly different from its theoretical level, and the prospect of obtaining full recovery is doubtful. In these studies, problem areas will be resolved by the remaining life method of capital recovery.

Generally, there are two methods of determining the theoretical depreciation reserve: the prospective method and the retrospective method. In the retrospective method, the computation is made based on the cost of property constructed and its exposure to depreciation. The reserve is computed using the current best estimate of service life and net salvage and annual accruals from which actual past retirements are deducted. In the prospective method, the computations are made looking forward using the future life expectancy of the property. The future life expectancy can then be used to predict future accruals based on the proposed service life and net salvage. By definition, in the prospective method, the theoretical reserve is equal to the book cost of the property adjusted for salvage minus the future accruals. The theoretical reserve for each plant account was calculated with the following formula:

Theoretical Reserve (%) =

(100% - FNS %) - (100% - ANS %) * (ARL/ASL)

where:

FNS % = Future Net Salvage in percent
ANS % = Average Net Salvage in percent
ARL = Average Remaining Life in years
ASL = Average Service Life in years

The first portion of this formula (100% - FNS%) represents the book cost of the property adjusted for net salvage or, in other words, the amount which needs to be recovered. The second portion of this formula (100% - ANS%)/ASL times ARL represents the total future accruals; the (100% - ANS%)/ASL is the whole or average service life depreciation rate and when that is multiplied by the remaining life (ARL) the result is the future recovery. Therefore, as the above formula indicates, the reserve level which should theoretically exist at the study's date is the book cost of the property adjusted for net salvage less all future accruals.

The prospective theoretical reserve method is the preferred method since it looks forward to the ultimate retirement of the plant. The use of the retrospective method is generally reserved for special cases where the remaining life is difficult to determine.

CAPITAL RECOVERY METHODS

Having determined each account's capital recovery parameters of survival/retirement dispersion, service life projection, average service life, average remaining life, net salvage, and theoretical reserve, the account's capital recovery accrual rates and annual depreciation expense can be determined. However, before this can be accomplished, a selection has to be made of the most appropriate capital recovery method for the company and its recovery needs. It is the intent of the capital recovery process to measure the rate of depreciation occurring in the company's plant and equipment, then allocate to accounting periods the cost of the property consumed. There are two basic methods commonly utilized to determine capital recovery rates. They are: the average service life method (sometimes referred to as the whole life method) and the average remaining life method.

Average Service Life (Whole Life or ASL) Method

The average service life method of capital recovery attempts to recover the original cost of the plant, adjusted for salvage, net of removal costs over the average service life of the property. The annual depreciation rate formula is:

$$\text{ASL Annual Depreciation Rate} = \frac{100\% - \text{Average Net Salvage \%}}{\text{Average Service Life (Years)}}$$

The basic assumption used in determining depreciation rates by the average service life method are:

1. The property will be retired over a specific average service life.

2. The property will be retired with a specific average net salvage.

These assumptions are reasonable if both the average service life and the average net salvage can be estimated with reasonable accuracy. However, the average service life method restricts full recovery of the company's invested capital to only those cases where the depreciation analyst's original estimate of both the average service life and average net salvage is exactly correct at the onset of the capital recovery process and those estimates remain unchanged over

the entire life of the plant. This is the "Achilles' heel" of the average service life method of capital recovery.

When the estimate of either the service life or the net salvage parameters change during the life of an asset, the average service life method may over or under accrue the asset. In an industry with long service life experience and increase cost of removal experience the requirement of a capital recovery system where the original estimates must be correct and remain unchanged over time is not workable. The above limitations are further compounded by the group accounting methods used by utilities, where numerous individual assets are grouped for depreciation accounting and administration.

These limitations of the average service life method render it inappropriate when used alone for the recovery of utility.

Average Remaining Life (ARL) Method

To remove the above-mentioned restrictions, capital recovery using the average remaining life method was developed. The average remaining life method attempts to recover the company's investment in plant, net of previously accumulated depreciation and future net salvage over the remaining life of the plant. The average remaining life depreciation accrual rate formula is:

$$\text{ARL Annual Depreciation Rate} = \frac{100\% - \text{Depreciation Reserve \%} - \text{Future Net Salvage\%}}{\text{Average Remaining Life (Years)}}$$

The basic assumptions used in determining the depreciation rate by the average remaining life method are:

1. The property's average remaining life is determinable.
2. The future net salvage is determinable.

These assumptions are similar to those necessary for the average service life method of capital recovery; however, the investment's remaining life and future net salvage can be estimated with greater accuracy as the plant's ultimate retirement grows near. Also, by including the accumulated reserve for depreciation and using the average remaining life, the recovery process

now has a feedback mechanism. The recovery process, in essence, is fine tuned as the company's plant ages and approaches retirement.

Since the capital recovery process is one of estimation of service lives (average service life and average remaining life) and the estimation of future net salvage (gross salvage and cost of removal), the capital recovery process requires a method of recovery which allows for changes in those original estimates over time. The remaining life method of capital recovery relieves the restrictions of the average service life method by putting a feedback mechanism into the accrual process. It is for these reasons that the capital recovery rates in these studies are based on the average remaining life method of capital recovery.

Comparison of Present and Proposed Depreciation Rates and Expenses

The Company's last depreciation (prepared by Deloitte & Touche, LLP in 1998) utilized the ASL depreciation procedures. For comparison purposes we have provided each account depreciation rates and expenses also on an ASL depreciation method along with the present rates and expenses based on the December 31, 2013 investment balances. However, for this study, our recommended depreciation rates and expenses are based on remaining life depreciation methods determined using the Company's investment and reserve balances at December 31, 2013.

OVERVIEW OF RESULTS

Where sufficient data exists, the gas plant of Cascade Natural Gas was analyzed using statistical life and net salvage analysis techniques. The service life experience was analyzed using the actuarial retirement rate analysis. The net salvage analysis was based on a ratio analysis of the past retirement experience for each account. The service life and net salvage recommendations were based on the previously described analysis, the company's expectations, the equipment in the account, industry experience and engineering judgment. For all the accounts, the capital recovery parameters were based on the type of equipment, its use, the analysis performed in these studies, and discussions with the company's accounting, engineering, and management personnel.

The following narrative is intended to provide a synopsis of the analysis performed and the results. The service lives, average and remaining lives, referenced in the following narrative, and the net salvage parameters are those used in the calculations of the recommended depreciation accrual rates and annual accruals using the remaining life method of capital recovery. The statistical analyses of life and net salvage, the service life calculations, and the resultant depreciation rates and expenses are presented for each account on the CD following the Depreciation Summary wherein the following described analyses and conclusions can be found.

Transmission Plant - Accounts 365.2 - 369.1

The Transmission Plant Accounts include the company's investment in rights-of-ways, mains, and measuring and regulating equipment. The Company's Transmission Plant functional group investment and reserve balances are as follows:

Account	Account Name	December 31, 2013 Plant and Reserve	
		Investment	Reserved Investment
365.2	Rights-of-Way	$1,026,089	$723,038
367.1	Mains	15,804,274	9,718,327
369.1	Measuring & Regulating Station Equipment	198,115	207,794
Total	Transmission Plant	$17,023,665	$10,649,159

Transmission Rights-of-Ways Account 365.2 - The rights-of-way account's current life is a 70-year service life. The retirement experience was insufficient to allow statistical analysis of either life or salvage. The service life analysis of the transmission mains account (367) indicated an overall service life of 65 year with a S6 Iowa-type survivor curve, which is recommended for this study. Typically, ROW experience few interim retirements over the property's service life which is reflective of a high mode S6 Iowa-type retirement dispersion. The 65-year service life, along with the account's surviving investment of average age of 46.5 years, results in a 65.1-year average service life and a 18.7-year average remaining life using vintage group service life weighting procedures.

The rights-of-ways investment usually retires with no salvage or experiencing any associated cost of removal. A 0% net salvage, the same as the company's current net salvage, is recommended.

Transmission Mains Account 367.1 - The service life analysis indicated high symmetric moded retirement dispersions (S5) with a 65 year life indication. The 65-year service life, along with the account's surviving investment of average age of 32.8 years, results in a 64.8-year average service life and a 32.2-year average remaining life using vintage group service life weighting procedures.

Overall the transmission mains have experienced net salvage of highly negative net salvage (a negative 183%), much of this negative net salvage is the result of a single retirement with the remaining retirements experience approximately a negative 20% net salvage. The company's current net salvage is a negative 20% which is intended to reflect the removal and/or abandonment costs which will be experienced after the plant's current 65-year service life. At retirement these mains will experience little salvage and significant removal costs. Most of the mains will be abandoned wherein the removal costs will be associated with cutting, purging the retiring main of gas and capping the abandoned pipe. The larger abandoned mains will need to be filled to prevent them for collapsing in the future as they deteriorate. Those mains being removed will experience extremely high removal costs associated with excavation, removal, and

disposal of the retiring mains. Net salvage has decreased in recent periods primarily due to low general inflation in the economy. The historical and recent experience indicates a continuation of the negative 20% net salvage is warranted.

Transmission Measuring and Regulating Station Equipment Account 369.1 - The M&R Station Equipment account's current life is a 40-year service life with a R2.5 Iowa-type survivor curve. The retirement experience was insufficient to allow statistical analysis of either life or salvage. The service life analysis of the transmission mains account (367) indicated an overall service life of 65 year with a S6 Iowa-type survivor curve. The M&R Station Equipment usually experience a shorter service than the transmission mains associated the M&R station Equipment. A 50-year service life is recommended for this study which along with the account's surviving investment of average age of 49.2 years, results in a 61.1-year average service life and a 12.4-year average remaining life using vintage group service life weighting procedures.

Overall the transmission M&R Station Equipment account has experienced net salvage of highly negative net salvage (a negative 299%), much of this negative net salvage is the result of a single retirement with the remaining retirements experience approximately a negative 33% net salvage. The company's current net salvage is a negative 20% which is intended to reflect the removal and/or abandonment costs which will be experienced after the plant's current 50-year service life. A negative 10% net salvage is recommended.

Distribution Plant - Accounts 374.2 – 388.1

The distribution plant accounts include the company's investment primarily related to mains, services, and meters. While there are other accounts in the distribution plant category, these accounts make up the majority of the company's investment.

The Distribution Plant functional group includes the following plant accounts and their related investment and reserve balances:

Account	Account Name	December 31, 2013 - Plant and Reserve	
		Investment	Reserved Investment
374.2	Land Rights	$2,024481	$555,373
375.1	Structures & Improvements	1,457,570	1,259,530
375.2	Leasehold Improvements	1,219	564
376.1	Mains	125,838,733	95,299,863
376.2	Mains-High Pressure	125,140,041	36,642,755
376.3	Mains-Polyethylene	110,360,600	26,989,236
377.1	Compressor Station Equipment	2,000,731	1,147,763
378.1	Regulator Station Equipment	21,468,661	7,185,579
380.1	Services	75,986,423	103,363,585
380.3	Services-Polyethylene	113,058,770	39,549,158
381.1	Meters	47,965,227	16,046,526
382.1	Meter Installations	30,029,637	11,908,944
383.1	House Regulators	9,222,839	3,577,768
385.1	Regulator Station Equipment - Industrial	8,890,422	3,536,036
388.1	Asset Retirement Obligation	48,962	39,792
Total	Distribution Plant	$674,145,354	$347,062,678

Distribution Plant Land Rights Account 374.2 - The Company currently utilizes a R2 Iowa-type survivor curve with a 60-year service life for this account. This account has not experience enough retirements to allow statistical analysis of either service life or salvage. Continued use of the current service life and retirement dispersion is recommended for this study. A 60-year service life, along with the account's surviving investment of average age of 26.6 years, results in a 64.7-year average service life and a 38.7-year average remaining life using vintage group service life weighting procedures.

The Land Right's investment usually retires experiencing no salvage or cost of removal. A 0% net salvage, the same as the company's current net salvage, is recommended.

Distribution Plant Structures and Improvements Account 375.1 - The Company currently utilizes a R3 Iowa-type survivor curve with a 40-year service life in its depreciation rate determination. This account has not experience enough retirements to allow statistical analysis of either service

life or salvage. Considering few retirements have occurred over the last few depreciation study cycles, continued use of the 40-year service life is recommended for this study; however, the lack of retirements suggest a higher mode R4 Iowa-type survivor curve. A 40-year service life with a R4 Iowa-type survivor curve, along with the account's surviving investment of average age of 32.7 years, results in a 42.1-year average service life and a 11.1-year average remaining life using vintage group service life weighting procedures.

At retirement, these structures and improvements will experience minimal salvage and some removal costs. A negative 5% net salvage is recommended to provide for the removal costs.

Distribution Plant Leasehold Improvements Account 375.2 - The Company currently utilizes the same depreciation parameters for it distribution plant leasehold improvements as its distribution structures and improvements those of a R3 Iowa-type survivor curve with a 40-year service life. This account' service life was analyzed using the total data band of retirements over the period 1974 through 2013. The actuarial retirement rate analysis indicated a R2 Iowa-type survivor curve with a 26-year service life which is recommended for this study. A 26-year service life with a R2 Iowa-type survivor curve, along with the account's surviving investment of average age of 33.5 years, results in a 38.1-year average service life and a 4.2-year average remaining life using vintage group service life weighting procedures.

At retirement, these leasehold improvements will experience no salvage or removal costs. A 0% net salvage is recommended.

Distribution Plant Mains Account 376.1 - The life analysis of the mains account was performed using actuarial retirement rate analysis using the following retirement bands:

Band	Retirement Years	Placement Years	Fitted Iowa-type survivor curve and associated Life
Total Data	1974-2013	1953-2013	R3 - 94
30-year	1984-2013	1953-2013	S2 - 101
20-year	1994-2013	1953-2013	S2 - 105
10-year	2004-2013	1953-2013	R4 - 86
5-year	2009-2013	1953-2013	L4 - 87

The life analysis lead to the selection of a R4.0 Iowa-type survivor curve as the best fit. Typically, this account experiences a higher mode such as a R4 or R5 retirement dispersion, a R4.0 Iowa-type survivor curve was used as a median curve selection. The life indications from the life analysis ranged from 86-87 years; currently, the company utilizes a 60-year service life with a R2 Iowa-type survivor curve. The life analysis suggests a longer life should be considered, a R4 Iowa-type survivor curve with a 75-year service life is recommended. A 75-year service life with a R4 Iowa-type survivor curve, along with the account's surviving investment of average age of 28.9 years, results in a 74.1-year average service life and a 47.3-year average remaining life using vintage group service life weighting procedures.

The salvage and cost of removal were analyzed using the following bands:

Band	Retirement Years	Gross Salvage	Cost of Remove	Net Salvage
Annually	1974-2013	Declining to 0%	Increasing to 133%	Decreasing to -133%
5 year rolling band	1982-2013	Declining to 0%	Increasing to 133%	Decreasing to -133%
Total data		1.1%	67.3%	-66.2%
30-years	1984-2013	1.1%	75.8%	-74.7%
20-years	1994-2014	1.0%	86.9%	-85.8%
10-years	2004-2013	0.0%	108.8%	-108.8%
5-years	2009-2013	0.0%	133.3%	-133.3%

The distribution mains, at retirement will have to either be removed or made safe for abandonment. The distribution mains account has experienced negative net salvage over its entire history. The net salvage experience over the period 1974 through 2013 has been a negative 66.2%; with recent experience (2004 - 2013) of a negative 133%. The company currently utilizes a negative 60% net salvage. Recognizing the historical and recent net salvage experience, a negative 100% net salvage is recommended.

Distribution Plant Mains-High Pressure Account 376.2 - The life analysis of the high pressure mains account was performed using actuarial retirement rate analysis using the following retirement bands:

Band	Retirement Years	Placement Years	Fitted Iowa-type survivor curve and associated Life
Total Data	1975-2013	1953-2013	R2.5 - 100
30-year	1984-2013	1953-2013	R2.5 - 100
20-year	1994-2013	1953-2013	R2.5 - 96
10-year	2004-2013	1953-2013	S0.5 - 113
5-year	2009-2013	1953-2013	S1 -87

The life analysis lead to the selection of a R2.5 Iowa-type survivor curve as the best fit. The life indications from the life analysis ranged from 87 to 113 years; currently, the company utilizes a 60-year service life with a R3 Iowa-type survivor curve. The life analysis suggests a longer life should be considered, a R4 Iowa-type survivor curve with a 85-year service life is recommended. A 85-year service life with a R2.5 Iowa-type survivor curve, along with the account's surviving investment of average age of 16.0 years, results in a 77.8-year average service life and a 70.7-year average remaining life using vintage group service life weighting procedures.

The salvage and cost of removal were analyzed using the following bands:

Band	Retirement Years	Gross Salvage	Cost of Remove	Net Salvage
Annually	1974-2013	Declining to 0%	Increasing to 24%	Decreasing to -24%
5 year rolling band	1982-2013	Declining to 0%	Increasing to 21%	Decreasing to -21%
Total data		1.1%	16.3%	-15.2%
30-years	1984-2013	0.5%	16.0%	-15.5%
20-years	1994-2014	0.1%	16.6%	-16.5%
10-years	2004-2013	0.0%	18.1%	-18.1%
5-years	2009-2013	0.0%	21.4%	-21.4%

The high pressure distribution mains, at retirement will have to either be removed or made safe for abandonment. The distribution mains account has experienced negative net salvage over its entire history. The net salvage experience over the period 1974 through 2013 has been a negative 15.2%; with recent experience (2004 - 2013) of a negative 21.4%. The company

currently utilizes a negative 10% net salvage. Recognizing the historical and recent net salvage experience, a negative 23% net salvage is recommended.

Distribution Plans Mains-Polyethylene Account 376.3 - The life analysis of the plastic distribution mains account was performed using actuarial retirement rate analysis using the following retirement bands:

Band	Retirement Years	Placement Years	Fitted Iowa-type survivor curve and associated Life
Total Data	1981-2013	1960-2013	L3 - 32
30-year	1985-2013	1960-2013	L3 - 32
20-year	1994-2013	1960-2013	L5 - 32
10-year	2004-2013	1960-2013	L5 - 36
5-year	2009-2013	1960-2013	L5 -36

The life analysis lead to the selection of a L3.0 Iowa-type survivor curve as the best fit. The life indications from the life analysis ranged from 32 to 36 years; currently, the company utilizes a 60-year service life with a R2 Iowa-type survivor curve. The life analysis suggests a shorter life should be considered, a L3.0 Iowa-type survivor curve with a 36-year service life is recommended. A 36-year service life with a L3.0 Iowa-type survivor curve, along with the account's surviving investment of average age of 12.0 years, results in a 35.3-year average service life and a 24.6-year average remaining life using vintage group service life weighting procedures.

The salvage and cost of removal were analyzed using the following bands:

Band	Retirement Years	Gross Salvage	Cost of Remove	Net Salvage
Annually	1974-2013	0%	Increasing to 28%	Decreasing to -28%
5 year rolling band	1982-2013	0%	Increasing to 28%	Decreasing to -28%
Total data		0.4%	26.4%	-26.1%
30-years	1984-2013	0.4%	26.4%	-26.1%
20-years	1994-2014	0.4%	26.7%	-26.3%
10-years	2004-2013	0.0%	28.1%	-28.1%
5-years	2009-2013	0.0%	20.9%	-20.9%

The plastic distribution mains, at retirement will have to either be removed or made safe for abandonment. The distribution mains account has experienced negative net salvage over its entire history. The net salvage experience over the period 1986 through 2013 has been a negative 26.1%; with recent experience (2004 - 2013) of a negative 28.1%. The company currently utilizes a negative 20% net salvage. Recognizing the historical and recent net salvage experience, a negative 30% net salvage is recommended.

Distribution Plant Compressor Station Equipment Account 377.1 - The Distribution Plant's Compressor Station Equipment account was established in 2002 subsequent to the company's last depreciation study, the Company currently has a 5.00% per year depreciation rate which is reflective of approximately a 21-year service life and a negative 5% net salvage. This account has not experienced any retirement therefore precluding the statistical analysis of service life and net salvage. Based on engineering judgment, a R3 Iowa-type survivor curve with a 35-year service life is recommended for this study. A 35-year service life with a R3 Iowa-type survivor curve, along with the account's surviving investment of average age of 11.5 years, results in a 35.5-year average service life and a 24.0-year average remaining life using vintage group service life weighting procedures.

At retirement, the compressor station will experience cost of removal in excess of salvage. A negative 5% net salvage is recommended.

Distribution Plant Regulating Station Equipment Account 378.1 - The life analysis of the M&R station equipment account was performed using actuarial retirement rate analysis using the following retirement bands:

Band	Retirement Years	Placement Years	Fitted Iowa-type survivor curve and associated Life
Total Data	1974-2013	1953-2013	L0.5 - 89
30-year	1984-2013	1953-2013	S0 - 79
20-year	1994-2013	1953-2013	S0 - 78
10-year	2004-2013	1953-2013	L0.5 - 86
5-year	2009-2013	1953-2013	L0.5 -78

The life analysis lead to the selection of a L1.0 Iowa-type survivor curve as the best fit. The life indications from the life analysis ranged from 78 to 89 years; currently, the company utilizes a 40-year service life with a R2.5 Iowa-type survivor curve. The life analysis suggests a longer life should be considered, a L1.0 Iowa-type survivor curve with a 60-year service life is recommended. A 60-year service life with a L1.0 Iowa-type survivor curve, along with the account's surviving investment of average age of 12.5 years, results in a 59.3-year average service life and a 50.4-year average remaining life using vintage group service life weighting procedures.

The salvage and cost of removal were analyzed using the following bands:

Band	Retirement Years	Gross Salvage	Cost of Remove	Net Salvage
Annually	1978-2013	0%	Increasing to 28%	Decreasing to -28%
5 year rolling band	1982-2013	0%	Increasing to 28%	Decreasing to -28%
Total data		18.3%	49.6%	-31.3%
30-years	1984-2013	18.9%	50.5%	-31.5%
20-years	1994-2014	21.6%	55.8%	-34.2%
10-years	2004-2013	32.1%	66.2%	-34.0%
5-years	2009-2013	0.0%	73.2%	-73.2%

The M&R station equipment account has experienced negative net salvage over its entire history. The net salvage experience over the period 1978 through 2013 has been a negative 31.3%; with recent experience (2004 - 2013) of a negative 34.1% and (2009-2013) of a negative

73.2%. The company currently utilizes a negative 20% net salvage. Recognizing the historical and recent net salvage experience, a negative 40% net salvage is recommended.

Distribution Plant Services Account 380.1 - The life analysis of the services account was performed using actuarial retirement rate analysis using the following retirement bands:

Band	Retirement Years	Placement Years	Fitted Iowa-type survivor curve and associated Life
Total Data	1974-2013	1953-2013	R5 -56
30-year	1984-2013	1953-2013	R5 - 56
20-year	1994-2013	1953-2013	L5 - 58
10-year	2004-2013	1953-2013	S5 - 57
5-year	2009-2013	1953-2013	S5 -58

The life analysis lead to the selection of a R5.0 Iowa-type survivor curve as the best fit. Typically, this account experiences a higher mode such as a R4 or R5 retirement dispersion, a R5.0 Iowa-type survivor curve fits this experience. The life indications from the life analysis ranged from 56-58 years; currently, the company utilizes a 45-year service life with a R5 Iowa-type survivor curve. The life analysis suggests a longer life should be considered, a R5 Iowa-type survivor curve with a 56-year service life is recommended. A 56-year service life with a R5 Iowa-type survivor curve, along with the account's surviving investment of average age of 26.6 years, results in a 55.2-year average service life and a 29.7-year average remaining life using vintage group service life weighting procedures.

The salvage and cost of removal were analyzed using the following bands:

Band	Retirement Years	Gross Salvage	Cost of Remove	Net Salvage
Annually	1974-2013	Declining to 0%	Increasing to 220%	Decreasing to -220%
5 year rolling band	1982-2013	Declining to 0%	Increasing to 220%	Decreasing to -220%
Total data		14.9%	128.0%	-113.1%
30-years	1984-2013	16.7%	138.0%	-121.3%
20-years	1994-2014	20.9%	147.0%	-126.1%
10-years	2004-2013	36.1%	198.4%	-162.3%
5-years	2009-2013	0.0%	220.0%	-220.0%

The services account has experienced significant negative net salvage over its entire history. This is typical as each service or, at best, a few services are retired individually; thus, resulting in high removal costs. The distribution service, at retirement will have to either be removed or made safe for abandonment. The net salvage experience over the period 1974 through 2013 has been a negative 113.1%; with recent experience (2004 - 2013) of a negative 162.3% and (2009-2013) of a negative 220.0%. The company currently utilizes a negative 130% net salvage. Recognizing the historical and recent net salvage experience, a negative 160% net salvage is recommended.

Distribution Plant Services Polyethylene Account 380.3 - The life analysis of the services polyethylene account was performed using actuarial retirement rate analysis using the following retirement bands:

Band	Retirement Years	Placement Years	Fitted Iowa-type survivor curve and associated Life
Total Data	1981-2013	1961-2013	S5 -28
30-year	1984-2013	1961-2013	S5 – 28
20-year	1994-2013	1961-2013	S5 - 28
10-year	2004-2013	1961-2013	S5 – 28
5-year	2009-2013	1961-2013	S5 -28

The life analysis lead to the selection of a S5.0 Iowa-type survivor curve as the best fit. Typically, this account experiences a high mode dispersion, a S4.0 Iowa-type survivor curve fits this experience. The life indications from the life analysis ranged from 28 years; currently, the company utilizes a 45-year service life with a R5 Iowa-type survivor curve. The life analysis suggests a shorter life should be considered, a S4 Iowa-type survivor curve with a 35-year service life is recommended. A 35-year service life with a S4 Iowa-type survivor curve, along with the account's surviving investment of average age of 10.4 years, results in a 33.7-year average service life and a 24.5-year average remaining life using vintage group service life weighting procedures.

The salvage and cost of removal were analyzed using the following bands:

Band	Retirement Years	Gross Salvage	Cost of Remove	Net Salvage
Annually	1974-2013	0%	Increasing to 40%	Decreasing to -40%
5 year rolling band	1982-2013	0%	Increasing to 40%	Decreasing to -40%
Total data		-0.1%	39.8%	-39.9%
30-years	1984-2013	-0.1%	39.8%	-39.9%
20-years	1994-2014	-0.1%	39.6%	-36.7%
10-years	2004-2013	0.0%	31.3%	-31.3%
5-years	2009-2013	0.0%	26.5%	-26.5%

The services account has experienced significant negative net salvage over its entire history. This is typical as each service or, at best, a few services are retired individually; thus, resulting in high removal costs. The distribution service, at retirement will have to either be removed or made safe for abandonment. The net salvage experience over the period 1974 through 2013 has been a negative 39.9%; with recent experience (2004 - 2013) of a negative 31.3% and (2009-2013) of a negative 26.5%. The company currently utilizes a negative 50% net salvage. Recognizing the historical and recent net salvage experience, a negative 30% net salvage is recommended.

Distribution Plant Meters Account 381.1 - The life analysis of the meters account was performed using actuarial retirement rate analysis using the following retirement bands:

Band	Retirement Years	Placement Years	Fitted Iowa-type survivor curve and associated Life
Total Data	1974-2013	1954-2013	S2 -42
30-year	1984-2013	1954-2013	S2 - 43
20-year	1994-2013	1954-2013	S3 - 44
10-year	2004-2013	1954-2013	L3 - 45
5-year	2009-2013	1954-2013	L3 -42

The life analysis lead to the selection of a medium S2.0 Iowa-type survivor curve as the best fit. The life indications from the life analysis ranged from 42 to 45 years; currently, the company utilizes a 33-year service life with a R5 Iowa-type survivor curve. The life analysis suggests a longer life should be considered, a S2 Iowa-type survivor curve with a 42-year service life is

recommended. A 42-year service life with a S2 Iowa-type survivor curve, along with the account's surviving investment of average age of 14.1 years, results in a 37.0-year average service life and a 29.3-year average remaining life using vintage group service life weighting procedures.

The salvage and cost of removal were analyzed using the following bands:

Band	Retirement Years	Gross Salvage	Cost of Remove	Net Salvage
Annually	1978-2013	Declining to 0.0%	0.0%	0.0%
5 year rolling band	1982-2013	Declining to 0.0%	0.0%	0.0%
Total data		11.3%	0.5%	10.8%
30-years	1984-2013	9.4%	0.4%	8.9%
20-years	1994-2014	8.4%	0.6%	7.8%
10-years	2004-2013	0.0%	0.0%	0.0%
5-years	2009-2013	0.0%	0.0%	0.0%

Historically, the gross salvage was positive 1978 to 2000 since then it has been 0%; while cost of removal has been 0% over the entire salvage analysis. The net salvage experience over the period 1974 through 2013 has been 10.8%; with recent experience (2004 - 2013) of 0.0% and (2009-2013) of 0.0%. The company currently utilizes a positive 15% net salvage. Recognizing the historical and recent net salvage experience, a 0.0% net salvage is recommended.

Distribution Plant Meter Installations Account 382.1 - The life analysis of the meter installations account was performed using actuarial retirement rate analysis using the following retirement bands:

Band	Retirement Years	Placement Years	Fitted Iowa-type survivor curve and associated Life
Total Data	1974-2013	1953-2013	L0 -102
30-year	1984-2013	1953-2013	L0 - 105
20-year	1994-2013	1953-2013	R2 - 77
10-year	2004-2013	1953-2013	R3 – 78
5-year	2009-2013	1953-2013	L3 -90

The life analysis lead to the selection of a R3.0 Iowa-type survivor curve as the best fit. Typically, this account experiences a medium mode dispersion, a R3.0 Iowa-type survivor curve fits this experience. The life indications from the life analysis ranged from 77 to 105 years; currently, the company utilizes a 40-year service life with a R1.5 Iowa-type survivor curve. The life analysis suggests a longer life should be considered, a R3 Iowa-type survivor curve with a 55-year service life is recommended. A 55-year service life with a R3 Iowa-type survivor curve, along with the account's surviving investment of average age of 15.6 years, results in a 52.4-year average service life and a 40.4-year average remaining life using vintage group service life weighting procedures.

The salvage and cost of removal were analyzed using the following bands:

Band	Retirement Years	Gross Salvage	Cost of Remove	Net Salvage
Annually	1978-2013	Declining to 0%	Increasing to 30 to 60%	Decreasing to -60%
5 year rolling band	1982-2013	Declining to 0%	Increasing to 20 to 40%	Decreasing to -40%
Total data		3.6%	21.9%	-18.9%
30-years	1984-2013	2.5%	16.8%	-14.3%
20-years	1994-2014	1.3%	18.0%	-16.6%
10-years	2004-2013	0.0%	23.2%	-23.2%
5-years	2009-2013	0.0%	38.2%	-38.2%

The meters installations account has experienced negative net salvage over its entire history. The net salvage experience over the period 1978 through 2013 has been a negative 18.3%; with recent experience (2004 - 2013) of a negative 23.2% and (2009-2013) of a negative 38.2%. The company currently utilizes a negative 10% net salvage. Recognizing the historical and recent net salvage experience, a negative 15% net salvage is recommended.

Distribution Plant House Regulators Account 383.1 - The life analysis of the regulator account was performed using actuarial retirement rate analysis using the following retirement bands:

Band	Retirement Years	Placement Years	Fitted Iowa-type survivor curve and associated Life
Total Data	1974-2013	1962-2013	R4 -44
30-year	1984-2013	1962-2013	R3 - 43
20-year	1994-2013	1962-2013	R3 - 43
10-year	2004-2013	1962-2013	R2.5 -46
5-year	2009-2013	1962-2013	O4 -64

The life analysis lead to the selection of a R3.0 Iowa-type survivor curve as the best fit. Typically, this account experiences a medium mode dispersion, a R3.0 Iowa-type survivor curve fits this experience. The life indications from the life analysis ranged from 43 to 46 years; currently, the company utilizes a 45-year service life with a R5 Iowa-type survivor curve. The life analysis suggests a shorter life should be considered, a R3 Iowa-type survivor curve with a 42-year service life is recommended. A 42-year service life with a R3 Iowa-type survivor curve, along with the account's surviving investment of average age of 17.7 years, results in a 39.6-year average service life and a 26.2-year average remaining life using vintage group service life weighting procedures.

The salvage and cost of removal were analyzed using the following bands:

Band	Retirement Years	Gross Salvage	Cost of Remove	Net Salvage
Annually	1978-2013	Declining to 0%	0%	Decreasing to 0%
5 year rolling band	1982-2013	Declining to 0%	0%	Decreasing to 0%
Total data		3.6%	21.9%	-18.9%
30-years	1984-2013	2.5%	16.8%	-14.3%
20-years	1994-2014	1.3%	18.0%	-16.6%
10-years	2004-2013	0.0%	23.2%	-23.2%
5-years	2009-2013	0.0%	38.2%	-38.2%

The regulators account has experienced positive net salvage in the past but has declined to 0% net salvage for the last twenty years. The company currently utilizes a 5% net salvage.

Recognizing the historical and recent net salvage experience, a 0% net salvage is recommended.

Distribution Plant Industrial Meters and Regulating Equipment Account 385.1 -- The life analysis of the industrial metering and regulating equipment account was performed using actuarial retirement rate analysis using the following retirement bands:

Band	Retirement Years	Placement Years	Fitted Iowa-type survivor curve and associated Life
Total Data	1974-2013	1961-2013	R1.5 -48
30-year	1984-2013	1961-2013	R1 - 49
20-year	1994-2013	1961-2013	R2 - 50
10-year	2004-2013	1961-2013	S0.5 -105
5-year	2009-2013	1961-2013	S0.5 -136

The life analysis lead to the selection of a low mode R2.0 Iowa-type survivor curve as the best fit. The life indications from the life analysis ranged from 48 to 50 years; with recent band not having experienced sufficient retirement for reliable statistical analysis. Currently the company utilizes a 28-year service life with a R1.5 Iowa-type survivor curve. The life analysis suggests a longer life should be considered, a R2 Iowa-type survivor curve with a 38-year service life is recommended. A 38-year service life with a R2 Iowa-type survivor curve, along with the account's surviving investment of average age of 12.3 years, results in a 35.8-year average service life and a 27.6-year average remaining life using vintage group service life weighting procedures.

The salvage and cost of removal were analyzed using the following bands:

Band	Retirement Years	Gross Salvage	Cost of Remove	Net Salvage
Annually	1978-2013	0%	Increasing to 5 to 6%	Decreasing to -5%
5 year rolling band	1982-2013	0%	Increasing to 5 to 6%	Decreasing to -5%
Total data		12.1%	2.9%	9.2%
30-years	1984-2013	12.1%	2.9%	9.2%
20-years	1994-2014	20.1%	2.5%	17.6%
10-years	2004-2013	1.6%	2.8%	-1.2%
5-years	2009-2013	6.4%	17.2%	-10.7%

The industrial metering and regulators equipment account has experienced positive net salvage in the past but has declined to a negative 1.2% for the last ten years and a negative 10.7% net salvage for the last five years. The company currently utilizes a 0% net salvage. Recognizing the historical and recent net salvage experience, a negative 10% net salvage is recommended.

Distribution Plant Asset Retirement Obligation (ARO) Account 388.1 - The Distribution Plant's Asset Retirement Obligation account was established in 2009 subsequent to the company's last depreciation study, the Company currently has a 3.05% per year depreciation rate which is reflective of approximately a 32.8-year service life and a 0% net salvage. This account has not experienced any retirement therefore precluding the statistical analysis of service life and net salvage. The Company proposes to keep the 5.00% rate in place. As an alternative, based on engineering judgment, a R2 Iowa-type survivor curve with a 38-year service life is recommended for this study. A 38-year service life with a R2 Iowa-type survivor curve, along with the account's surviving investment of average age of 21.1 years, results in a 30.0-year average service life and a 20.7-year average remaining life using vintage group service life weighting procedures.

A negative 0% net salvage is recommended.

General Plant - Accounts 390.1 - 398.1

The General Plant functional group includes the following plant accounts:

Account	Account Name	December 31, 2013 Plant and Reserve	
		Investment	Reserved Investment
390.1	Structures & Improvements	$17,480,754	$10,720,055
390.2	Leasehold Improvements	16,808	32,657
391.1	Computer Systems	92,213	86,365
391.2	Computer Hardware	3,306,327	3,303,327
391.3	Data Communications Equipment	1,742,736	16,594
391.4	Office Equipment	390,712	-240,421
391.5	Office Furniture & Fixtures	1,623,532	-116,110
392.1	Transportation Equipment-Trailers	476,107	223,385
392.2	Transportation Equipment	11,218,709	3,815,356
393.1	Stores Equipment	55,775	4,236
394.1	Tools, Shop, & Garage Equipment	5,672,068	1,650,158
394.2	CNG Equipment	127,445	113,108
395.1	Laboratory Equipment	138,043	58,603
396.1	Power Operated Equipment-Trailers	464,441	177,196
396.2	Power Operated Equipment	2,452,121	294,109
397.1	Communications Equipment-Base Station	328,232	166,411
397.2	Communications Equipment-Tele-metering	3,489,559	3,443,101
397.3	Communications Equipment-Telex & Telephone	799,129	227,099
397.4	Communications Equipment-Mobile	615,452	-1,293
398.1	Miscellaneous Equipment	38,881	-17,908
Total	Depreciable General Plant	$50,529,045	$23,959,026

General Plant Structures and Improvements Account 390.1 - The life analysis of the general plant structures and improvements account was performed using actuarial retirement rate analysis using the following retirement bands:

Band	Retirement Years	Placement Years	Fitted Iowa-type survivor curve and associated Life
Total Data	1974-2013	1953-2013	L1.5 - 35
30-year	1984-2013	1953-2013	L1.5 -35
20-year	1994-2013	1953-2013	S0.5 - 30
10-year	2004-2013	1953-2013	O2 -21
5-year	2009-2013	1953-2013	O2 -10

In the life analyses detailed above all retirement bands were affected by the large retirement in 2010 of $7,716,336 representing the sale of Cascades' general office building in Seattle, Washington when it moved its headquarters to Kennewick, Washington. Addition bands ending in 2009 were performed in order to determine the sensitivity of the overall life analysis to this single retirement. The following table details the results of these addition retirement bands:

Band	Retirement Years	Placement Years	Fitted Iowa-type survivor curve and associated Life
Total Data to 2009	1974-2009	1953-2013	L1 - 89
26-year to 2009	1984-2009	1953-2013	L1 - 92

The life analysis lead to the selection of a medium mode L1.5 Iowa-type survivor curve as the best fit. The life indications from the life analysis ranged from 30 to 35 years; with recent bands not reliable for statistical analysis. Currently the company utilizes a 45-year service life with a R3 Iowa-type survivor curve. The life analysis suggests continued use of the current depreciation parameters is warranted; therefore, a R3 Iowa-type survivor curve with a 45-year service life is recommended. A 45-year service life with a R3 Iowa-type survivor curve, along with the account's surviving investment of average age of 13.9 years, results in a 37.0-year

average service life and a 31.3-year average remaining life using vintage group service life weighting procedures.

The salvage and cost of removal were analyzed using the following bands:

Band	Retirement Years	Gross Salvage	Cost of Remove	Net Salvage
Annually	1978-2013	Sporadic but Positive	Mostly 0%	Sporadic but Positive
5 year rolling band	1982-2013	Sporadic but Positive	Mostly 0%	Sporadic but Positive
Total data		96.0%	2.0%	94.0%
30-years	1984-2013	96.3%	2.0%	94.3%
20-years	1994-2014	96.9%	0.8%	96.1%
10-years	2004-2013	97.9%	0.8%	97.1%
5-years	2009-2013	106.4%	0.9%	105.5%

The historical salvage and cost of removal data were also affected by the 2010 retirement, the following table removes the 2010 retirement out of the banded data:

Band	Retirement Years	Gross Salvage	Cost of Remove	Net Salvage
Total data		62.3%	12.2%	50.1%
30-years	1984-2013	59.9%	14.0%	45.9%
20-years	1994-2014	60.9%	2.3%	58.6%
10-years	2004-2013	68.7%	2.1%	66.5%
5-years	2009-2013	No retirements	No retirements	No retirements

The structures and improvements account has experienced positive net salvage in the past with or without the 2010 retirement included. The company currently utilizes a negative 5% net salvage. Recognizing the historical and recent net salvage experience, a 0% net salvage is recommended.

General Plant Leasehold Improvements Account 390.2 – A review of the depreciation charges related to the General Plant's Leasehold improvement account reveal no depreciation expense has been taken as far back as 2002; based on this fact the current depreciation rate was assumed to be 0% per year. Generally, leasehold improvement might utilize the same depreciation parameters as account 390.1 structures and improvements for which the Company

currently has a R3 Iowa curve with a 45 year service and a negative 5% net salvage resulting in a 1.95% per ASL depreciation rate.

The life analysis of the general plant's leasehold improvement account was performed using actuarial retirement rate analysis using the following retirement bands:

Band	Retirement Years	Placement Years	Fitted Iowa-type survivor curve and associated Life
No T-Cut			
Total Data	1974-2013	1953-2013	O4 -70
30-year	1984-2013	1953-2013	O4 - 101
20-year	1994-2013	1953-2013	O4 - 73
T-Cut age 20 years			
Total Data	1974-2013	1953-2013	L2 -21
30-year	1984-2013	1953-2013	S1 - 23
20-year	1994-2013	1953-2013	L1 - 21

All the retirement bands the observed life tables hung up after an age of 20 years resulting in unrealistic O4 Iowa-type survivor curves with exceeding long life indications. The life analyses were rerun with a T-cut of 20 years meaning the statistical curve fitting was conducted over the retirement exposures from age 0.0 years to age 20 years. This second life analyses lead to the selection of a low mode S1 Iowa-type survivor curve as the best fit. The life indications from the life analysis ranged from 21 to 23 years which is more realistic for leasehold improvements; however a 23-year life produces a extremely short remaining life of 1.7 years. A S1 Iowa-type survivor curve with a 30-year service life is appropriate. A 30-year service life with a S1 Iowa-type survivor curve, along with the account's surviving investment of average age of 43.8 years, results in a 25.9-year average service life and a 5.5-year average remaining life using vintage group service life weighting procedures.

The salvage and cost of removal were analyzed using the following bands:

Band	Retirement Years	Gross Salvage	Cost of Remove	Net Salvage
Annually	1978-2013	0%	0%	0%
5 year rolling band	1982-2013	0%	0%	0%
Total data		0.1%	0%	0.1%
30-years	1984-2013	0.1%	0%	0.1%
20-years	1994-2014	0%	0%	0%
10-years	2004-2013	0%	0%	0%
5-years	2009-2013	0%	0%	0%

The leasehold improvement account has experienced 0% net salvage over its entire history. Recognizing the historical and recent net salvage experience, a 0% net salvage is recommended.

General Plant Office Furniture and Equipment - Computer Systems Account 391.1 - The life analysis of the computer equipment account was performed using actuarial retirement rate analysis using the following retirement bands:

Band	Retirement Years	Placement Years	Fitted Iowa-type survivor curve and associated Life
Total Data	1975-2013	1967-2013	L1 -8
30-year	1984-2013	1967-2013	L1 - 8
20-year	1994-2013	1967-2013	O2 - 8
10-year	2004-2013	1967-2013	L2 -12
5-year	2009-2013	1967-2013	L3 -93

The life analysis lead to the selection of a low mode L1 Iowa-type survivor curve as the best fit. The life indications from the life analysis ranged from 8 to 12 years; with recent band (209-2013) not having experienced sufficient retirement for reliable statistical analysis. Currently the company utilizes a 7-year service life with a S0 Iowa-type survivor curve. The life analysis suggests a similar life should be considered, a L1 Iowa-type survivor curve with a 8-year service life is recommended. A 8-year service life with a L1 Iowa-type survivor curve, along with the account's surviving investment of average age of 6.5 years, results in a 10.7-year average

service life and a 4.3-year average remaining life using vintage group service life weighting procedures.

The salvage and cost of removal were analyzed using the following bands:

Band	Retirement Years	Gross Salvage	Cost of Remove	Net Salvage
Annually	1978-2013	0%	0%	0%
5 year rolling band	1982-2013	0%	0%	0%
Total data		6.0%	0.0%	5.9%
30-years	1984-2013	6.1%	0.0%	6.1%
20-years	1994-2014	10.5%	0.0%	10.5%
10-years	2004-2013	35.5%	0.0%	35.5%
5-years	2009-2013	0.0%	0.0%	0.0%

The computer equipment account has experienced sporadic positive net salvage using the overall band (1978-2013) a 6% net salvage was indicated. The company currently utilizes a 0% net salvage. Recognizing the historical and recent net salvage experience a 6% net salvage is recommended.

General Plant Office Furniture and Equipment - Computer Software Account 391.2 – In 2010 company's investment in its software assets have be capitalized in the intangible plant functional group in account 303 Software. Historically, the company's software was accounted for in account 391.2 Computer-software; which has become fully recovered and its depreciation has been stopped. All future software additions will be capitalized into the intangible software account. The following life and salvage analysis was used in reviewing the depreciation parameters for account 303 computer software.

The life analysis of the computer software account was performed using actuarial retirement rate analysis using the following retirement bands:

Band	Retirement Years	Placement Years	Fitted Iowa-type survivor curve and associated Life
Total Data	1979-2013	1978-2013	L3 -9
30-year	1984-2013	1978-2013	L3 - 9
20-year	1994-2013	1978-2013	L3 - 9
10-year	2004-2013	1978-2013	L4 -8
5-year	2009-2013	1978-2013	S6 -6

The life analysis lead to the selection of a low mode L3 Iowa-type survivor curve as the best fit. The life indications from the life analysis ranged from 6 to 9 years. Currently the company utilizes a 7-year service life with a S0 Iowa-type survivor curve. The life analysis suggests a similar life should be considered, a S-.5 Iowa-type survivor curve with a 6-year service life is recommended. A 8-year service life with a L3 Iowa-type survivor curve, along with the account's surviving investment of average age of 6.0 years, results in a 7.5-year average service life and a 3.5-year average remaining life using vintage group service life weighting procedures.

The salvage and cost of removal were analyzed using the following bands:

Band	Retirement Years	Gross Salvage	Cost of Remove	Net Salvage
Annually	1978-2013	0%	0%	0%
5 year rolling band	1982-2013	0%	0%	0%
Total data		0%	0%	0%
30-years	1984-2013	0%	0%	0%
20-years	1994-2014	0%	0%	0%
10-years	2004-2013	0%	0%	0%
5-years	2009-2013	0.0%	0.0%	0.0%

The computer software account has experienced 0% net salvage for all years. The company currently utilizes a 0% net salvage. Recognizing the historical and recent net salvage experience a 0% net salvage is recommended.

General Plant Office Furniture and Equipment – Data Communications Equipment Account 391.3 - The life analysis of the data communications equipment account was performed using actuarial retirement rate analysis using the following retirement bands:

Band	Retirement Years	Placement Years	Fitted Iowa-type survivor curve and associated Life
Total Data	1981-2013	1981-2013	S6 -7
30-year	1984-2013	1981-2013	S6 -7
20-year	1994-2013	1981-2013	S6 -7
10-year	2004-2013	1981-2013	L5 -9
5-year	2009-2013	1981-2013	S6 -7

The life analysis lead to the selection of a high mode S6 Iowa-type survivor curve as the best fit. The life indications from the life analysis ranged from 7 to 9 years. Currently the company utilizes a 7-year service life with a S0 Iowa-type survivor curve. The life analysis suggests a similar life should be considered, a S6 Iowa-type survivor curve with a 7-year service life is recommended. A 7-year service life with a S6 Iowa-type survivor curve, along with the account's surviving investment of average age of 5.0 years, results in a 4.9-year average service life and a 2.6-year average remaining life using vintage group service life weighting procedures.

The salvage and cost of removal were analyzed using the following bands:

Band	Retirement Years	Gross Salvage	Cost of Remove	Net Salvage
Annually	1978-2013	Declining to 0%	Declining to 0%	Declining to 0%
5 year rolling band	1982-2013	Declining to 0%	Declining to 0%	Declining to 0%
Total data		0.4%	0.0%	0.4
30-years	1984-2013	0.4%	0.0%	0.4%
20-years	1994-2014	0.0%	0.0%	0.0%
10-years	2004-2013	0.0%	0.0%	0.0%
5-years	2009-2013	0.0%	0.0%	0.0%

The data communications equipment account has experienced sporadic positive net salvage using the overall band (1978-2013) a 0.4% net salvage indicated; recent experience (1994-2013) has been 0% net salvage. The company currently utilizes a 5% net salvage. Recognizing the historical and recent net salvage experience a 0% net salvage is recommended.

General Plant Office Furniture and Equipment – Office Equipment Account 391.4 - The life analysis of the office equipment account was performed using actuarial retirement rate analysis using the following retirement bands:

Band	Retirement Years	Placement Years	Fitted Iowa-type survivor curve and associated Life
Total Data	1985-2013	1957-2013	S0.5 -15
20-year	1994-2013	1957-2013	R1.5 -14
10-year	2004-2013	1957-2013	R0.5 -12
5-year	2009-2013	1957-2013	S0.5 -7

The life analysis lead to the selection of a low mode R1 Iowa-type survivor curve as the best fit. The life indications from the life analysis ranged from 12 to 15 years. Currently the company utilizes a 20-year service life with a L2 Iowa-type survivor curve. The life analysis suggests a shorter life should be considered, a R1 Iowa-type survivor curve with a 15-year service life is recommended. A 15-year service life with a R1 Iowa-type survivor curve, along with the account's surviving investment of average age of 7.6 years, results in a 11.3-year average service life and a 9.3-year average remaining life using vintage group service life weighting procedures.

The salvage and cost of removal were analyzed using the following bands:

Band	Retirement Years	Gross Salvage	Cost of Remove	Net Salvage
Annually	1978-2013	Declining to 0%	Declining to 0%	Declining to 0%
5 year rolling band	1982-2013	Declining to 0%	Declining to 0%	Declining to 0%
Total data		2.4%	0.0%	2.4%
30-years	1984-2013	2.4%	0.0%	2.4%
20-years	1994-2014	1.0%	0.0%	1.0%
10-years	2004-2013	0.2%	0.0%	0.2%
5-years	2009-2013	0.0%	0.0%	0.0%

The office equipment account has experienced sporadic positive net salvage using the overall band (1984-2013) a 2.4% net salvage indicated; recent experience (1994-2013) has been 0% net salvage. The company currently utilizes a 10% net salvage. Recognizing the historical and recent net salvage experience a 0% net salvage is recommended.

General Plant Office Furniture and Equipment – Office Furniture and Fixtures Account 391.5 - The life analysis of the office furniture and fixtures account was performed using actuarial retirement rate analysis using the following retirement bands:

Band	Retirement Years	Placement Years	Fitted Iowa-type survivor curve and associated Life
Total Data	1974-2013	1953-2013	R1 -25
30-year	1984-2013	1953-2013	R1 -25
20-year	1994-2013	1953-2013	O1 -21
10-year	2004-2013	1953-2013	O1 -18
5-year	2009-2013	1953-2013	O1 -13

The life analysis lead to the selection of a low mode R1 Iowa-type survivor curve as the best fit. The life indications from the life analysis ranged from 13 to 25 years. Currently the company utilizes a 30-year service life with a R4 Iowa-type survivor curve. The life analysis suggests a shorter life should be considered, a R1 Iowa-type survivor curve with a 25-year service life is recommended. A 25-year service life with a R1 Iowa-type survivor curve, along with the account's surviving investment of average age of 4.4 years, results in a 22.9-year average service life and a 21.5-year average remaining life using vintage group service life weighting procedures.

The salvage and cost of removal were analyzed using the following bands:

Band	Retirement Years	Gross Salvage	Cost of Remove	Net Salvage
Annually	1978-2013	Declining to 0%	Declining to 0%	Declining to 0%
5 year rolling band	1982-2013	Declining to 0%	Declining to 0%	Declining to 0%
Total data		1.3%	0.0%	1.3%
30-years	1984-2013	0.2%	0.0%	0.2%
20-years	1994-2014	0.0%	0.0%	0.0%
10-years	2004-2013	0.0%	0.0%	0.0%
5-years	2009-2013	0.0%	0.0%	0.0%

The office furniture and fixtures account has experienced sporadic positive net salvage using the overall band (1984-2013) a 1.3% net salvage indicated; recent experience (1994-2013) has been 0% net salvage. The company currently utilizes a 10% net salvage. Recognizing the historical and recent net salvage experience a 0% net salvage is recommended.

General Plant Transportation Equipment – Trailers Account 392.1 – The transportation equipment trailer account was segregated from the overall transportation account in 2009; therefore the life analysis was performed using actuarial retirement rate analysis using the only a 2009 -2013 retirement band:

Band	Retirement Years	Placement Years	Fitted Iowa-type survivor curve and associated Life
5-year	2009-2013	1960-2013	L3 -24

The life analysis lead to the selection of a medium mode L3 Iowa-type survivor curve as the best fit. The life indications from the life analysis in the 24 years range. Currently the company utilizes a 9-year service life with a L2 Iowa-type survivor curve which is the life established in the last depreciation for the entire transportation account. Typically trailers last quite a bit longer than the transportation equipment as the life analysis suggest. The life analysis suggests a shorter life should be considered, a L3 Iowa-type survivor curve with a 24-year service life is recommended. A 24-year service life with a L3 Iowa-type survivor curve, along with the account's surviving investment of average age of 9.9 years, results in a 23.5-year average

service life and a 15.9-year average remaining life using vintage group service life weighting procedures.

Similar to the life analysis, the salvage and cost of removal were analyzed using the 2009-2013 band:

Band	Retirement Years	Gross Salvage	Cost of Remove	Net Salvage
5-years	2009-2013	3.2%	0.0%	3.2%

The transportation equipment trailers account has experienced positive net salvage using the overall band (2009-2013) a 3.2% net salvage indicated. The company currently utilizes a 20% net salvage which is for the overall transportation equipment account. Recognizing the historical and recent net salvage experience a 3% net salvage is recommended.

General Plant Transportation Equipment – Transportation Equipment Account 392.2 - The life analysis of the transportation equipment account was performed using actuarial retirement rate analysis using the following retirement bands:

Band	Retirement Years	Placement Years	Fitted Iowa-type survivor curve and associated Life
Total Data	1974-2013	1956-2013	L1 -11
30-year	1984-2013	1956-2013	L1 -11
20-year	1994-2013	1956-2013	L0.5 -12
10-year	2004-2013	1956-2013	L1 -13
5-year	2009-2013	1956-2013	L0 -14

The life analysis lead to the selection of a low mode L1 Iowa-type survivor curve as the best fit. The life indications from the life analysis ranged from 11 to 14 years. Currently the company utilizes a 9-year service life with a L2 Iowa-type survivor curve. The life analysis suggests a longer life should be considered, a L1 Iowa-type survivor curve with a 11-year service life is recommended. A 11-year service life with a L1 Iowa-type survivor curve, along with the account's surviving investment of average age of 5.2 years, results in a 10.2 -year average

service life and a 7.8-year average remaining life using vintage group service life weighting procedures.

The salvage and cost of removal were analyzed using the following bands:

Band	Retirement Years	Gross Salvage	Cost of Remove	Net Salvage
Annually	1978-2013	15% to 30%	0%	Declining to 0%
5 year rolling band	1982-2013	15% to 30%	0%	Declining to 0%
Total data		18.7%	0.0%	18.7%
30-years	1984-2013	17.7%	0.0%	17.7%
20-years	1994-2014	15.1%	0.0%	15.1%
10-years	2004-2013	11.6%	0.1%	11.5%
5-years	2009-2013	19.1%	0.1%	19.0%

The transportation equipment account has experienced positive net salvage from 1978 to 2000, then 0% net salvage over the period 2001 to 2008, finally returning to positive net salvage subsequent to 2008. Using the overall band (1978-2013) a 18.73% net salvage indicated; recent experience (2009-2013) has been 19.1% net salvage. The company currently utilizes a 20% net salvage. Recognizing the historical and recent net salvage experience a 15% net salvage is recommended.

General Plant - Stores Equipment Account 393.1 - The life analysis of the stores equipment account was performed using actuarial retirement rate analysis using the following retirement bands:

Band	Retirement Years	Placement Years	Fitted Iowa-type survivor curve and associated Life
Total Data	1974-2013	1953-2013	S6 -33
30-year	1984-2013	1953-2013	S6 -33
20-year	1994-2013	1953-2013	R5 -32
10-year	2004-2013	1953-2013	Insufficient Retirements for Analysis
5-year	2009-2013	1953-2013	Insufficient Retirements for Analysis

The life analysis lead to the selection of a low mode S6 Iowa-type survivor curve as the best fit. The life indications from the life analysis ranged from 32 to 33 years. Currently the company utilizes a 30-year service life with a R2 Iowa-type survivor curve. The life analysis suggests a similar life should be considered, a S6 Iowa-type survivor curve with a 33-year service life is recommended. A 33-year service life with a S6 Iowa-type survivor curve, along with the account's surviving investment of average age of 15.7 years, results in a 27.5-year average service life and a 17.3-year average remaining life using vintage group service life weighting procedures.

The salvage and cost of removal were analyzed using the following bands:

Band	Retirement Years	Gross Salvage	Cost of Remove	Net Salvage
Annually	1978-2013	Highly Positive	0%	Highly Positive
5 year rolling band	1982-2013	Highly Positive	0%	Highly Positive
Total data		1,586.2%	0.0%	1,586.2%
30-years	1984-2013	1,588.3%	0.0%	1,588.3%
20-years	1994-2014	1,588.3%	0.0%	1,588.3%
10-years	2004-2013	3,583.2%	0.0%	3,583.2%
5-years	2009-2013	0.0%	0.0%	0.0%

The stores equipment account has experienced highly positive net salvage over its entire history. The company currently utilizes a 0% net salvage. Recognizing the historical and recent net salvage experience a 0% net salvage is recommended.

General Plant – Tools, Shop, and Garage Equipment Account 394.1 - The life analysis of the tools, shop, and garage equipment account was performed using actuarial retirement rate analysis using the following retirement bands:

Band	Retirement Years	Placement Years	Fitted Iowa-type survivor curve and associated Life
Total Data	1974-2013	1953-2013	S6 -31
30-year	1984-2013	1953-2013	S6 -31
20-year	1994-2013	1953-2013	S6 -31
10-year	2004-2013	1953-2013	S6 -31
5-year	2009-2013	1953-2013	S6 -31

The life analysis lead to the selection of a low mode S6 Iowa-type survivor curve as the best fit. The life indications from the life analysis were 31 years. Currently the company utilizes a 30-year service life with a R2 Iowa-type survivor curve. The life analysis suggests a similar life should be considered, a S6 Iowa-type survivor curve with a 31-year service life is recommended. A 31-year service life with a S6 Iowa-type survivor curve, along with the account's surviving investment of average age of 10.9 years, results in a 29.3-year average service life and a 19.9-year average remaining life using vintage group service life weighting procedures.

The salvage and cost of removal were analyzed using the following bands:

Band	Retirement Years	Gross Salvage	Cost of Remove	Net Salvage
Annually	1978-2013	Declining to 0%	Declining to 0%	Declining to 0%
5 year rolling band	1982-2013	Declining to 0%	Declining to 0%	Declining to 0%
Total data		2.3%	7.9%	-5.6%
30-years	1984-2013	2.2%	8.1%	-6.0%
20-years	1994-2014	0.8%	0.6%	-0.0%
10-years	2004-2013	0.0%	0.9%	-0.9%
5-years	2009-2013	0.0%	1.2%	-1.2%

The tools, shop, and garage equipment account has experience a negative 6% net salvage based on the overall band with that net salvage becoming near 0% in recent periods. The company currently utilizes a negative 5% net salvage. Recognizing the historical and recent net salvage experience a 0% net salvage is recommended.

General Plant – Compressed Natural Gas (CNG) Equipment Account 394.2 – There were insufficient retirements to allow the statistical analysis of the CNG equipment account's service life.

Currently the company utilizes a 30-year service life with a R2 Iowa-type survivor curve. A 31-year service life with a R4 Iowa-type survivor curve, along with the account's surviving investment of average age of 28.3 years, results in a 28.3-year average service life and a 6.1-year average remaining life using vintage group service life weighting procedures.

The CNG accounts net salvage was based on judgment. The company currently utilizes a 5% net salvage. Recognizing the historical and recent net salvage experience a 0% net salvage is recommended.

General Plant – Laboratory Equipment Account 395.1 - The life analysis of the laboratory equipment account was performed using actuarial retirement rate analysis using the following retirement bands:

Band	Retirement Years	Placement Years	Fitted Iowa-type survivor curve and associated Life
Total Data	1974-2013	1953-2007	R6 -25

The life analysis lead to the selection of a low mode R5 Iowa-type survivor curve as the best fit. The life indications from the life analysis were 25 years. Currently the company utilizes a 25-year service life with a R2 Iowa-type survivor curve. The life analysis suggests a similar life should be considered, a S6 Iowa-type survivor curve with a 25-year service life is recommended. A 25-year service life with a R5 Iowa-type survivor curve, along with the account's surviving investment of average age of 12.9 years, results in a 25.1-year average service life and a 12.5-year average remaining life using vintage group service life weighting procedures.

The salvage and cost of removal were analyzed using the following bands:

Band	Retirement Years	Gross Salvage	Cost of Remove	Net Salvage
Annually	1978-2013	0%	0%	0%
5 year rolling band	1982-2013	0%	0%	0%
Total data		0%	0%	0%
30-years	1984-2013	0%	0%	0%
20-years	1994-2014	0%	0%	0%
10-years	2004-2013	0%	0%	0%
5-years	2009-2013	0%	0%	0%

The laboratory equipment account has experienced 0% net salvage over the entire analysis period. The company currently utilizes a 0% net salvage. Recognizing the historical and recent net salvage experience a 0% net salvage is recommended.

General Plant Power Operated Equipment – Trailers Account 396.1 – The power operated equipment trailer account was segregated from the overall power operated equipment account in 2009; therefore the life analysis was performed using actuarial retirement rate analysis using the only a 2009 -2013 retirement band:

Band	Retirement Years	Placement Years	Fitted Iowa-type survivor curve and associated Life
5-year	2009-2013	1981-2013	L2 -16

The life analysis lead to the selection of a medium mode L2 Iowa-type survivor curve as the best fit. The life indications from the life analysis in the 16 years range. Currently the company utilizes a 16-year service life with a L3 Iowa-type survivor curve which is the life established in the last depreciation for the entire power operated equipment account. Typically trailers last quite a bit longer than the power operated equipment as the life analysis suggest. The life analysis suggests a longer life should be considered, a L2 Iowa-type survivor curve with a 17-year service life is recommended. A 17-year service life with a L2 Iowa-type survivor curve, along with the account's surviving investment of average age of 9.9 years, results in a 19.3-year average service life and a 11.8-year average remaining life using vintage group service life weighting procedures.

Similar to the life analysis, the salvage and cost of removal were analyzed using the 2009-2013 band:

Band	Retirement Years	Gross Salvage	Cost of Remove	Net Salvage
5-years	2009-2013	11.5%	0.0%	11.5%

The power operated equipment trailers account has experienced positive net salvage using the overall band (2009-2013) a 11.5% net salvage indicated. The company currently utilizes a 35% net salvage which is for the overall power operated equipment account. Recognizing the historical and recent net salvage experience a 25% net salvage is recommended.

General Plant – Power Operated Equipment Account 396.2 - The life analysis of the power operated equipment account was performed using actuarial retirement rate analysis using the following retirement bands:

Band	Retirement Years	Placement Years	Fitted Iowa-type survivor curve and associated Life
Total Data	1974-2013	1953-2013	L0 -15
30-year	1984-2013	1953-2013	L0 -14
20-year	1994-2013	1953-2013	L0 -14
10-year	2004-2013	1953-2013	L0 -11
5-year	2009-2013	1953-2013	L0 -4

The life analysis lead to the selection of a low mode L0 Iowa-type survivor curve as the best fit. The life indications from the life analysis were in the 11 to 15 years. Currently the company utilizes a 16-year service life with a L0 Iowa-type survivor curve. The life analysis suggests a similar life should be considered, a L1.5 Iowa-type survivor curve with a 15-year service life is recommended. A 15-year service life with a L1.5 Iowa-type survivor curve, along with the account's surviving investment of average age of 6.4 years, results in a 8.8-year average service life and a 11.2-year average remaining life using vintage group service life weighting procedures.

The salvage and cost of removal were analyzed using the following bands:

Band	Retirement Years	Gross Salvage	Cost of Remove	Net Salvage
Annually	1978-2013	Variable	0%	Variable
5 year rolling band	1982-2013	Variable	0%	Variable
Total data		68.3%	0.0%	68.3%
30-years	1984-2013	69.6%	0.0%	69.6%
20-years	1994-2014	75.4%	0.0%	75.4%
10-years	2004-2013	78.0%	0.0%	78.0%
5-years	2009-2013	63.9%	0.0%	63.9%

The power operated equipment account has experience a positive net salvage based on the overall band with that net salvage near 64% in recent periods. The company currently utilizes a 35% net salvage. Recognizing the historical and recent net salvage experience a 25% net salvage is recommended.

General Plant – Communications Equipment – Base Station Equipment Account 397.1 – There were too few retirement to allow statistical analysis of service life of the communication equipment – base station equipment account. Currently the company utilizes a 25-year service life with a R1.5 Iowa-type survivor curve. A R2.0 Iowa-type survivor curve with a 20-year service life is recommended. A 20-year service life with a R2.0 Iowa-type survivor curve, along with the account's surviving investment of average age of 15.5 years, results in a 23.4-year average service life and a 12.3-year average remaining life using vintage group service life weighting procedures.

The communication equipment – base station equipment account has not experienced enough retirement to allow statistical analysis of net salvage. After a 20-year service life the salvage should be low. The company currently utilizes a 5% net salvage. Recognizing the historical and recent net salvage experience a 0% net salvage is recommended.

General Communications Equipment – Tele-metering Account 397.2 – The service life of the tele-metering communication equipment account was performed using actuarial retirement rate analysis using a 2009 -2013 retirement band:

Band	Retirement Years	Placement Years	Fitted Iowa-type survivor curve and associated Life
5-year	2009-2013	1970-2013	L1 -18

The life analysis lead to the selection of a medium mode L1 Iowa-type survivor curve as the best fit. The life indications from the life analysis in the 18 years range. Currently the company utilizes a 10-year service life with a R3 Iowa-type survivor curve for the tele-metering equipment account. The life analysis suggests a longer life should be considered, a L1 Iowa-type survivor curve with a 18-year service life is recommended. A 18-year service life with a L1 Iowa-type survivor curve, along with the account's surviving investment of average age of 13.3 years, results in a 18.9-year average service life and a 10.5-year average remaining life using vintage group service life weighting procedures.

Similar to the life analysis, the salvage and cost of removal were analyzed using the 1981-2013 band:

Band	Retirement Years	Gross Salvage	Cost of Remove	Net Salvage
Total data	1981-2013	0.6%	0.1%	0.5%

The tele-metering equipment account has experienced essentially 0% net salvage which is consistent with communications equipment with such a long service life. The company currently utilizes a 0% net salvage for this account. Recognizing the historical and recent net salvage experience a 0% net salvage is recommended.

General Communications Equipment – Telex and Telephone Equipment Account 397.3 – The service life of the telex and telephone equipment account was performed using actuarial retirement rate analysis using a 1976 -2013 retirement band:

Band	Retirement Years	Placement Years	Fitted Iowa-type survivor curve and associated Life
38-year	1976-2013	1976-2012	L1/L1.5 -12

The life analysis lead to the selection of a medium mode L1.5 Iowa-type survivor curve as the best fit. The life indications from the life analysis in the 12 years range. Currently the company utilizes a 10-year service life with a R4 Iowa-type survivor curve for the telex and telephone equipment account. The life analysis suggests a similar life should be considered, a L1.5 Iowa-type survivor curve with a 12-year service life is recommended. A 12-year service life with a L1.5 Iowa-type survivor curve, along with the account's surviving investment of average age of 6.8 years, results in a 11.7-year average service life and a 7.8-year average remaining life using vintage group service life weighting procedures.

Similar to the life analysis, the salvage and cost of removal were analyzed using the 1981-2013 band:

Band	Retirement Years	Gross Salvage	Cost of Remove	Net Salvage
Total data	1982-2013	0.3%	0.0%	0.3%

The telex and telephone equipment account has experienced essentially 0% net salvage which is consistent with equipment with such a long service life. The company currently utilizes a 0% net salvage for this account. Recognizing the historical and recent net salvage experience a 0% net salvage is recommended.

General Communications Equipment – Mobile equipment Account 397.4 – The service life of the mobile communications equipment account was performed using actuarial retirement rate analysis using a 1976 -2013 retirement band:

Band	Retirement Years	Placement Years	Fitted Iowa-type survivor curve and associated Life
38-year	1974-2013	1961-2012	S5/R4/R5 -24-25

The life analysis lead to the selection of a medium mode R5 Iowa-type survivor curve as the best fit. The life indications from the life analysis in the 25 years range. Currently the company utilizes a 25-year service life with a R2.5 Iowa-type survivor curve for the mobile communications equipment account. The majority of the investment in this account was placed in 2012 and 2013. The service life analysis suggests a 25-year life; however 25-years is too long for mobile communications equipment acquired in the last two years. A R5 Iowa-type survivor curve with a 12-year service life is recommended. A 12-year service life with a R5 Iowa-type survivor curve, along with the account's surviving investment of average age of 1.5 years, results in a 11.9-year average service life and a 10.7-year average remaining life using vintage group service life weighting procedures.

Similar to the life analysis, the salvage and cost of removal were analyzed using the 1981-2013 band:

Band	Retirement Years	Gross Salvage	Cost of Remove	Net Salvage
Total data	1981-2013	1.3%	0.0%	1.3%

The mobile communications equipment account has experienced essentially 0% net salvage which is consistent with equipment with such a long service life. The company currently utilizes a 5% net salvage for this account. Recognizing the historical and recent net salvage experience a 0% net salvage is recommended.

General Plant – Miscellaneous Equipment Account 398 – The service life of the miscellaneous equipment account was performed using actuarial retirement rate analysis using a 1976 -2013 retirement band:

Band	Retirement Years	Placement Years	Fitted Iowa-type survivor curve and associated Life
38-year	1974-2013	1953-2012	R2.5/R3 -20-21

The life analysis lead to the selection of a medium mode R3 Iowa-type survivor curve as the best fit. The life indications from the life analysis in the 20 years range. Currently the company utilizes a 20-year service life with a S1 Iowa-type survivor curve for the miscellaneous equipment account. The life analysis suggests a similar life should be considered, a R3 Iowa-type survivor curve with a 20-year service life is recommended. A 20-year service life with a R3 Iowa-type survivor curve, along with the account's surviving investment of average age of 7.4 years, results in a 13.4-year average service life and a 13.9-year average remaining life using vintage group service life weighting procedures.

Similar to the life analysis, the salvage and cost of removal were analyzed using the 1981-2013 band:

Band	Retirement Years	Gross Salvage	Cost of Remove	Net Salvage
Total data	1979-2013	0.1%	0.0%	0.1%

The miscellaneous equipment account has experienced essentially 0% net salvage which is consistent with equipment with such a long service life. The company currently utilizes a 0% net salvage for this account. Recognizing the historical and recent net salvage experience a 0% net salvage is recommended.

RESULTS

The studies in this report were based upon the plant and reserve balances as of December 31, 2013, and included an analysis of each account's historical retirement experience using statistically acceptable life and salvage analysis techniques. The historical life and salvage indications were adjusted for factors expected to affect the recovery of the company's plant investment. These adjustments were determined through discussion with Cascade Natural Gas's management, knowledge of the plant, knowledge of the gas industry, and the understanding of the capital recovery process.

The proposed depreciation accrual rates are based on the above-described capital recovery parameters and the company's current overall capital recovery position. The capital recovery accrual rates recommended in this study are based on the average remaining life method of capital recovery.

The recommendations are as follows:

Plant Investment and Reserve	Balances 12-31-2013
Plant Investment	$741,702,876
Reserved Investment	381,670,863
Reserve as a % of Plant	51.46%
Present Accruals	
Accrual Rate (%/year)	2.77%
Accruals ($s/year)	20,514,902
Average Service Life Accruals	
Accrual Rate (%/year)	3.22%
Accruals ($s/year)	23,892,067
Change in Accruals ($s/year)	$3,377,165
Remaining Life Accruals	
Accrual Rate (%/year)	3.04%
Accruals ($s/year)	22,533,134
Change in Accruals ($s/year)	$2,081,232
Proposed Remaining Life Accruals	
Accrual Rate (%/year)	**3.04%**
Accruals ($s/year)	**22,533,134**
Change in Accruals ($s/year)	**$2,018,232**

Periodic studies of the Company's depreciation parameters, accrual rates, and practices are recommended in order that its most current service life experience, construction and replacement programs, and the applicable technological and regulatory trends may be properly reflected in the annual depreciation accruals.

SERVICE CONDITIONS

Neither AUS CONSULTANTS or its officers or assigned professional staff has an interest in any property that is the subject of this depreciation study report. As used herein the term "interest" is defined as ownership of the subject property, acting, or having some expectations of acting, as agent in the purchase, sale, or financing of the subject property; and managing, or having some expectation of managing, the subject property.

AUS CONSULTANTS and its officers have not conditioned their fee for service either as a percentage of the conclusions reached in this report or any other condition that is contingent upon the outcome of an award; court action; tax reduction; consummation of the sale, disposition, acquisition or merger; financing; or specified finding by the client, nor will they receive any additional compensation in the form of commissions, rebates, discounts, or exchange of goods or services.

All employees of AUS CONSULTANTS who participated in the preparation of this report and who are certified depreciation professionals in the Society of Depreciation.