DEPRECIATION RATES & DEPRECIATION STUDY

Depreciation expense is recognized on a straight-line basis over the estimated remaining service life of assets, based upon depreciation studies conducted periodically (typically every 5 years) by the Corporation. The last depreciation study for Centra Gas Manitoba Inc. ("Centra") was completed in July 2006 with the resulting depreciation rates being implemented effective April 1, 2007.

In addition to the normal update of service lives, this depreciation study also involved an assessment of International Financial Reporting Standards ("IFRS") compliant depreciation practices and methodologies given that Centra will be required to implement IFRS compliant depreciation rates effective April 1, 2014.

As with previous depreciation studies, an external consultant, Gannett Fleming, Inc., was engaged to review Centra's current depreciation practices, to provide advice on any changes necessary for compliance with IFRS, and to develop IFRS compliant depreciation rates. A depreciation study involves an analysis of financial asset addition and retirement activity to determine a statistical estimate of the average service life for each depreciable component; a peer review; and discussions with operational and engineering staff to identify company specific factors impacting the service lives of each component, such as changes in use or technology that could limit the usefulness of historical transactions in predicting current useful lives, and differences in use and circumstances that could impact the comparability to peer companies. The depreciation consultant considers each of these factors in determining an appropriate average service life and depreciation curve to be used for each depreciable component. Please see the IFRS compliant Depreciation Study for information about the scope and basis for the study, as well as the methods used in this study.

The depreciation study was initiated in 2009 and completed in October 2011 and is based on depreciable assets in service as of March 31, 2010. The implementation of the depreciation rates resulting from the recent study will be accomplished in two phases. In the first phase, Centra updated services lives effective April 1, 2011. In the second phase, Centra will implement IFRS compliant depreciation rates effective April 1, 2014 which will include a change in the depreciation methodology to the Equal Life Group (ELG) and the removal of asset retirement costs from depreciation rates.

A summary of the depreciation rates effective April 1, 2007 as compared to the depreciation rates effective April 1, 2011 and April 1, 2014 may be found in the table on page 5, followed by a letter from Gannett Fleming, Inc. containing the depreciation rates to be used under Generally Accepted Accounting Principles, and by the full IFRS compliant Depreciation Study.

The following table provides a summary of the estimated changes to depreciation expense for gas operations for the 3 year period between 2013 and 2015:

	Depreciation Expense ($ 000's)		
	2013	**2014**	**2015**
Change in Service Life - PP&E (Net of Contributions)	(1,094)	(1,180)	(1,231)
Change in methodology (ELG)			2,309
Removal of Asset Retirement Costs from Depreciation			(4,897)
Net Impact	**(1,094)**	**(1,180)**	**(3,819)**

The significant changes in the depreciation study are discussed in the sections below.

Componentization & Change in Service Lives

In preparation for conversion to IFRS, Centra undertook a comprehensive review of existing depreciable component groupings to determine whether IFRS requirements were met. As a result of this review, it was determined that no new components are required for Centra in order to comply with IFRS. Centra uses the standard asset groupings recommended by the Canadian Gas Association, which are generally accepted as being IFRS compliant in other Canadian gas utilities.

Life extensions were recommended by the consultant for several accounts in consideration of the following factors:

a) Statistical evidence that Centra has been achieving a longer service life than previously estimated as evidenced by lower level of ongoing retirement activity than expected;
b) Industry comparative data; and
c) Discussions with Centra personnel. Operational management have indicated that Centra experiences less incidence of failure than is typical in the industry due to superior cathodic protection and the lack of any significant amount of the early generation uncertified plastic pipe that has been subject to premature failure in other Western Canadian natural gas distribution utilities.

The impact of these changes for Centra was a decrease to depreciation expense (net of contributions) of $0.874 million in 2011/12 with estimated decreases of $1.094 million in 2012/13, $1.180 million in 2013/14 and $1.231 million in 2014/15.

Change in methodology to Equal Life Group

There are two main methods used by utilities for calculating group depreciation, the Average Service Life (ASL) procedure and the Equal Life Group (ELG) procedure.

IFRS requires that any gains and losses on the disposal/retirement of an asset must be recognized immediately in income. This is different than the current North American regulatory practice of recording gains and losses in accumulated depreciation and this has resulted in a change to the depreciation methodology to better match the recording of depreciation with the actual service life of the underlying assets.

The ASL procedure, which has been used by Centra in the past, calculates depreciation expense based upon the average life of all assets within each class. Although accepted for utility accounting under current Canadian accounting standards, this method is viewed as problematic from an IFRS perspective because, except for those assets which have a life exactly equal to the average service life of that group, assets are being depreciated over a longer or shorter timeframe than their expected service life.

The ELG procedure addresses this issue by developing depreciation rates with specific consideration of the expected retirement pattern for each asset within each class. Every asset in the class is depreciated over its own expected service life and therefore is expected to be fully depreciated (not over or under depreciated) when it is removed from service. The resulting depreciation expense calculations are compliant with IFRS and minimize retirement gains or losses that must be recognized in current income. Centra will be calculating depreciation rates based on ELG methodology effective April 1, 2014.

Because the ELG procedure ensures that assets with a shorter service life than average are fully depreciated at their expected retirement date, there is an earlier recognition of depreciation expense than would be the case under the ASL procedure. The estimated impact of this change for Centra is an increase to depreciation expense of $2.309 million in 2014/15.

Removal of Asset Retirement Costs from Depreciation

IFRS is also much more prescriptive in terms of those items that make up the depreciable cost of assets and does not recognize North American regulatory practices of including the costs of removal of assets in depreciation rates unless there is a legal or constructive obligation to remove such assets (in which case an asset retirement obligation is recorded). As such, Centra will be eliminating this practice and removing asset retirement costs from its depreciation rates effective April 1, 2014.

The estimated impact of this change for Centra is a decrease to depreciation expense of $4.897 million in 2014/15.

Please see the following table for the depreciation rates for Centra.

Depreciable Group	Effective April 1, 2007	Effective April 1, 2011	Effective April 1, 2014
FRANCHISES & CONSENTS	5.56	5.56	5.56
TRANSMISSION			
Land Rights	1.23	1.29	1.38
Structures & Improvements - M&R	1.64	1.96	1.84
Structures & Improvements - Other	3.51	2.32	2.06
Mains	1.73	1.74	1.55
Measuring & Regulating Equipment	2.62	1.93	1.99
Regulating Station Electronic Equipment		6.67	6.67
Other - Transmission	2.50	2.50	2.50
DISTRIBUTION			
Land Rights	1.28	1.29	1.38
Structures & Improvements	3.19	2.10	2.09
Structures & Improvements - M&R	1.56	1.58	1.83
Services	3.27	2.89	1.90
Regulators & Meter Installations	2.62	2.13	2.25
Mains	1.80	1.84	1.51
Measuring & Regulating Equipment	4.04	3.27	2.91
Telemetry Equipment	5.59	5.00	5.01
Regulating Station Electronic Equipment		6.67	6.67
Meters	3.76	4.15	4.87
AMR / ERT Modules	10.00	10.00	10.00
Computer Hardware Equipment - EMS/SCADA		20.00	20.00
Computer System Development - EMS/SCADA		20.00	20.00
GENERAL PLANT			
Structures & Improvements	1.95	1.50	2.57
Office Furniture & Equipment	6.67	6.67	6.67
Computer System Development	10.00	10.00	10.00
Transportation Equipment	6.14	13.94	13.59
Heavy Work Equipment	5.34	-	-
Tools & Work Equipment	6.67	6.67	6.67
COMPOSITE (WEIGHTED AVERAGE) RATE	**2.80**	**2.62**	**2.23**

Gannett Fleming

Excellence Delivered ***As Promised***

December 13, 2011

Centra Gas Manitoba Inc.
360 Portage Avenue
Winnipeg, Manitoba
R3C 0G8

Attention: Mr. Vince Warden
Vice President, Finance & Administration
and Chief Financial Officer

Ladies and Gentlemen:

Pursuant to your request, we have calculated depreciation rates based on your original cost as of March 31, 2010 using the depreciation calculation procedures that were approved in your last depreciation study, namely the use of the Average Service Life ("ASL") procedure and incorporation of estimated net negative salvage percentages. The attached schedules provide a summary of the depreciation rates related to the gas transmission, distribution and general plant assets of Centra Gas Manitoba Inc. (or "the Company") as of March 31, 2010.

The calculated annual depreciation accrual rates presented in the report are applicable to plant in service as of March 31, 2010. The depreciation rates are based on the average service life estimates and interim survivor curve determinations as recently completed in the full depreciation study report. The net salvage percentages used in the enclosed schedules of depreciation rates were based on the net salvage percentages as approved in your last depreciation study.

Gannett Fleming has calculated and are providing these requested schedules of depreciation rates in order to provide continuity from the last depreciation study, through the transition to the depreciation rates as provided in the recently completed Gannett Fleming Depreciation Study report.

Gannett Fleming, Inc.
Valuation and Rate Division
Suite 277 • 200 Rivercrest Drive S.E. • Calgary, AB T2C 2X5 • Canada
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Gannett Fleming

Excellence Delivered ***As Promised***

As the attached schedules are a work product of Gannett Fleming, we ask that this cover letter be provided any time that the attached schedules are distributed. Gannett Fleming does, however, authorize the distribution of the electronic version of the attached schedules.

Respectfully submitted,

GANNETT FLEMING, INC.

LARRY E. KENNEDY
Director, Canadian Services
Valuation and Rate Division

LEK/hac
Project: 052988.200

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CENTRA GAS MANITOBA INC.

SCHEDULE 1. ESTIMATED SURVIVOR CURVES, NET SALVAGE PERCENTS, ORIGINAL COST AND ANNUAL ACCRUALS
FOR THE TWELVE MONTHS ENDED MARCH 31, 2010
(USE OF THE ASL PROCEDURE)

Acct	Depreciable Group	Survivor Curve	Net Salvage	Surviving Original Cost as of March 31, 2010	Calculated Annual Accrual Amount	Calculated Annual Accrual Rate (%)	Annual Provision For True-Up	Total Depreciation Expense		Total Depreciation Rate (%)
	(1)	(2)	(3)	(4)	(5)	(6)=(5)/(4)	(7)	(8)=(5)+(7)		(9)=(8)/(4)
401.00	Franchises & Consents	20-SQ	0	37,735	1,887	5.00		1,887	**	5.56
	TRANSMISSION									
461.00	Land Rights	75-R4	0	3,492,194	46,446	1.33	(1,468)	44,978		1.29
463.00	Structures and Improvements - Measuring and Regulating	50-R5	(5)	1,003,313	21,070	2.10	(1,392)	19,678		1.96
464.00	Structures and Improvements - Other	50-R5	(5)	76,421	1,605	2.10	170	1,775		2.32
465.00	Mains	65-R4	(15)	87,828,342	1,555,440	1.77	(23,530)	1,531,910		1.74
467.00	Measuring and Regulating Equipment	50-S2.5	(5)	7,311,646	153,545	2.10	(12,245)	141,300		1.93
467.20	Regulating Station Electronic Equipment	15-SQ	0			6.67 *				6.67
469.00	Other - Transmission	40-SQ	0			2.50 *				2.50
	TOTAL TRANSMISSION			**99,711,916**	**1,778,105**		**(38,465)**	**1,739,640**		
	DISTRIBUTION									
471.00	Land Rights	75-R4	0	731,058	9,723	1.33	(295)	9,428		1.29
472.00	Structures and Improvements	45-R1.5	(10)	1,342,407	32,782	2.44	(4,591)	28,191		2.10
472.10	Structures and Improvements - Measuring and Regulating	55-R4	5	3,757,864	64,973	1.73	(5,491)	59,482		1.58
473.00	Services	55-R2.5	(50)	204,217,909	5,575,149	2.73	333,063	5,908,212		2.89
474.00	Regulators and Meter Installations	45-R4	0	44,900,044	996,781	2.22	(40,109)	956,672		2.13
475.00	Mains	65-R4	(20)	156,954,058	2,900,511	1.85	(8,991)	2,891,520		1.84
477.00	Measuring and Regulating Equipment	35-R2	(20)	33,132,020	1,137,091	3.43	(54,641)	1,082,450		3.27
477.10	Telemetry Equipment	16-S6	0	4,084,903	255,306	6.25	(51,243)	204,063		5.00
477.20	Regulating Station Electronic Equipment	15-SQ	0			6.67 *				6.67
478.00	Meters	26-S1.5	0	38,119,191	1,463,237	3.84	118,322	1,581,559		4.15
478.10	AMR / ERT Modules	10-SQ	0			10.00 *				10.00
479.10	Computer Hardware Equipment - EMS/SCADA	5-SQ	0			20.00 *				20.00
479.30	Computer System Development - EMS/SCADA	5-SQ	0			20.00 *				20.00
	TOTAL DISTRIBUTION			**487,239,454**	**12,435,554**		**286,024**	**12,721,578**		
	GENERAL PLANT									
482.00	Structures and Improvements	45-R3	15	9,147,218	172,608	1.89	(35,177)	137,431		1.50
483.00	Office Furniture and Equipment	15-SQ	0	1,072,615	71,508	6.67		71,508		6.67
483.30	Computer System Development	10-SQ	0	9,888,754	988,875	10.00		988,875		10.00
484.00	Transportation Equipment	10-R5	10	1,390,934	87,113	6.26	106,721	193,834		13.94
485.00	Heavy Work Equipment	20-R5	20	595,679		0.00			***	0.00
486.00	Tools and Work Equipment	15-SQ	0	2,928,013	195,201	6.67		195,201		6.67
	TOTAL GENERAL PLANT			**25,023,213**	**1,515,305**		**71,544**	**1,586,849**		
	TOTAL DEPRECIABLE PLANT REVIEWED			**612,012,316**	**15,730,851**		**319,103**	**16,049,954**		**2.62**

* Rate is provided for the use with future additions
** Total Depreciation expense calculated based upon length of lease term, with no provision for true up.
*** Account is fully depreciated

CENTRA GAS MANITOBA INC.

SCHEDULE 2. CALCULATED ACCRUED DEPRECIATION, BOOK ACCUMULATED DEPRECIATION AND DETERMINATION OF ANNUAL PROVISION FOR TRUE-UP RELATED TO ESTIMATED ORIGINAL COST AS OF MARCH 31, 2010 (USE OF THE ASL PROCEDURE)

Acct	Description	Surviving Original Cost As of March 31, 2010	Calculated Accrued Depreciation	Book Accumulated Depreciation	Accumulated Depreciation Variance		Probable Remaining Life	Annual Provision for True-Up	True-Up Rate (%)
					Amount	Percent			
	(1)	(2)	(3)	(4)	(5) = (3)-(4)	(6) = (5)/(3)	(7)	(8)=(5)/(7)	(9)=(8)/(2)
401.00	Franchises & Consents	37,735	22,401	22,647	(246)	(1.10)	11.3		0.00
	TRANSMISSION								
461.00	Land Rights	3,492,194	444,142	542,038	(97,896)	(22.00)	66.7	(1,468)	(0.04)
463.00	Structures and Improvements - Measuring and Regulating	1,003,313	435,300	483,169	(47,869)	(11.00)	34.4	(1,392)	(0.14)
464.00	Structures and Improvements - Other	76,421	54,035	51,419	2,616	4.80	15.4	170	0.22
465.00	Mains	87,828,342	21,008,959	22,225,437	(1,216,478)	(5.80)	51.7	(23,530)	(0.03)
467.00	Measuring and Regulating Equipment	7,311,646	1,632,144	2,152,557	(520,413)	(31.90)	42.5	(12,245)	(0.17)
467.20	Regulating Station Electronic Equipment								
469.00	Other - Transmission								
	TOTAL TRANSMISSION	**99,711,916**	**23,574,580**	**25,454,620**	**(1,880,040)**			**(38,465)**	
	DISTRIBUTION								
471.00	Land Rights	731,058	91,895	111,349	(19,454)	(21.20)	65.9	(295)	(0.04)
472.00	Structures and Improvements	1,342,407	538,050	672,100	(134,050)	(24.90)	29.2	(4,591)	(0.34)
472.10	Structures and Improvements - Measuring and Regulating	3,757,864	955,234	1,180,934	(225,700)	(23.60)	41.1	(5,491)	(0.15)
473.00	Services	204,217,909	86,761,442	73,871,919	12,889,523	14.90	38.7	333,063	0.16
474.00	Regulators and Meter Installations	44,900,044	15,553,876	16,789,232	(1,235,356)	(7.90)	30.8	(40,109)	(0.09)
475.00	Mains	156,954,058	53,363,221	53,783,097	(419,876)	(0.80)	46.7	(8,991)	(0.01)
477.00	Measuring and Regulating Equipment	33,132,020	12,557,520	13,885,307	(1,327,787)	(10.60)	24.3	(54,641)	(0.16)
477.10	Telemetry Equipment	4,084,903	2,433,099	2,935,282	(502,183)	(20.60)	9.8	(51,243)	(1.25)
477.20	Regulating Station Electronic Equipment								
478.00	Meters	38,119,191	12,801,250	10,872,600	1,928,650	15.10	16.3	118,322	0.31
478.10	AMR / ERT Modules						0.0		
479.10	Computer Hardware Equipment - EMS/SCADA								
479.30	Computer System Development - EMS/SCADA								
	TOTAL DISTRIBUTION	**487,239,454**	**185,055,587**	**174,101,820**	**10,953,767**			**286,024**	
	GENERAL PLANT								
482.00	Structures and Improvements	9,147,218	4,869,009	5,512,748	(643,739)	(13.20)	18.3	(35,177)	(0.38)
483.00	Office Furniture and Equipment	1,072,615	1,030,523	865,357	165,166		*		0.00
483.30	Computer System Development	9,888,754	6,592,128	5,880,869	711,259		*		0.00
484.00	Transportation Equipment	1,390,934	1,190,595	1,073,202	117,393	9.90	1.1	106,721	7.67
485.00	Heavy Work Equipment	595,679	326,462	586,496	(260,034)	(79.70)	2.1 **		0.00
486.00	Tools and Work Equipment	2,928,013	2,531,934	2,113,746	418,188		*		0.00
	TOTAL GENERAL PLANT	**25,023,213**	**16,540,651**	**16,032,418**	**508,233**			**71,544**	
	TOTAL DEPRECIABLE PLANT REVIEWED	**612,012,316**	**225,193,219**	**215,611,505**	**9,581,714**			**319,103**	

* No true up is calculated as account will be amortized until fully depreciated
** Fully amortized account, therefore true-up has been suspended

CENTRA GAS MANITOBA INC.

WINNIPEG, MANITOBA

DEPRECIATION STUDY

CALCULATED ANNUAL DEPRECIATION ACCRUAL RATES APPLICABLE TO PLANT IN SERVICE AS OF MARCH 31, 2010

Harrisburg, Pennsylvania ***Calgary, Alberta*** ***Valley Forge, Pennsylvania***

Gannett Fleming

Excellence Delivered ***As Promised***

November 2, 2011

Centra Gas Manitoba Inc.
360 Portage Avenue
Winnipeg, Manitoba
R3C 0G8

Attention: Mr. Vince Warden
Vice President, Finance & Administration
and Chief Financial Officer

Ladies and Gentlemen:

Pursuant to your request, we have conducted a depreciation study related to the gas transmission, distribution and general plant assets of Centra Gas Manitoba Inc. (or "the company") as of March 31, 2010. Our report presents a description of the methods used in the estimation of depreciation, the statistical analyses of service life and the summary and detailed tabulations of annual and accrued depreciation.

The calculated annual depreciation accrual rates presented in the report are applicable to plant in service as of March 31, 2010. The depreciation rates are based on the straight-line remaining life method using the equal life group procedure. A periodic review of the depreciation rates using the same estimates and methods is recommended.

Respectfully submitted,

GANNETT FLEMING, INC.

LARRY E. KENNEDY
Director, Canadian Services
Valuation and Rate Division

LEK/hac
Project: 052988.200

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PART I. INTRODUCTION

CENTRA GAS MANITOBA INC.
DEPRECIATION STUDY

CALCULATED ANNUAL DEPRECIATION
ACCRUAL RATES APPLICABLE TO PLANT IN SERVICE
AS OF MARCH 31, 2010

PART I. INTRODUCTION

SCOPE

This report sets forth the results of the depreciation study conducted for the natural gas transmission, distribution and general plant assets of Centra Gas Manitoba Inc. as of March 31, 2010 to determine the annual depreciation accrual rates and amounts for financial reporting purposes applicable to the original cost of plant as of March 31, 2010.

The depreciation accrual rates presented herein are based on generally-accepted methods and procedures for calculating depreciation. The estimated survivor curves used in this report are based on studies incorporating data through March 2010.

Part I, Introduction, contains statements with respect to the scope of the report and the basis of the study. Part II, Methods Used in the Calculation of Depreciation, presents the methods used in the estimation of average service lives and survivor curves used in the calculation of depreciation. Part III, Results of Study, presents a summary of annual depreciation. A separate document presenting the statistical analyses of service life estimates and the detailed tabulations of annual depreciation is also provided.

BASIS OF THE STUDY

Depreciation. The depreciation accrual rates and accrued depreciation were calculated using the straight line method, the whole life basis and the equal life group (ELG) procedure. The calculation was based on the attained ages and estimated service life for each depreciable group of assets as of March 31, 2010.

Service Life Estimates. The method of estimating service life consisted of compiling the service life history of the plant accounts and subaccounts, reducing this history to trends through the use of analytical techniques that have been generally accepted in various regulatory jurisdictions, and forecasting the trend of survivors for each depreciable group on the basis of interpretations of past trends and consideration of Company plans for the future. The combination of the historical trend and the estimated future trend yielded a complete pattern of life characteristics from which the average service life was derived. The service life estimates used in the depreciation calculation incorporated historical data compiled through March 31, 2010. Such data included plant additions, retirements, transfers and other plant activity.

A general understanding of the function of the plant and information with respect to the reasons for past retirements and the expected future causes of retirement was obtained through interviews with Company representatives. The information gained through these discussions with company representatives was also used in the development of the average service life estimates.

International Financial Reporting Standards. The Canadian Accounting Standards Board has announced that Canadian Generally Accepted Accounting Principles (GAAP) will be converged to comply for reporting purposes with the

International Financial Reporting Standards (IFRS) by 2011[1]. Gannett Fleming views that the depreciation methods and procedures as recommended in this report will comply with IFRS.

In preparation for this change, Gannett Fleming has developed depreciation rates and parameters that are in compliance with the new standard.

As such, this study has included the following changes from previous Centra Gas depreciation studies:

- Elimination of the pre-collection of costs of removal; and
- Incorporation of the Equal Life Group Procedure (ELG).

Gannett Fleming has reviewed the depreciable groupings established by Centra Gas and believes that the groups, as provided to Gannett Fleming and previously used, are in conformance with the componentization requirements of IFRS and continue to provide a reasonable grouping of homogeneous assets for regulatory purposes.

IFRS does not allow for any recognition of costs of removal within the depreciation expense. Removal of these costs for financial disclosure purposes is required in order to comply with IFRS and as such all cost of removal provisions have been removed from this study.

In the view of Gannett Fleming, group accounting methods using the ELG procedure are compliant with the new standard. The ELG procedure provides a precise matching of service life estimates to depreciation expense.

[1] In September 2010, the Canadian Accounting Standards Board announced that an optional one-year deferral for the implementation of IFRS is available for Rate Regulated Entities.

RECOMMENDATIONS

The calculated annual depreciation accrual rates set forth herein apply specifically to plant in service as of March 31, 2010. Continued surveillance and periodic revisions are normally required to maintain continued use of appropriate depreciation rates, and to comply with the standards as set out in International Accounting Standard ("IAS") 16 of IFRS.

The depreciation rates should be reviewed periodically to reflect the changes that result from plant accounting activity. A depreciation reserve deficiency or surplus will develop if future capital expenditures vary significantly from those anticipated in this study.

PART II. METHODS USED IN THE CALCULATION OF DEPRECIATION

PART II. METHODS USED IN THE CALCULATION OF DEPRECIATION

DEPRECIATION

Depreciation, in public utility regulation, is the loss in service value not restored by current maintenance, incurred in connection with the consumption or prospective retirement of utility plant in the course of service from causes which are known to be in current operation and against which the utility is not protected by insurance. Among causes to be given consideration are wear and tear, deterioration, action of the elements, inadequacy, obsolescence, changes in the art, changes in demand, and the requirements of public authorities.

Depreciation, as used in accounting, is a method of distributing fixed capital costs, less net salvage, over a period of time by allocating annual amounts to expense. Each annual amount of such depreciation expense is part of that year's total cost of providing natural gas distribution service. Normally, the period of time over which the fixed capital cost is allocated to the cost of service is equal to the period of time over which an item renders service, that is, the item's service life. The most prevalent method of allocation is to distribute an equal amount of cost to each year of service life. This method is known as the straight-line method of depreciation.

The calculation of annual and accrued depreciation based on the straight line method requires the estimation of survivor curves and the selection of group depreciation procedures. These subjects are discussed in the sections that follow.

ESTIMATION OF SURVIVOR CURVES

Survivor Curves. The use of an average service life for a property group implies that the various units in the group have different lives. Thus, the average life may be obtained by determining the separate lives of each of the units, or by constructing a survivor curve by plotting the number of units which survive at successive ages. A discussion of the general concept of survivor curves is presented. Also, the Iowa type survivor curves are reviewed.

The survivor curve graphically depicts the amount of property existing at each age throughout the life of an original group. From the survivor curve, the average life of the group, the remaining life expectancy, the probable life, and the frequency curve can be calculated. In Figure 1, a typical smooth survivor curve and the derived curves are illustrated. The average life is obtained by calculating the area under the survivor curve, from age zero to the maximum age, and dividing this area by the ordinate at age zero. The remaining life expectancy at any age can be calculated by obtaining the area under the curve, from the observation age to the maximum age, and dividing this area by the percent surviving at the observation age. For example, in Figure 1, the remaining life at age 30 is equal to the crosshatched area under the survivor curve divided by 29.5 percent surviving at age 30. The probable life at any age is developed by adding the age and remaining life. If the probable life of the property is calculated for each year of age, the probable life curve shown in the chart can be developed. The frequency curve presents the number of units retired in each age interval. It is derived by obtaining the differences between the amount of property surviving at the beginning and at the end of each interval.

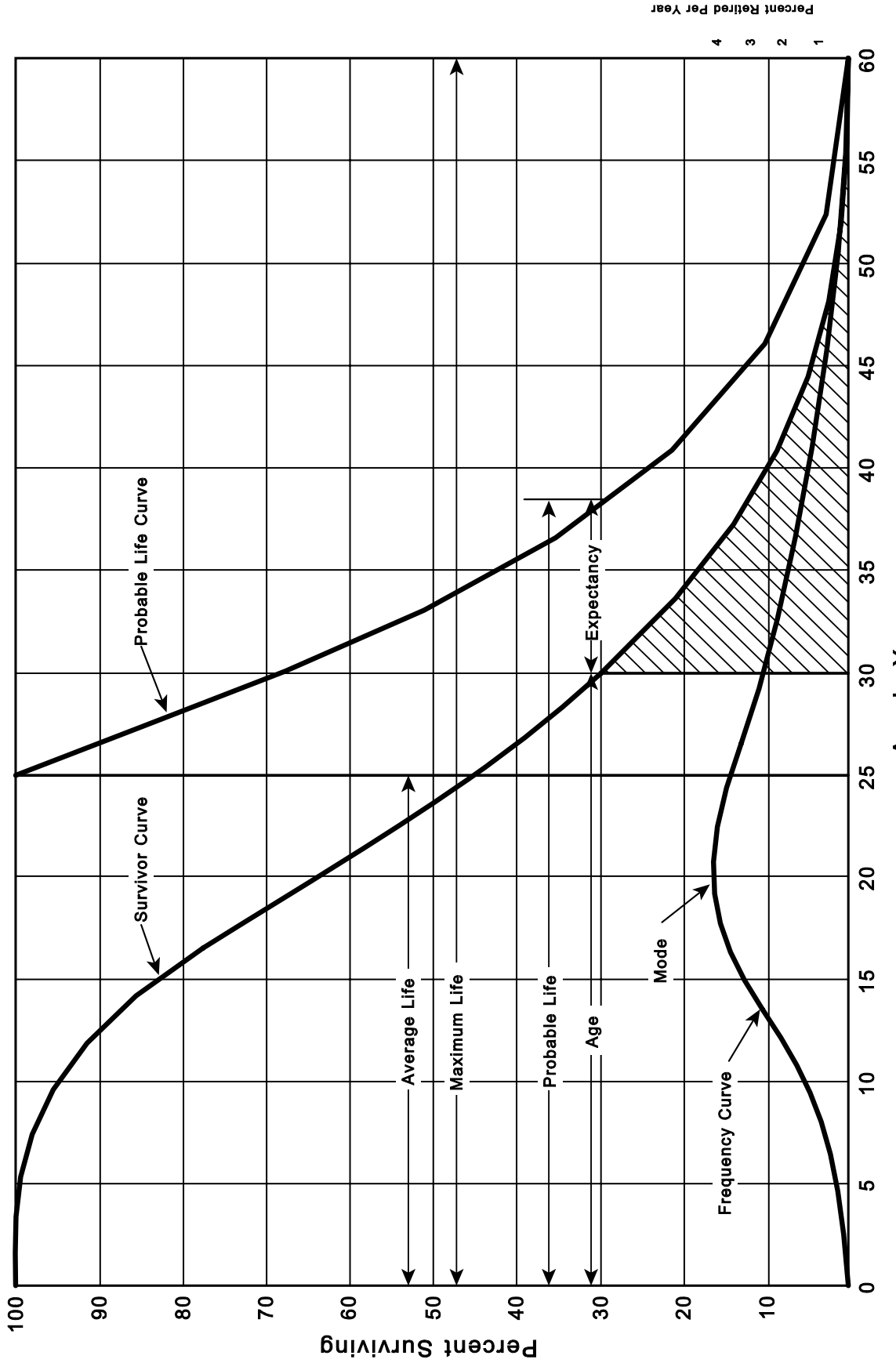

Figure 1. A Typical Survivor Curve and Derived Curves

Iowa Type Curves. The range of survivor characteristics usually experienced by utility and industrial properties is encompassed by a system of generalized survivor curves known as the Iowa type curves. There are four families in the Iowa system, labeled in accordance with the location of the modes of the retirements in relationship to the average life and the relative height of the modes. The left moded curves, presented in Figure 2, are those in which the greatest frequency of retirement occurs to the left of, or prior to, average service life. The symmetrical moded curves, presented in Figure 3, are those in which the greatest frequency of retirement occurs at average service life. The right moded curves, presented in Figure 4, are those in which the greatest frequency occurs to the right of, or after, average service life. The origin moded curves, presented in Figure 5, are those in which the greatest frequency of retirement occurs at the origin, or immediately after age zero. The letter designation of each family of curves (L, S, R or O) represents the location of the mode of the associated frequency curve with respect to the average service life. The numbers represent the relative heights of the modes of the frequency curves within each family.

The Iowa curves were developed at the Iowa State College Engineering Experiment Station through an extensive process of observation and classification of the ages at which industrial property had been retired. A report of the study which resulted in the classification of property survivor characteristics into 18 type curves, which constitute three of the four families, was published in 1935 in the form of the Experiment Station's Bulletin 125.[2] These curve types have also been presented in

[2] Winfrey, Robley. Statistical Analyses of Industrial Property Retirements. Iowa State College, Engineering Experiment Station, Bulletin 125. 1935.

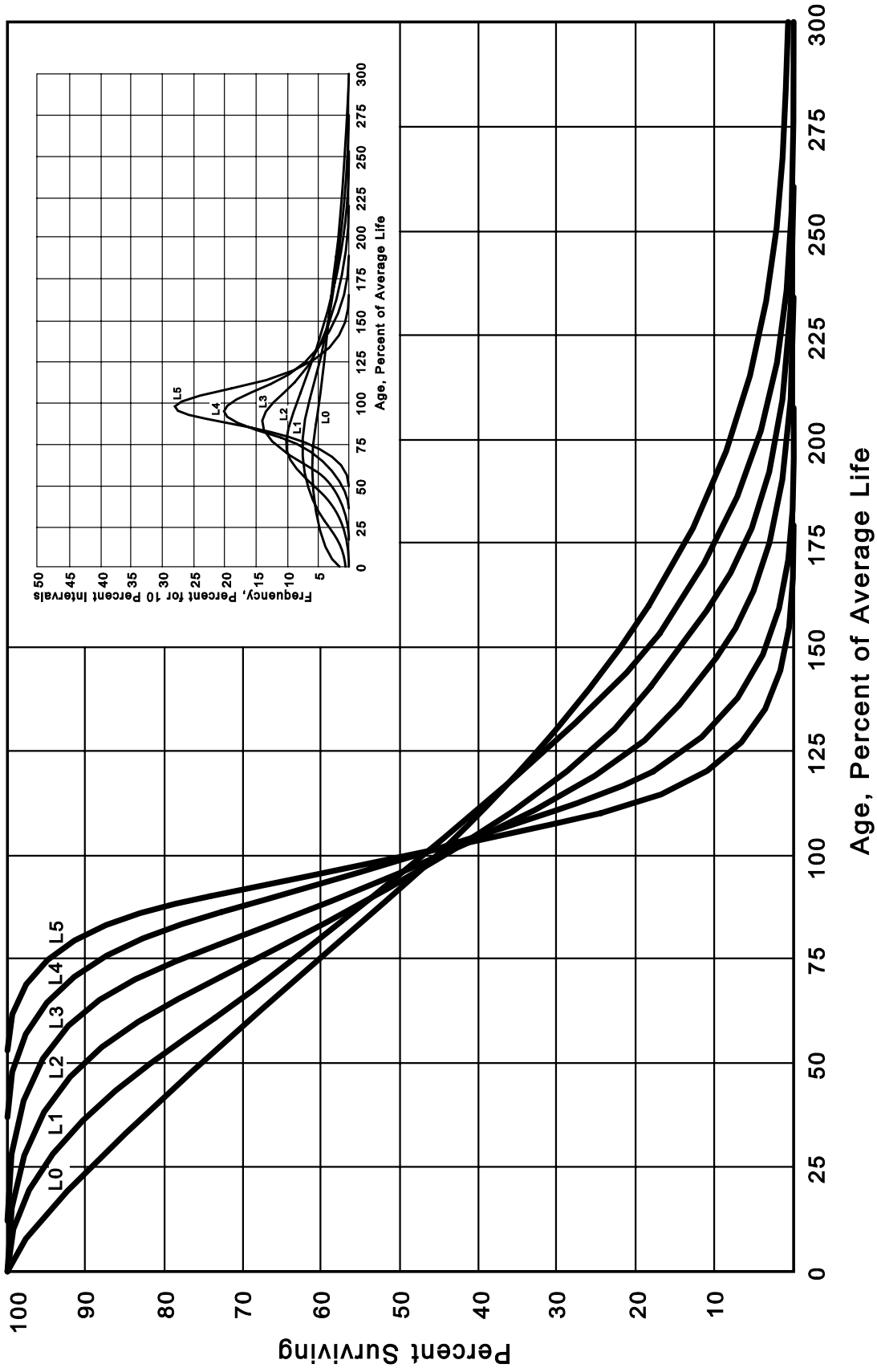

Figure 2. Left Modal or "L" Iowa Type Survivor Curves

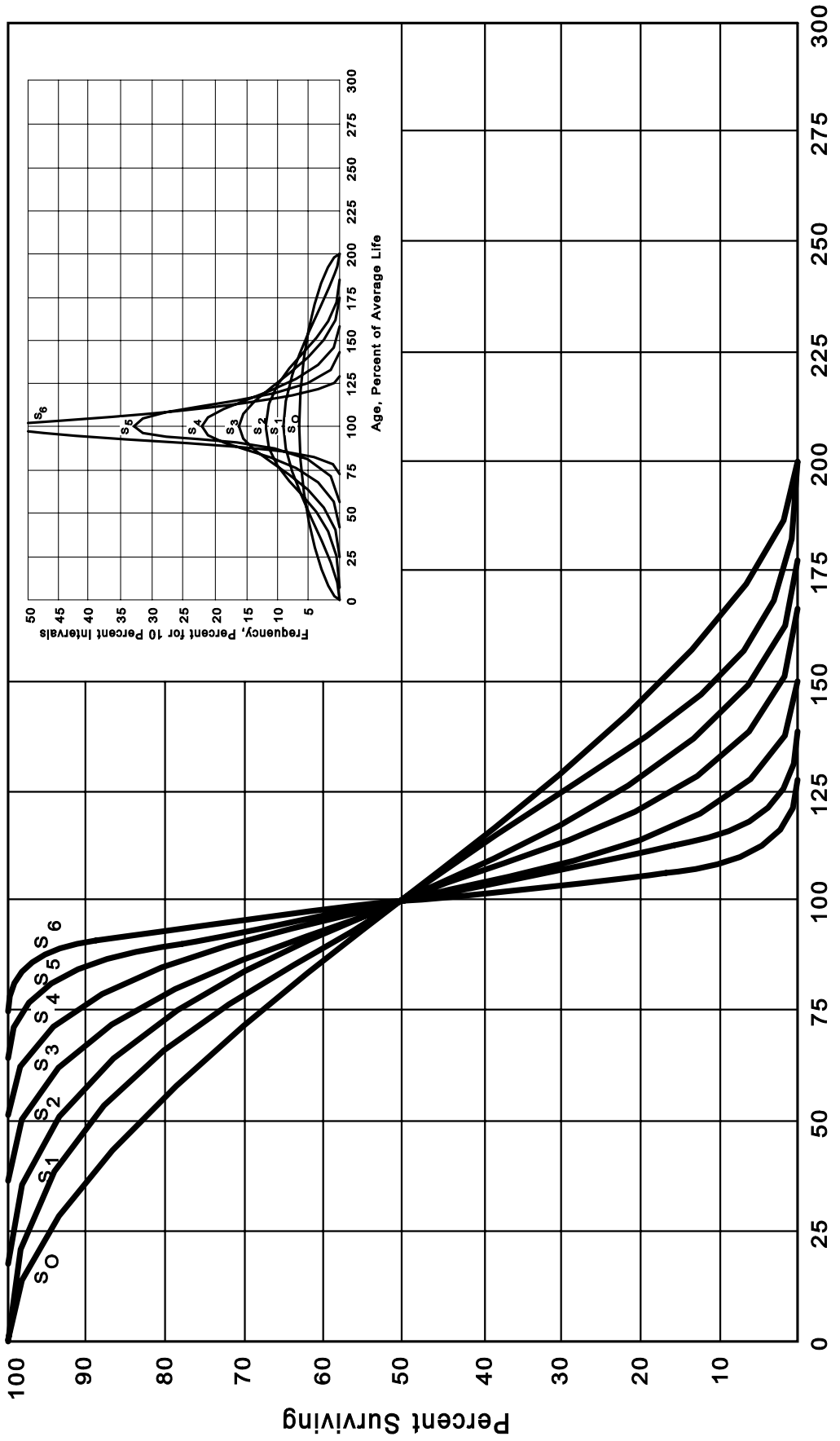

Figure 3. Symmetrical or "S" Iowa Type Survivor Curves

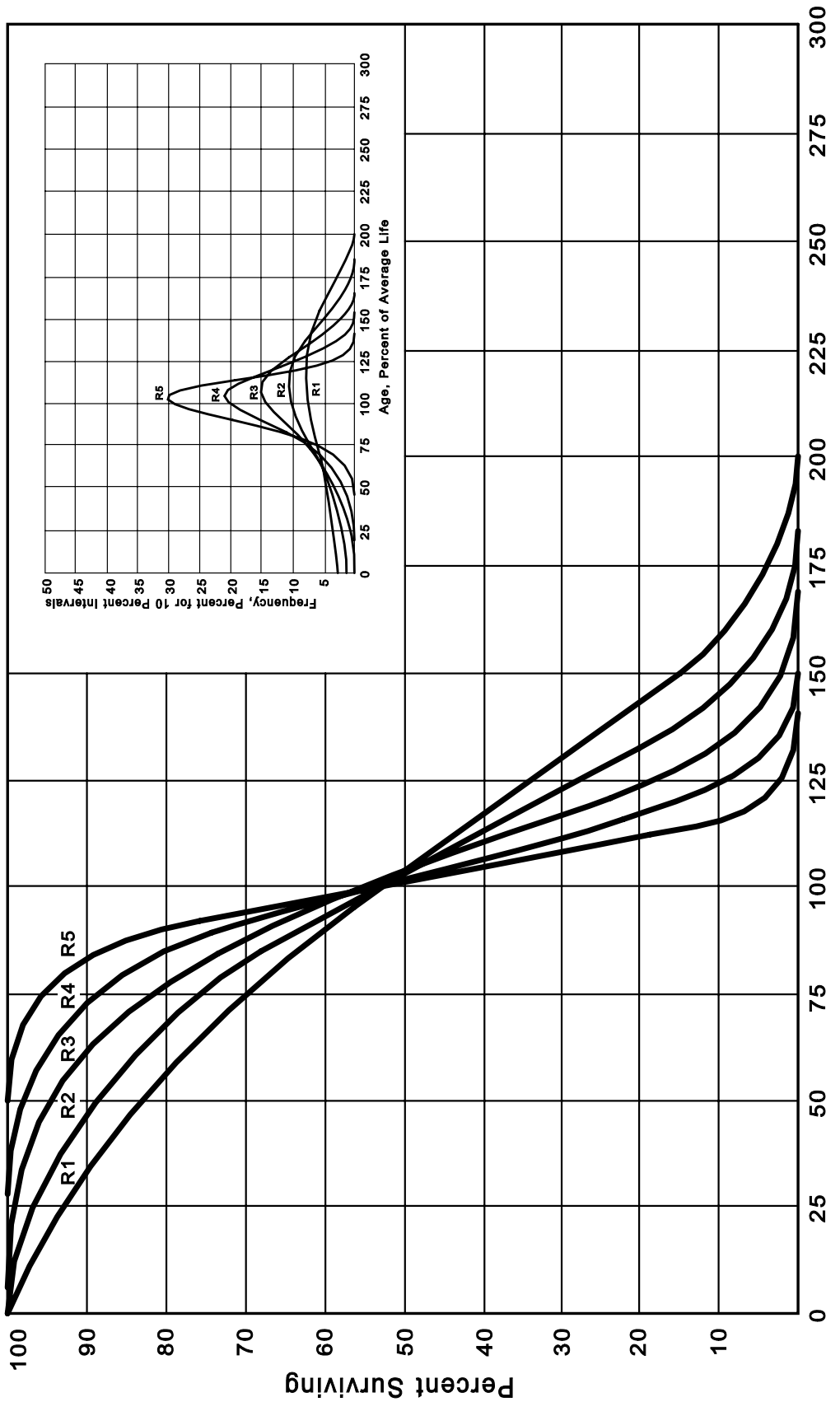

Figure 4. Right Modal or "R" Iowa Type Survivor Curves

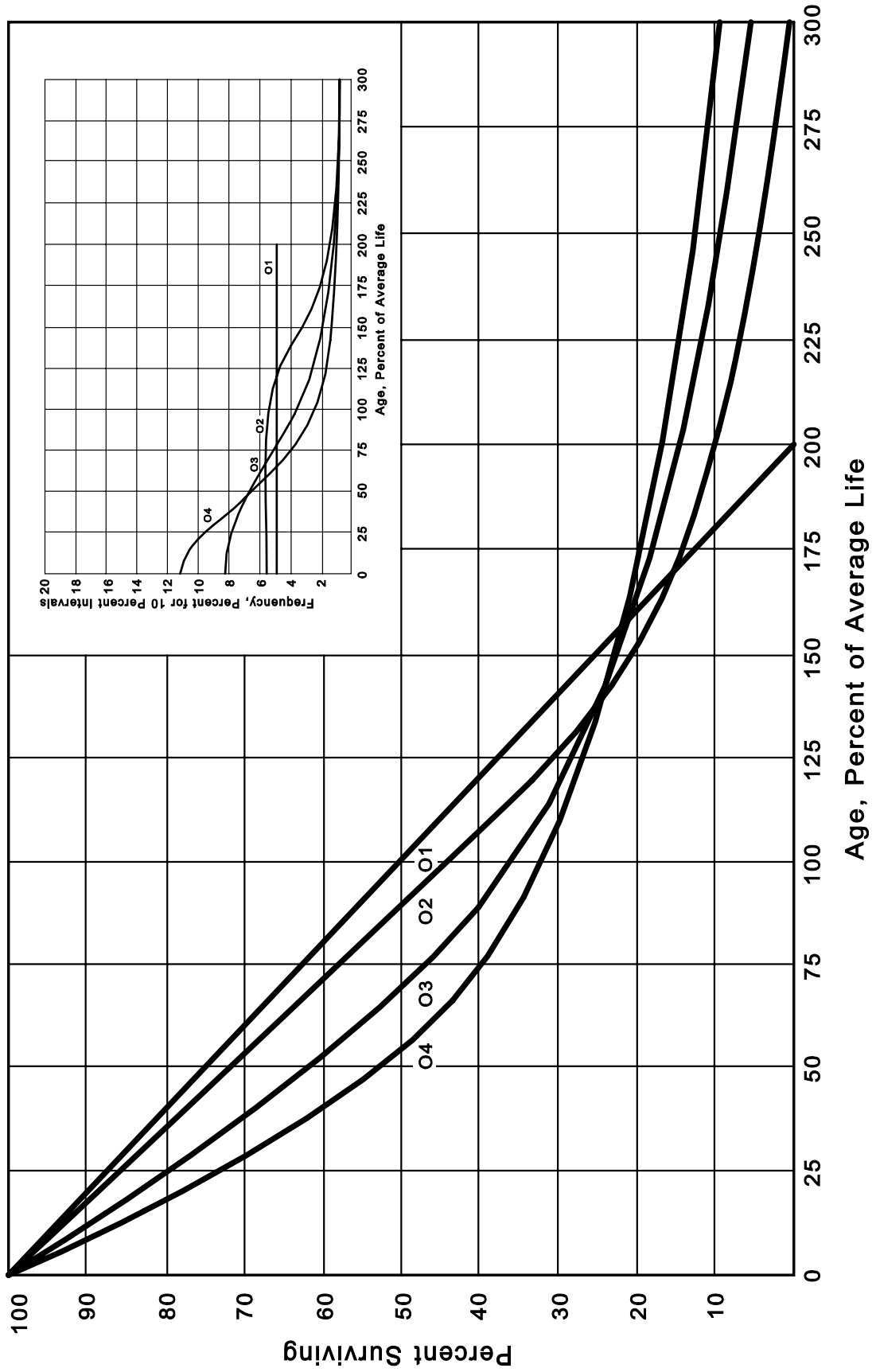

Figure 5. Origin Modal or "O" Iowa Type Survivor Curves

subsequent Experiment Station bulletins and in the text, "Engineering Valuation and Depreciation."[3] In 1957, Frank V. B. Couch, Jr., an Iowa State College graduate student, submitted a thesis[4] presenting his development of the fourth family consisting of the four O type survivor curves.

Retirement Rate Method of Analysis. The retirement rate method is an actuarial method of deriving survivor curves using the average rates at which property of each age group is retired. The method relates to property groups for which aged accounting experience is available and is the method used to develop the original stub survivor curves in this study. The method (also known as the annual rate method) is illustrated through the use of an example in the following text, and is also explained in several publications, including "Statistical Analyses of Industrial Property Retirements,"[5] "Engineering Valuation and Depreciation,"[6] and "Depreciation Systems."[7]

The average rate of retirement used in the calculation of the percent surviving for the survivor curve (life table) requires two sets of data: first, the property retired during a period of observation, identified by the property's age at retirement; and second, the property exposed to retirement at the beginning of the age intervals during the same period. The period of observation is referred to as the experience band, and the band of years which represent the installation dates of the property exposed to retirement during the experience band is referred to as the placement band. An example of the calculations used in the development of a life table follows. The example includes

[3]Marston, Anson, Robley Winfrey and Jean C. Hempstead. Engineering Valuation and Depreciation, 2nd Edition. New York, McGraw-Hill Book Company. 1953.

[4]Couch, Frank V. B., Jr. "Classification of Type O Retirement Characteristics of Industrial Property." Unpublished M.S. thesis (Engineering Valuation). Library, Iowa State College, Ames, Iowa. 1957.

[5]Winfrey, Robley, Supra Note 1.

[6]Marston, Anson, Robley Winfrey, and Jean C. Hempstead, Supra Note 2.

[7]Wolf, Frank K. and W. Chester Fitch. Depreciation Systems. Iowa State University Press. 1994

schedules of annual aged property transactions, a schedule of plant exposed to retirement, a life table and illustrations of smoothing the stub survivor curve.

Schedules of Annual Transactions in Plant Records. The property group used to illustrate the retirement rate method is observed for the experience band 2001-2010 during which there were placements during the years 1996-2010. In order to illustrate the summation of the aged data by age interval, the data were compiled in the manner presented in Tables 1 and 2 on pages II-12 and II-14. In Table 1, the year of installation (year placed) and the year of retirement are shown. The age interval during which a retirement occurred is determined from this information. In the example which follows, $10,000 of the dollars invested in 1996 was retired in 2001. The $10,000 retirement occurred during the age interval between 4½ and 5½ years on the basis that approximately one-half of the amount of property was installed prior to and subsequent to July 1 of each year. That is, on average, property installed during a year is placed in service at the midpoint of the year for the purpose of the analysis. All retirements also are stated as occurring at the midpoint of a one-year age interval of time, except the first age interval which encompasses only one-half year.

The total retirements occurring in each age interval in a band are determined by summing the amounts for each transaction year-installation year combination for that age interval. For example, the total of $143,000 retired for age interval 4½-5½ is the sum of the retirements entered on Table 1 immediately above the stairstep line drawn on the table beginning with the 2001 retirements of 1996 installations and ending with the 2010 retirements of the 2005 installations. Thus, the total amount of 143 for age interval 4½-5½ equals the sum of:

TABLE 1. RETIREMENTS FOR EACH YEAR 2001-2010
SUMMARIZED BY AGE INTERVAL

Experience Band 2001-2010 — Placement Band 1996-2010

Year Placed	Retirements, Thousands of Dollars During Year										Total During Age Interval	Age Interval
	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010		
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
1996	10	11	12	13	14	16	23	24	25	26	26	13½-14½
1997	11	12	13	15	16	18	20	21	22	19	44	12½-13½
1998	11	12	13	14	16	17	19	21	22	18	64	11½-12½
1999	8	9	10	11	11	13	14	15	16	17	83	10½-11½
2000	9	10	11	12	13	14	16	17	19	20	93	9½-10½
2001	4	9	10	11	12	13	14	15	16	20	105	8½-9½
2002		5	11	12	13	14	15	16	18	20	113	7½-8½
2003			6	12	13	15	16	17	19	19	124	6½-7½
2004				6	13	15	16	17	19	19	131	5½-6½
2005					7	14	16	17	19	20	143	4½-5½
2006						8	18	20	22	23	146	3½-4½
2007							9	20	22	25	150	2½-3½
2008								11	23	25	151	1½-2½
2009									11	24	153	½-1½
2010	___	___	___	___	___	___	___	___	___	13	80	0-½
Total	53	68	86	106	128	157	196	231	273	308	1,606	

10 + 12 + 13 + 11 + 13 + 13 + 15 + 17 + 19 + 20.

In Table 2, other transactions which affect the group are recorded in a similar manner. The entries illustrated include transfers and sales. The entries which are credits to the plant account are shown in parentheses. The items recorded on this schedule are not totaled with the retirements, but are used in developing the exposures at the beginning of each age interval.

Schedule of Plant Exposed to Retirement. The development of the amount of plant exposed to retirement at the beginning of each age interval is illustrated in Table 3 on page ll-15**.** The surviving plant at the beginning of each year from 2001 through 2010 is recorded by year in the portion of the table headed "Annual Survivors at the Beginning of the Year." The last amount entered in each column is the amount of new plant added to the group during the year. The amounts entered in Table 3 for each successive year following the beginning balance or addition are obtained by adding or subtracting the net entries shown on Tables 1 and 2. For the purpose of determining the plant exposed to retirement, transfers-in are considered as being exposed to retirement in this group at the beginning of the year in which they occurred, and the sales and transfers-out are considered to be removed from the plant exposed to retirement at the beginning of the following year. Thus, the amounts of plant shown at the beginning of each year are the amounts of plant from each placement year considered to be exposed to retirement at the beginning of each successive transaction

TABLE 2. OTHER TRANSACTIONS FOR EACH YEAR 2001-2010
SUMMARIZED BY AGE INTERVAL

Experience Band 2001-2010 Placement Band 1996-2010

Placed	Acquisitions, Transfers and Sales, Thousands of Dollars During Year										Total During Age Interval	Age Interval
	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010		
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
1996	-	-	-	-	-	-	60[a]	-	-	-	-	13½-14½
1997	-	-	-	-	-	-	-	-	-	-	-	12½-13½
1998	-	-	-	-	-	-	-	-	-	-	-	11½-12½
1999	-	-	-	-	-	-	-	(5)[b]	-	-	60	10½-11½
2000	-	-	-	-	-	-	-	6[a]	-	-	-	9½-10½
2001		-	-	-	-	-	-	-	-	-	(5)	8½-9½
2002			-	-	-	-	-	-	-	-	-	7½-8½
2003			-	-	-	-	-	-	-	-	-	6½-7½
2004				-	-	-	-	(12)[b]	-	-	-	5½-6½
2005					-	-	-	-	22[a]	-	-	4½-5½
2006						-	-	(19)[b]	-	-	10	3½-4½
2007							-	-	-	-	-	2½-3½
2008								-	-	(102)[c]	(121)	1½-2½
2009									-	-	-	½-1½
2010											-	0-½
Total	-	-	-	-	-	-	60	(30)	22	(102)	(50)	

[a] Transfer Affecting Exposures at Beginning of Year
[b] Transfer Affecting Exposures at End of Year
[c] Sale with Continued Use
Parentheses denote Credit amount.

TABLE 3. PLANT EXPOSED TO RETIREMENT JANUARY 1
OF EACH YEAR 2001-2010
SUMMARIZED BY AGE INTERVAL

Experience Band 2001-2010 Placement Band 1996-2010

Year Placed	Exposures, Thousands of Dollars — Annual Survivors at the Beginning of the Year										Total at Beginning of Age Interval	Age Interval
	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010		
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
1996	255	245	234	222	209	195	239	216	192	167	167	13½-14½
1997	279	268	256	243	228	212	194	174	153	131	323	12½-13½
1998	307	296	284	271	257	241	224	205	184	162	531	11½-12½
1999	338	330	321	311	300	289	276	262	242	226	823	10½-11½
2000	376	367	357	346	334	321	307	297	280	261	1,097	9½-10½
2001	420[a]	416	407	397	386	374	361	347	332	316	1,503	8½-9½
2002		460[a]	455	444	432	419	405	390	374	356	1,952	7½-8½
2003			510[a]	504	492	479	464	448	431	412	2,463	6½-7½
2004				580[a]	574	561	546	530	501	482	3,057	5½-6½
2005					660[a]	653	639	623	628	609	3,789	4½-5½
2006						750[a]	742	724	685	663	4,332	3½-4½
2007							850[a]	841	821	799	4,955	2½-3½
2008								960[a]	949	926	5,719	1½-2½
2009									1,080[a]	1,069	6,579	½-1½
2010											7,490	0-½
Total	1,975	2,382	2,824	3,318	3,872	4,494	5,247	6,017	6,852	7,799	44,780	

[a] Additions during the year.

year. For example, the exposures for the installation year 2006 are calculated in the following manner:

Exposures at age 0	= amount of addition	= $750,000
Exposures at age ½	= $750,000 - $ 8,000	= $742,000
Exposures at age 1½	= $742,000 - $18,000	= $724,000
Exposures at age 2½	= $724,000 - $20,000 - $19,000	= $685,000
Exposures at age 3½	= $685,000 - $22,000	= $663,000

For the entire experience band 2001-2010, the total exposures at the beginning of an age interval are obtained by summing diagonally in a manner similar to the summing of the retirements during an age interval (Table 1). For example, the figure of 3,789, shown as the total exposures at the beginning of age interval 4½-5½, is obtained by summing:

255 + 268 + 284 + 311 + 334 + 374 + 405 + 448 + 501 + 609.

Original Life Table. The original life table, illustrated in Table 4 on page II-17 is developed from the totals shown on the schedules of retirements and exposures, Tables 1 and 3, respectively. The exposures at the beginning of the age interval are obtained from the corresponding age interval of the exposure schedule, and the retirements during the age interval are obtained from the corresponding age interval of the retirement schedule. The retirement ratio is the result of dividing the retirements during the age interval by the exposures at the beginning of the age interval. The percent surviving at the beginning of each age interval is derived from survivor ratios, each of which equals one minus the retirement ratio. The percent surviving is developed by starting with 100% at age zero and successively multiplying the percent

TABLE 4. ORIGINAL LIFE TABLE
CALCULATED BY THE RETIREMENT RATE METHOD

Experience Band 2001-2010 Placement Band 1996-2010

(Exposure and Retirement Amounts are in Thousands of Dollars)

Age at Beginning of Interval (1)	Exposures at Beginning of Age Interval (2)	Retirements During Age Interval (3)	Retirement Ratio (4)	Survivor Ratio (5)	Percent Surviving at Beginning of Age Interval (6)
0.0	7,490	80	0.0107	0.9893	100.00
0.5	6,579	153	0.0233	0.9767	98.93
1.5	5,719	151	0.0264	0.9736	96.62
2.5	4,955	150	0.0303	0.9697	94.07
3.5	4,332	146	0.0337	0.9663	91.22
4.5	3,789	143	0.0377	0.9623	88.15
5.5	3,057	131	0.0429	0.9571	84.83
6.5	2,463	124	0.0503	0.9497	81.19
7.5	1,952	113	0.0579	0.9421	77.11
8.5	1,503	105	0.0699	0.9301	72.65
9.5	1,097	93	0.0848	0.9152	67.57
10.5	823	83	0.1009	0.8991	61.84
11.5	531	64	0.1205	0.8795	55.60
12.5	323	44	0.1362	0.8638	48.90
13.5	167	26	0.1557	0.8443	42.24
					35.66
Total	44,780	1,606			

Column 2 from Table 3, Column 12, Plant Exposed to Retirement.
Column 3 from Table 1, Column 12, Retirements for Each Year.
Column 4 = Column 3 divided by Column 2.
Column 5 = 1.0000 minus Column 4.
Column 6 = Column 5 multiplied by Column 6 as of the Preceding Age Interval.

surviving at the beginning of each interval by the survivor ratio, i.e., one minus the retirement ratio for that age interval. The calculations necessary to determine the percent surviving at age 5½ are as follows:

Percent surviving at age 4½	=	88.15				
Exposures at age 4½	=	3,789,000				
Retirements from age 4½ to 5½	=	143,000				
Retirement Ratio	=	143,000	÷	3,789,000	=	0.0377
Survivor Ratio	=	1.000	-	0.0377	=	0.9623
Percent surviving at age 5½	=	(88.15)	x	(0.9623)	=	84.83

The totals of the exposures and retirements (columns 2 and 3) are shown for the purpose of checking with the respective totals in Tables 1 and 3. The ratio of the total retirements to the total exposures, other than for each age interval, is meaningless.

The original survivor curve is plotted from the original life table (column 6, Table 4). When the curve terminates at a percent surviving greater than zero, it is called a stub survivor curve. Survivor curves developed from retirement rate studies generally are stub curves.

Smoothing the Original Survivor Curve. The smoothing of the original survivor curve eliminates any irregularities and serves as the basis for the preliminary extrapolation to zero percent surviving of the original stub curve. Even if the original survivor curve is complete from 100% to zero percent, it is desirable to eliminate any irregularities, as there is still an extrapolation for the vintages which have not yet lived to the age at which the curve reaches zero percent. In this study, the smoothing of the original curve with established type curves was used to eliminate irregularities in the original curve.

The Iowa type curves are used in this study to smooth those original stub curves which are expressed as percents surviving at ages in years. Each original survivor

curve was compared to the Iowa curves using visual and mathematical matching in order to determine the better fitting smooth curves. In Figures 6, 7, and 8, the original curve developed in Table 4 is compared with the L, S, and R Iowa type curves which most nearly fit the original survivor curve. In Figure 6, the L1 curve with an average life between 12 and 13 years appears to be the best fit. In Figure 7, the S0 type curve with a 12-year average life appears to be the best fit and appears to be better than the L1 fitting. In Figure 8, the R1 type curve with a 12-year average life appears to be the best fit and appears to be better than either the L1 or the S0.

In Figure 9, the three fittings, 12-L1, 12-S0 and 12-R1 are drawn for comparison purposes. It is probable that the 12-R1 Iowa curve would be selected as the most representative of the plotted survivor characteristics of the group.

Compliance of the Retirement Rate Method of Analysis to IFRS

The Canadian Accounting Standards Board has announced that Canadian Generally Accepted Accounting Principles (GAAP) will cease to exist as of a target date in 2011 (or 2012 for regulated entities that elect to defer implementation for 1 year). As of that date many organizations will be required to report under the International Financial Accounting Standards (IFRS). The International Accounting Standard (IAS) 16 deals with the recognition and reporting of property, plant and equipment.

This standard requires that the depreciation expense associated with an asset be aligned with the expected service life of the asset. Gannett Fleming notes that the requirements and implementation of IFRS are generally aligned with the appropriate and reasonable depreciation practices and procedures commonly used for regulatory purposes.

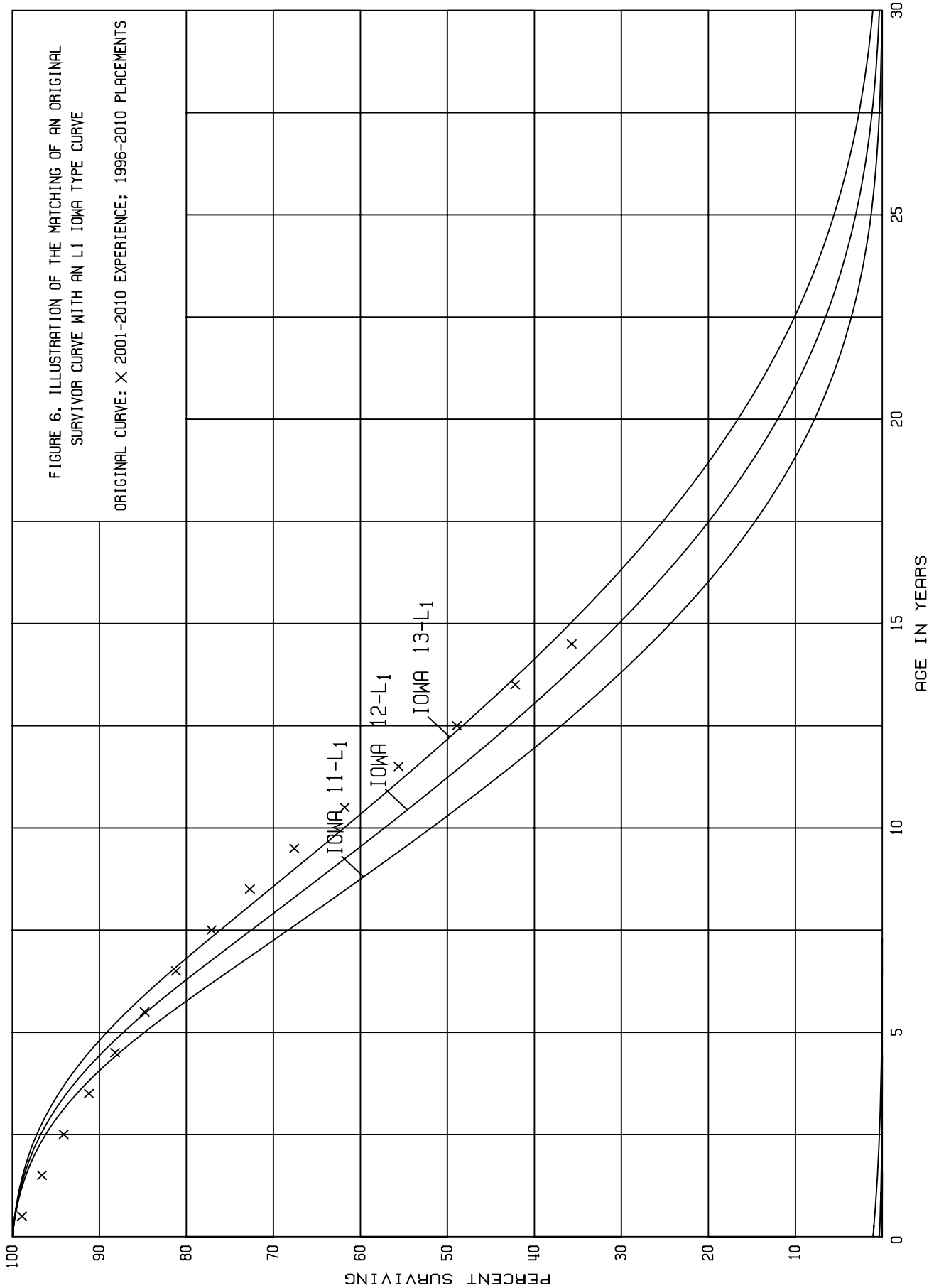
FIGURE 6. ILLUSTRATION OF THE MATCHING OF AN ORIGINAL SURVIVOR CURVE WITH AN L1 IOWA TYPE CURVE
ORIGINAL CURVE: X 2001-2010 EXPERIENCE; 1996-2010 PLACEMENTS
IOWA 11-L1
IOWA 12-L1
IOWA 13-L1
PERCENT SURVIVING
AGE IN YEARS
100
90
80
70
60
50
40
30
20
10
0
5
10
15
20
25
30

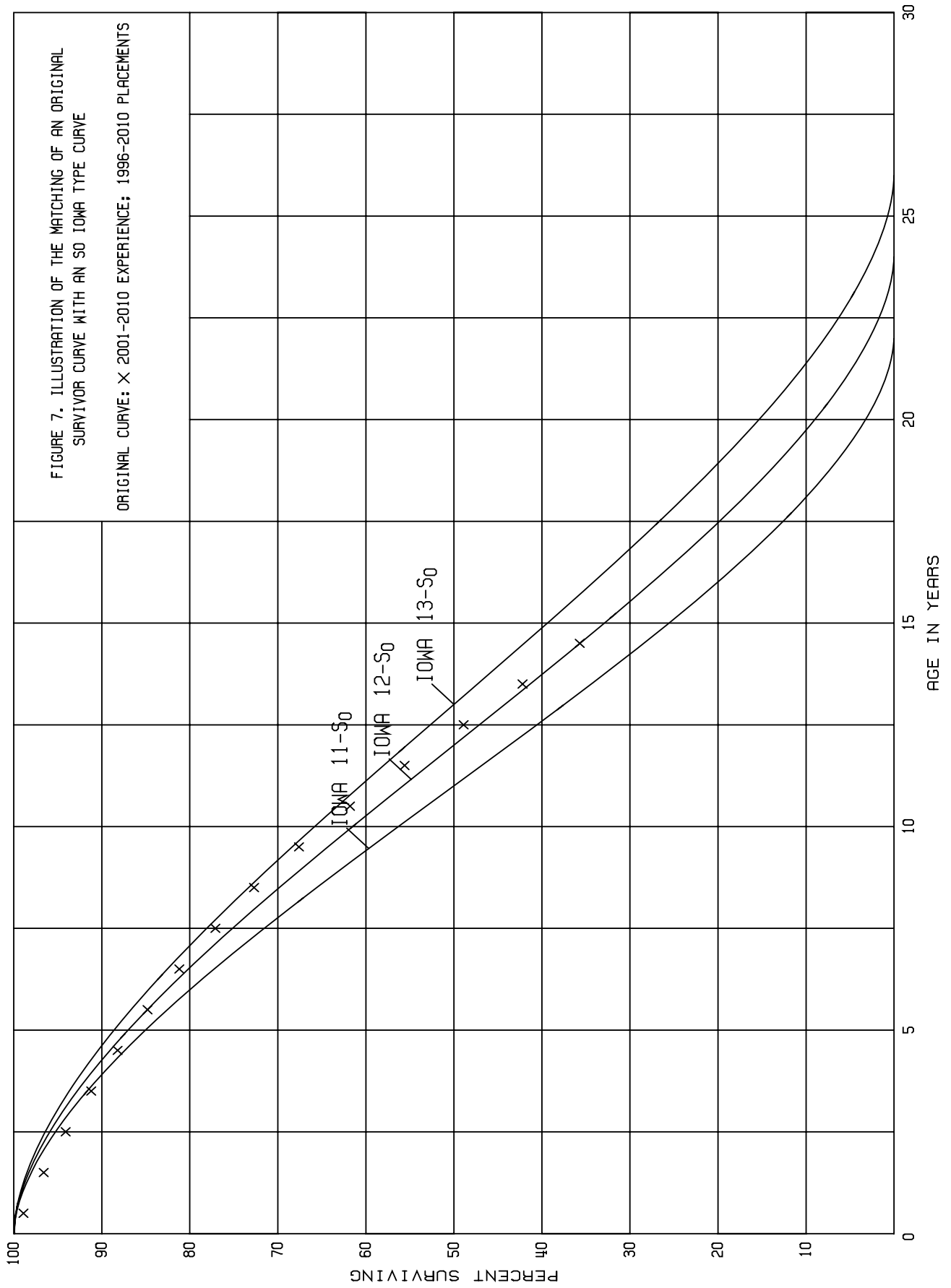
FIGURE 7. ILLUSTRATION OF THE MATCHING OF AN ORIGINAL SURVIVOR CURVE WITH AN SO IOWA TYPE CURVE
ORIGINAL CURVE: X 2001-2010 EXPERIENCE; 1996-2010 PLACEMENTS
IOWA 11-S0
IOWA 12-S0
IOWA 13-S0
PERCENT SURVIVING
100
90
80
70
60
50
40
30
20
10
0
5
10
15
20
25
30
AGE IN YEARS

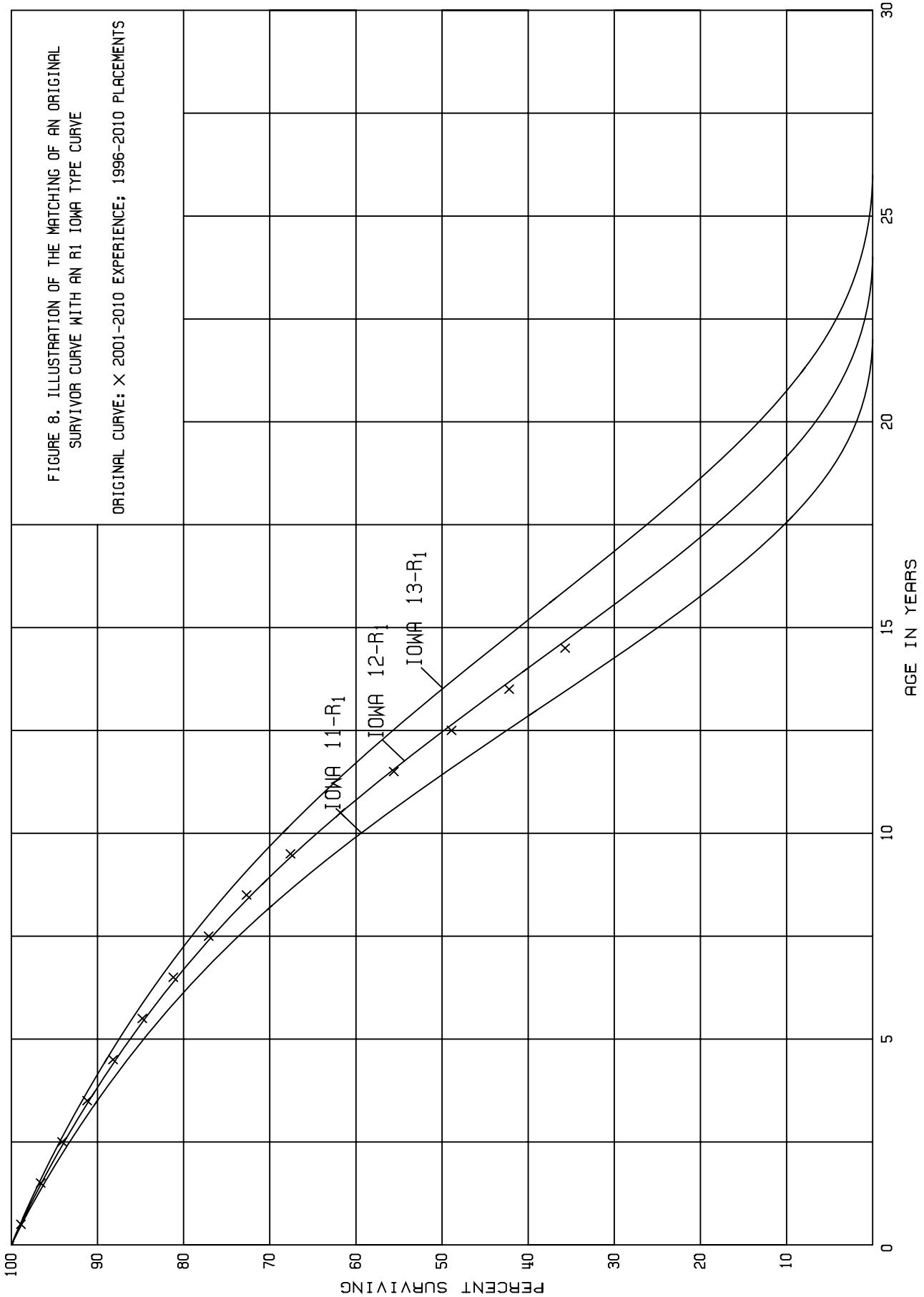
FIGURE 8. ILLUSTRATION OF THE MATCHING OF AN ORIGINAL SURVIVOR CURVE WITH AN R1 IOWA TYPE CURVE
ORIGINAL CURVE: X 2001-2010 EXPERIENCE; 1996-2010 PLACEMENTS
IOWA 11-R1
IOWA 12-R1
IOWA 13-R1
PERCENT SURVIVING
100
90
80
70
60
50
40
30
20
10
0
5
10
15
20
25
30
AGE IN YEARS

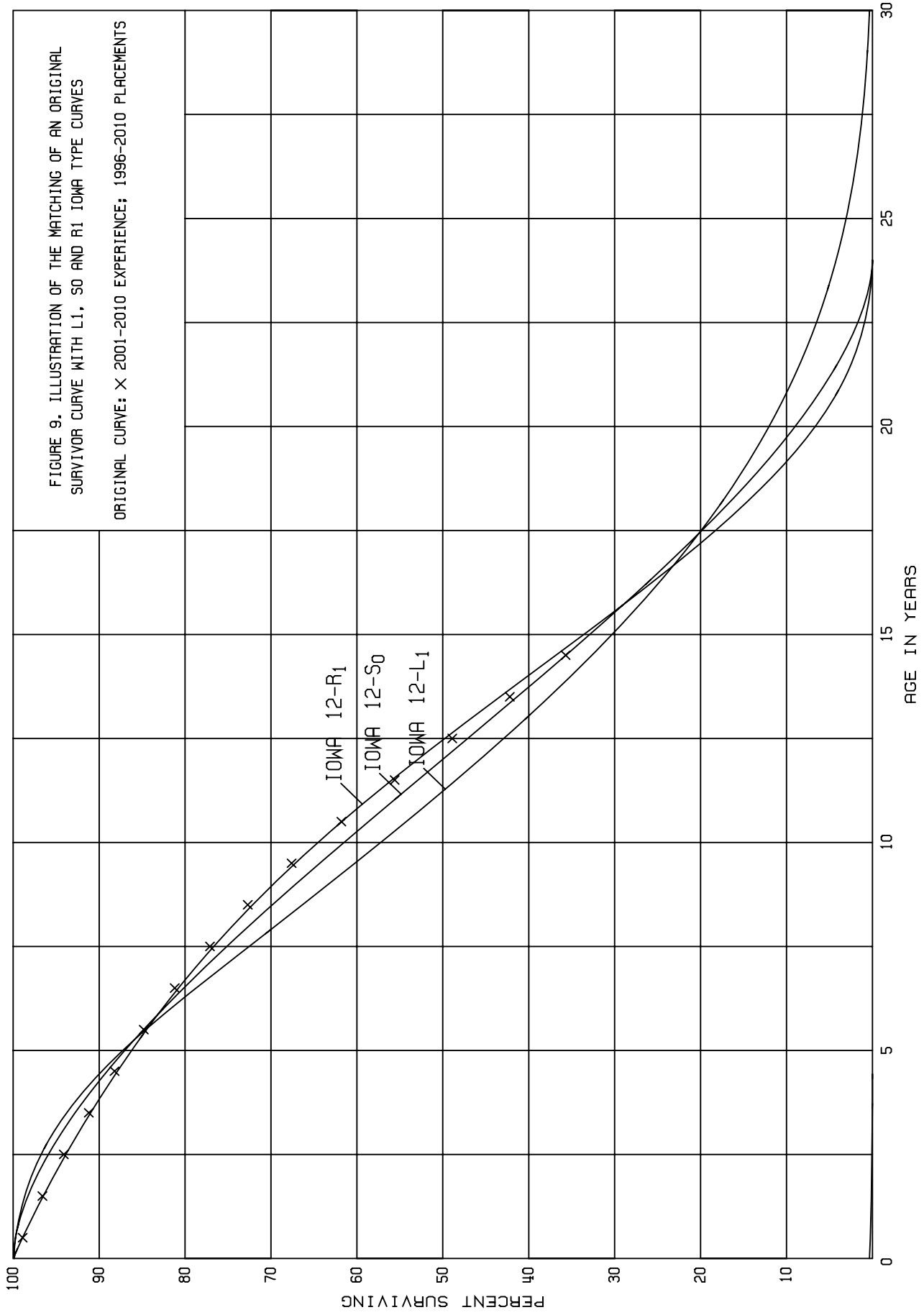
FIGURE 9. ILLUSTRATION OF THE MATCHING OF AN ORIGINAL SURVIVOR CURVE WITH L1, SO AND R1 IOWA TYPE CURVES
ORIGINAL CURVE: X 2001-2010 EXPERIENCE; 1996-2010 PLACEMENTS
IOWA 12-R1
IOWA 12-S0
IOWA 12-L1
PERCENT SURVIVING
100
90
80
70
60
50
40
30
20
10
0
5
10
15
20
25
30
AGE IN YEARS

In the view of Gannett Fleming, the use of an Iowa curve in the estimation of average service life and retirement expectations of a group of homogenous assets meets the requirements of IAS 16. However, the account structure of the utility must be analyzed to ensure that the assets included in each group are like in nature and service of the asset to the utility is similar. In this manner, it can be expected that any one of the assets in the group are equally likely to be subjected to any of the forces of retirement to which the group of assets are subjected.

In order to better meet the componentization requirements as discussed above, and to continue to use group accounting and depreciation practices, the company reviewed the type of physical assets included in all plant accounts. As a result of this review, Centra Gas Manitoba Inc. has determined that no new accounts are required, and use of the existing data bases will result in compliance with IFRS. Gannett Fleming agrees with this determination and does not recommend any changes to account structure.

Survivor Curve Judgments. In this study, the survivor curve estimates were based on judgment which considered a number of factors. The primary factors were the statistical analysis of data; current policies and outlook as determined during conversations with management personnel; and average service life estimates from previous studies of this Company and other natural gas distribution companies.

The following discussion, dealing with the accounts which comprise the majority of the investment analyzed, presents an overview of the factors considered by Gannett Fleming in the determination of the average service life estimates. The survivor curve

estimates for the remainder of the accounts not discussed in the following sections were based on similar considerations.

Account 465.00, Mains – Transmission - represents approximately 14% of the depreciable plant studied. The retirements, additions and other plant transactions for the period 1956 through 2010 were analyzed using the retirement rate analysis method. The original survivor curve, as plotted on page IV-11, provides a stubbed observed life table which indicates only a modest level through age 56, after which the level of plant exposed to retirement become statistically insignificant. The observed life table provides indications that the continued use of a 65-year average service life is appropriate. However, the lack of retirement activity over the observed life period provides indications that a higher moded curve is required. The recommended Iowa 65-R4 curve provides a reasonable fit to the historic retirement trends, is consistent with the views of the Operations staff, and is closer to the range of average service life estimates of the relevant peer group of utilities.

Account 473.00, Services - Distribution – represents approximately 33% of the depreciable distribution plant studied. The retirements, additions and other plant transactions for the period 1953 through 2010 were analyzed using the retirement rate analysis method. The original survivor curve, as plotted on page IV-26**,** provides a observed life table which indicates a constant level of retirement ratios beginning early in the life and continuing through to the end of the observation period. The statistical analysis completed by Gannett Fleming provided an indication of the 55-R2.5 Iowa curve.

The company did not install any significant levels of early generation uncertified plastic pipe; as such, the future life of the plant will not be impacted by future programs related to early generation plastic pipe as has been witnessed in a number of Western Canadian natural gas distribution utilities. Therefore, the historic retirement indications provide for a meaningful analysis of the future life expectations.

The above analysis provides additional indications that the current average service life estimate should be lengthened from the currently approved 50-R2. Given the consideration of all relevant factors, Gannett Fleming recommends an increase in the current average service life estimate to the Iowa 55-R2.5. The recommended Iowa 55-R2.5 curve provides for a reasonable fit to the historic retirement trends, is consistent with the views of the operational staff, and is closer to the range of average service life estimates of the relevant peer group of utilities.

Account 475.00, Mains – Distribution - represents approximately 26% of the depreciable distribution plant studied. The retirements, additions and other plant transactions generated for the period 1953 through 2010 were analyzed using the retirement rate analysis method. The original survivor curve, as plotted on page IV-32**,** indicates only a minimal amount of plant retired to date resulting in a stubbed observed life table which indicates only a modest level of retirement through age 57. The observed life table provides indications that the continued use of a 65-year average service life is appropriate. However, the lack of retirement activity over the observed life period provides indications that a higher than currently used moded curve is required. The recommended Iowa 65-R4 curve provides for a reasonable fit to the historic

retirement trends, is consistent with the views of the operational staff, and is closer to the range of average service life estimates of the relevant peer group of utilities.

The survivor curve estimates for the remaining accounts were based on similar considerations of historical analyses, management outlook and estimates for this Company and other natural gas distribution utilities.

NET SALVAGE ESTIMATES

This report is developed to be in compliance with the requirements of IFRS for financial reporting purposes. The pre-collection of future costs of removal within depreciation expense is not compliant with the standards and therefore all net negative salvage provisions have been removed from the depreciation rate calculations. To the extent that it is necessary to remove existing assets in order to replace them, the costs of removal will be recorded as a capital cost of the replacement assets at the time of the retirement of the assets currently in service.

IAS 16 does provide for the recognition of residual value of assets at the time of retirement to be recognized in depreciation expense. Therefore, a residual salvage calculation has been incorporated into the depreciation rates for a number of general plant accounts.

CALCULATION OF ANNUAL AND ACCRUED DEPRECIATION

Group Depreciation Procedures. When more than a single item of property is under consideration, a group procedure for depreciation is appropriate because normally all of the items within a group do not have identical service lives, but have lives

that are dispersed over a range of time. There are two primary group procedures, namely, Average Service Life (ASL) and Equal Life Group (ELG).

The difference in calculation of depreciation expense derived from ELG and ASL can best be explained with the use of a simple example.

ASL Versus ELG Example. Assume one plant account with a total cost of $2,000 is comprised of two subgroups of assets, each with an original cost of $1,000. The first group has a life of 5 years, while the second group has a life of 15 years.

Under both procedures the average life of this plant account would equal 10 years (15 + 5)/2. With the ASL procedure this average life would be used to determine the depreciation accruals for the first 5 years as follows:

($2,000 / 10 years) = $200 per year

The accrual for years 6 through 15 would be as follows:

($1,000 / 10 years) = $100 per year

Under the ELG procedure, the expense for each sub group is determined and then added together. Therefore for the first 5 years, the accrual would be as follows:

($1,000 / 5 years) + ($1,000 / 15 years) = $267 per year.

The accrual for years 6 through15 would be as follows:

($1,000 / 15 years) = $67 per year.

The following table sets forth the differences in the two methods:

Average Service Life Procedure				**Equal Life Group Procedure**			
Year	Accruals ($)	Retirements ($)	Acc. Deprn Balance ($)	Year	Accruals ($)	Retirements ($)	Acc. Deprn Balance ($)
1	200		200	1	267		267
2	200		400	2	267		534
3	200		600	3	267		801
4	200		800	4	267		1,068
5	200	1,000	0	5	267	1,000	335
6	100		100	6	67		402
7	100		200	7	67		469
8	100		300	8	67		536
9	100		400	9	67		603
10	100		500	10	67		670
11	100		600	11	66		736
12	100		700	12	66		802
13	100		800	13	66		868
14	100		900	14	66		934
15	100	1,000	0	15	66	1,000	0

It should be noted from the table that overall, both methods will recover the same original cost, however, there are two key differences. First, using the ASL procedure, after the first 5 years, no depreciation has been collected for the asset remaining in service. Essentially, the concept of depreciation expense matching the assets providing service is not met. With the ELG procedure, this problem is remedied and after the retirement at year 5 of the shorter life asset, an appropriate provision for the first 5 years of service on the longer living asset is accumulated ($67 X 5 years = $335). Under ELG all current users are sharing the cost of all assets in service.

Secondly, under ASL the customers using the last remaining assets are required to pick up an adjustment for the under accrual of depreciation expense during the early years of the account. This inter-generational inequity would result in a situation at

Centra Gas where users in the later years of the system bear the cost of under accruals which benefited earlier users of the system.

Conformance of ELG to IFRS. IAS 16 requires depreciation expense to reflect the life expectation of assets in service. As indicated in the above example, the rate of annual depreciation is based on the average life or average service life of the group, and this rate is applied to the surviving balances of the group's cost. As further noted in the above example, a characteristic of the ASL procedure is that the cost of plant retired prior to average life is not fully recouped at the time of retirement, whereas the cost of plant retired subsequent to average life is more than fully recouped. Over the entire life cycle, the portion of cost not recouped prior to average life is balanced by the cost recouped subsequent to average life. In this procedure, the accrued depreciation is based on the average service life of the group and the average remaining life of each vintage within the group derived from the area under the survivor curve between the attained age of the vintage and the maximum age.

Application of the ELG procedure requires that the property group be subdivided according to service life. That is, each equal life group includes that portion of the property which experiences the life of that specific group. The relative size of each equal life group is determined from the property's life dispersion curve. The calculated depreciation for the property group is the summation of the calculated depreciation based on the service life of each equal life group.

While the simplified two asset example provides an illustration of the differences between the ASL and ELG procedures, the ELG calculations, when applied to mass property accounts, become more complex. In order to provide an illustration of the

calculation of equal life group depreciation in a mass property account the table on the following page provides a calculation using the Iowa 15-R3 survivor curve, 0 percent net salvage and a December 31, 2010 calculation date. In the table, each equal life group is defined by the age interval shown in columns 1 and 2. These are the ages at which the first and last retirement of each group occurs, and the group's equal life, shown in column 3, is the midpoint of the interval. For purposes of the calculation, each vintage is divided into equal life groups arranged so that the midpoint of each one-year age interval coincides with the calculation date, e.g., December 31 in this case. This enables the calculation of annual accruals for a twelve-month period centered on the date of calculation.

The retirement during the age interval, shown in column 4, is the size of each equal life group and is derived from the Iowa 15-R3 survivor curve and 0 percent net salvage. It is the difference between the percents surviving at the beginning and end of the age interval. Each equal life group's annual accrual, shown in column 5, equals the group's size (column 4) divided by its life (column 3).

Columns 7 through 10 show the derivation of the annual and accrued factors for each vintage based on the information developed in the first five columns. The year installed is shown in column 6. For all vintages other than 2010, the summation of annual accruals for each year installed, shown in column 7, is calculated by adding one-half of the group annual accrual (column 5) for that vintage's current age interval plus the group annual accruals for all succeeding age intervals. For example, the figure 7.53413204309 for 2009 equals one-half of 0.14669333333 plus all of the succeeding figures in column 5. Only one-half of the annual accrual for the vintage's current age

interval group is included in the summation because the equal life group for that interval has reached the year during which it is expected to be retired.

DETAILED COMPUTATION OF ANNUAL AND ACCRUED FACTORS USING THE EQUAL LIFE GROUP PROCEDURE

INPUT PARAMETERS:
CALCULATION DATE.. 12-31-2010
SURVIVOR CURVE.... 15-R3

AGE INTERVAL BEG (1)	AGE INTERVAL END (2)	LIFE (3)	RETIREMENTS DURING INTERVAL (4)	GROUP ANNUAL ACCRUAL (5)=(4)/(3)	YEAR INST (6)	SUMMATION OF ANNUAL ACCRUALS (7)	AVERAGE PERCENT SURVIVING (8)	ANNUAL FACTOR (9)	ACCRUED FACTOR (10)
0.000	1.000	0.500	0.13204	0.13204000000	2010	7.73951870976	99.939619	0.0774	0.0387
1.000	2.000	1.500	0.22004	0.14669333333	2009	7.53413204309	99.757940	0.0755	0.1133
2.000	3.000	2.500	0.34901	0.13960400000	2008	7.39098337643	99.473416	0.0743	0.1858
3.000	4.000	3.500	0.53168	0.15190857143	2007	7.24522709071	99.033069	0.0732	0.2562
4.000	5.000	4.500	0.77648	0.17255111111	2006	7.08299724944	98.378988	0.0720	0.3240
5.000	6.000	5.500	1.09520	0.19912727273	2005	6.89715805752	97.443149	0.0708	0.3894
6.000	7.000	6.500	1.50085	0.23090000000	2004	6.68214442116	96.145127	0.0695	0.4518
7.000	8.000	7.500	1.99686	0.26624800000	2003	6.43357042116	94.396275	0.0682	0.5115
8.000	9.000	8.500	2.59836	0.30568941176	2002	6.14760171528	92.098663	0.0668	0.5678
9.000	10.000	9.500	3.32846	0.35036421053	2001	5.81957490413	89.135249	0.0653	0.6204
10.000	11.000	10.500	4.20015	0.40001428571	2000	5.44438565601	85.370944	0.0638	0.6699
11.000	12.000	11.500	5.24273	0.45588956522	1999	5.01643373055	80.649505	0.0622	0.7153
12.000	13.000	12.500	6.46397	0.51711760000	1998	4.52993014794	74.796157	0.0606	0.7575
13.000	14.000	13.500	7.78086	0.57636000000	1997	3.98319134794	67.673742	0.0589	0.7952
14.000	15.000	14.500	9.04123	0.62353310345	1996	3.38324479621	59.262695	0.0571	0.8280
15.000	16.000	15.500	9.97724	0.64369290323	1995	2.74963179287	49.753461	0.0553	0.8572
16.000	17.000	16.500	10.26569	0.62216303030	1994	2.11670382611	39.631994	0.0534	0.8811
17.000	18.000	17.500	9.71888	0.55536457143	1993	1.52794002524	29.639708	0.0516	0.9030
18.000	19.000	18.500	8.35418	0.45157729730	1992	1.02446909088	20.603179	0.0497	0.9195
19.000	20.000	19.500	6.50335	0.33350512821	1991	0.63192787812	13.174414	0.0480	0.9360
20.000	21.000	20.500	4.58978	0.22389170732	1990	0.35322946036	7.627850	0.0463	0.9492
21.000	22.000	21.500	2.91547	0.13560325581	1989	0.17348197879	3.875224	0.0448	0.9632
22.000	23.000	22.500	1.61144	0.07161955556	1988	0.06987057311	1.611769	0.0434	0.9765
23.000	24.000	23.500	0.66967	0.02849659574	1987	0.01981249746	0.471215	0.0420	0.9870
24.000	25.000	24.500	0.13425	0.00547959184	1986	0.00282440367	0.069256	0.0408	0.9996
25.000	25.350	25.175	0.00213	0.00008460775	1985	0.00001480636	0.000373	0.0397	1.0000
TOTAL			100.00000						

NOTE: In the application of the annual and accrued factors, zero percent net salvage is used in the above computations and the adjustment is made when the factors are applied to the surviving costs.

The summation of annual accruals (column 7) for installations during 2010 is calculated on the basis of an in-service date at the midpoint of the year, i.e., June 30. Inasmuch as the overall calculation is centered on December 31, 2010, the first figure in column 7, for vintage 2010, equals all of the group annual accrual for the first equal life group plus the accruals for all of the subsequent equal life groups.

The average percent surviving derived from the Iowa 15-R3 survivor curve and 0 percent net salvage, is shown in column 8 for each age interval. The annual factor, shown in column 9, is the result of dividing the summation of annual accruals (column 7) by the average percent surviving (column 8). The accrued factor, shown in column 10, equals the annual factor multiplied by the age of the group at December 31, 2010.

PART III. RESULTS OF STUDY

PART III. RESULTS OF STUDY

QUALIFICATION OF RESULTS

The calculated annual and accrued depreciation and the calculation of the composite average remaining life are the principal results of the study. Continued surveillance and periodic revisions are normally required to maintain continued use of appropriate annual depreciation accrual rates. An assumption that accrual rates can remain unchanged over a long period of time implies a disregard for the inherent variability in service lives and salvage and for the change of the composition of property in service. The annual accrual rates and the accrued depreciation were calculated in accordance with the straight line method, using the equal life group life procedure based on estimates which reflect considerations of current historical evidence and expected future conditions.

DESCRIPTION OF DETAILED TABULATIONS

The service life estimates were based on judgment that incorporated statistical analysis of retirement data, discussions with management and consideration of estimates made for other natural gas distribution utilities. The results of the statistical analysis of service life are presented in the supporting materials document beginning on page IV-2.

For each depreciable group analyzed by the retirement rate method, a chart depicting the original and estimated survivor curves is followed by a tabular presentation of the original life table(s) plotted on the chart. The survivor curves estimated for the depreciable groups are shown as dark smooth curves on the charts. Each smooth survivor curve is denoted by a numeral followed by the curve type designation. The

numeral used is the average life derived from the entire curve from 100 percent to zero percent surviving. The titles of the chart indicate the group, the symbol used to plot the points of the original life table, and the experience and placement bands of the life tables which were plotted. The experience band indicates the range of years for which retirements were used to develop the stub survivor curve. The placements indicate, for the related experience band, the range of years of installations that appear in the experience.

The tables of the calculated annual depreciation applicable to plant as of March 31, 2010 are presented in account sequence starting on page V-2. The tables indicate the estimated average survivor curves used in the calculations. The tables set forth, for each installation year, the original cost, calculated accrued depreciation, and the calculated annual accrual.

CENTRA GAS MANITOBA INC.

SCHEDULE 1. ESTIMATED SURVIVOR CURVES, NET SALVAGE PERCENTS, ORIGINAL COST AND ANNUAL ACCRUALS
AS OF MARCH 31, 2010

Acct	Depreciable Group	Survivor Curve	Net Salvage	Surviving Original Cost as of March 31, 2010	Calculated Annual Accrual Amount	Calculated Annual Accrual Rate (%)	Annual Provision For True-Up	Total Depreciation Related to Life Expense		Total Depreciation Related to Life Rate (%)
	(1)	(2)	(3)	(4)	(5)	(6)=(5)/(4)	(7)	(8)=(5)+(7)		(9)=(8)/(4)
401.00	Franchises and Consents	20-SQ	0	37,735	1,887	5.00		1,887	**	5.56
	TRANSMISSION									
461.00	Land Rights	75-R4	0	3,492,194	49,232	1.41	(1,169)	48,063		1.38
463.00	Structures and Improvements - Measuring and Regulating	50-R5	0	1,003,313	20,096	2.00	(1,679)	18,417		1.84
464.00	Structures and Improvements - Other	50-R5	0	76,421	1,510	1.98	64	1,574		2.06
465.00	Mains	65-R4	0	87,828,342	1,423,137	1.62	(59,366)	1,363,771		1.55
467.00	Measuring and Regulating Equipment	50-S2.5	0	7,311,646	157,163	2.15	(11,821)	145,342		1.99
467.20	Regulating Station Electronic Equipment	15-SQ	0			6.67 *				6.67
469.00	Other - Transmission	40-SQ	0			2.50 *				2.50
	TOTAL TRANSMISSION			**99,711,916**	**1,651,137**		**(73,971)**	**1,577,166**		
	DISTRIBUTION									
471.00	Land Rights	75-R4	0	731,058	10,336	1.41	(225)	10,111		1.38
472.00	Structures and Improvements	45-R1.5	0	1,342,407	29,909	2.23	(1,845)	28,064		2.09
472.10	Structures and Improvements - Measuring and Regulating	55-R4	0	3,757,864	71,768	1.91	(3,088)	68,680		1.83
473.00	Services	55-R2.5	0	204,217,909	4,074,815	2.00	(191,117)	3,883,698		1.90
474.00	Regulators and Meter Installations	45-R4	0	44,900,044	1,025,458	2.28	(16,586)	1,008,872		2.25
475.00	Mains	65-R4	0	156,954,058	2,517,519	1.60	(152,097)	2,365,422		1.51
477.00	Measuring and Regulating Equipment	35-R2	0	33,132,020	1,023,772	3.09	(59,978)	963,794		2.91
477.10	Telemetry Equipment	16-S6	0	4,084,903	254,765	6.24	(50,269)	204,496		5.01
477.20	Regulating Station Electronic Equipment	15-SQ				6.67 *				6.67
478.00	Meters	26-S1.5	0	38,119,191	1,560,997	4.10	297,122	1,858,119		4.87
478.10	AMR / ERT Modules	10-SQ	0			10.00 *				10.00
479.10	Computer Hardware Equipment - EMS/SCADA	5-SQ	0			20.00 *				20.00
479.30	Computer System Development - EMS/SCADA	5-SQ	0			20.00 *				20.00
	TOTAL DISTRIBUTION			**487,239,454**	**10,569,339**		**(178,083)**	**10,391,256**		
	GENERAL PLANT									
482.00	Structures and Improvements	45-R3	0	9,147,218	191,135	2.09	44,375	235,510		2.57
483.00	Office Furniture and Equipment	15-SQ	0	1,072,615	71,508	6.67		71,508		6.67
483.30	Computer System Development	10-SQ	0	9,888,754	988,875	10.00		988,875		10.00
484.00	Transportation Equipment	10-R5	10	1,390,934	60,034	4.32	128,973	189,007		13.59
485.00	Heavy Work Equipment	20-R5	20	595,679		0.00			***	0.00
486.00	Tools and Work Equipment	15-SQ	0	2,928,013	195,201	6.67		195,201		6.67
	TOTAL GENERAL PLANT			**25,023,213**	**1,506,753**		**173,348**	**1,680,101**		
	TOTAL DEPRECIABLE PLANT			**612,012,316**	**13,729,115**		**(78,706)**	**13,650,409**		**2.23**

* Rate is provided for the use with future additions
** Total depreciation expense calculated based upon length of lease term, with no provision for true up.
*** Account is fully depreciated

CENTRA GAS MANITOBA INC.

SCHEDULE 2. CALCULATED ACCRUED DEPRECIATION, BOOK ACCUMULATED DEPRECIATION AND DETERMINATION OF ANNUAL PROVISION FOR TRUE-UP RELATED TO ORIGINAL COST AS OF MARCH 31, 2010

Acct	Description	Surviving Original Cost As Of March 31, 2010	Calculated Accrued Depreciation	Book Accumulated Depreciation	Accumulated Depreciation Variance		Probable Remaining Life	Annual Provision for True-Up	True-Up Rate (%)
					Amount	Percent			
	(1)	(2)	(3)	(4)	(5) = (3)-(4)	(6) = (5)/(3)	(7)	(8)=(5)/(7)	(9)=(8)/(2)
401.00	Franchises & Consents	37,735	22,401	22,647	(246)	(1.10)	9.7		0.00
	TRANSMISSION								
461.00	Land Rights	3,492,194	469,204	542,038	(72,834)	(15.50)	62.3	(1,169)	(0.03)
463.00	Structures and Improvements - Measuring and Regulating	1,003,313	422,253	483,169	(60,916)	(14.40)	36.3	(1,679)	(0.17)
464.00	Structures and Improvements - Other	76,421	52,409	51,419	990	1.90	15.5	64	0.08
465.00	Mains	87,828,342	19,327,202	22,225,437	(2,898,235)	(15.00)	48.8	(59,366)	(0.07)
467.00	Measuring and Regulating Equipment	7,311,646	1,699,569	2,152,557	(452,988)	(26.70)	38.3	(11,821)	(0.16)
467.20	Regulating Station Electronic Equipment								
469.00	Other - Transmission								
	TOTAL TRANSMISSION	**99,711,916**	**21,970,637**	**25,454,620**	**(3,483,983)**			**(73,971)**	
	DISTRIBUTION								
471.00	Land Rights	731,058	97,535	111,349	(13,814)	(14.20)	61.5	(225)	(0.03)
472.00	Structures and Improvements	1,342,407	627,751	672,100	(44,349)	(7.10)	24.0	(1,845)	(0.14)
472.10	Structures and Improvements - Measuring and Regulating	3,757,864	1,063,877	1,180,934	(117,057)	(11.00)	37.9	(3,088)	(0.08)
473.00	Services	204,217,909	67,362,470	73,871,919	(6,509,449)	(9.10)	34.1	(191,117)	(0.09)
474.00	Regulators and Meter Installations	44,900,044	16,318,865	16,789,232	(470,367)	(2.90)	28.4	(16,586)	(0.04)
475.00	Mains	156,954,058	46,887,035	53,783,097	(6,896,062)	(14.70)	45.3	(152,097)	(0.10)
477.00	Measuring and Regulating Equipment	33,132,020	12,667,156	13,885,307	(1,218,151)	(9.60)	20.3	(59,978)	(0.18)
477.10	Telemetry Equipment	4,084,903	2,448,173	2,935,282	(487,109)	(19.90)	9.7	(50,269)	(1.23)
477.20	Regulating Station Electronic Equipment								
478.00	Meters	38,119,191	14,732,213	10,872,600	3,859,613	26.20	13.0	297,122	0.78
478.10	AMR / ERT Modules								
479.10	Computer Hardware Equipment - EMS/SCADA								
479.30	Computer System Development - EMS/SCADA								
	TOTAL DISTRIBUTION	**487,239,454**	**162,205,075**	**174,101,820**	**(11,896,745)**			**(178,083)**	
	GENERAL PLANT								
482.00	Structures and Improvements	9,147,218	6,168,614	5,512,748	655,866	10.60	14.8	44,375	0.49
483.00	Office Furniture and Equipment	1,072,615	1,030,523	865,357	165,166		*	0	0.00
483.30	Computer System Development	9,888,754	6,592,128	5,880,869	711,259		*	0	0.00
484.00	Transportation Equipment	1,390,934	1,202,175	1,073,202	128,973	10.70	1.0	128,973	9.27
485.00	Heavy Work Equipment	595,679	331,995	586,496	(254,501)	(76.70)	7.2 **	0	0.00
486.00	Tools and Work Equipment	2,928,013	2,531,934	2,113,746	418,188		*	0	0.00
	TOTAL GENERAL PLANT	**25,023,213**	**17,857,369**	**16,032,418**	**1,824,951**			**173,348**	
	TOTAL DEPRECIABLE PLANT REVIEWED	**612,012,316**	**202,055,482**	**215,611,505**	**(13,556,023)**			**(78,706)**	

* No true up is calculated as account will be amortized until fully depreciated
** Fully amortized account, therefore true up has been suspended