Report on the

Comprehensive Depreciation Study

Prepared for

Big Rivers Electric Corporation
Henderson, Kentucky

January 2011
Project Number: 57670

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Prepared by

Burns & McDonnell Engineering Company, Inc.
Kansas City, Missouri

Burns & McDonnell
SINCE 1898

January 6, 2011

Mr. Jeremy Garrett
Accountant
Big Rivers Electric Corporation
201 Third Street
Henderson, KY 42420

Re: 2010 Comprehensive Depreciation Study
Project Number: 57670

Dear Mr. Garrett:

This report encompasses the Comprehensive Depreciation Study (the Study), completed by Burns & McDonnell Engineering Company (Burns & McDonnell) on behalf of Big Rivers Electric Corporation (Big Rivers), for Big Rivers' electric plant and transmission assets as of April 30, 2010. The Study was prepared in accordance with Big Rivers' Request for Quotation dated May 1, 2010 and Big Rivers' Purchase Order #119451 dated June 29, 2010. The Study was performed for all facilities accounted for in accordance with Rural Utilities Service (RUS) Bulletin 1767B-1, Uniform System of Accounts.

Big Rivers has also committed to filing for a general review of its operations and tariffs to the Kentucky Public Service Commission (KPSC) within three years of closing the generation plant "unwind" transaction from July, 2009. This Study was also completed as a requirement for that filing. The depreciation rates developed as part of this study must be approved by the RUS and KPSC before implementation. This Study reflects the results of Burns & McDonnell's engineering assessment and analysis of the remaining useful lives of Big Rivers' system assets and presents our proposed electric plant and transmission system depreciation rates.

The Study presents the proposed remaining life estimates and the corresponding proposed depreciation rates for each account of Big Rivers' system. This Study also provides comparisons of Big Rivers' annual depreciation expense calculated using both the existing and the proposed depreciation rates based on the plant in service as of April 30, 2010. This comparison shows the proposed depreciation rates would result in an increase in depreciation expense of approximately $4.0 million per year; $2.2 million of the increase is the result of increasing the depreciation rate for Account 312 A-K Environmental Compliance.

This report represents the completion of Burns & McDonnell's scope of services for the Comprehensive Depreciation Study on behalf of Big Rivers. Our project manager and team of engineers who participated in the project would like to extend appreciation to the staff for their assistance during the project. We also are available to discuss this report and Burns & McDonnell's findings with you at your convenience.

Sincerely,
Burns & McDonnell

Ted J. Kelly
Principal & Project Director

Jon Summerville
Project Manager

TJK/jes

TABLE OF CONTENTS

PART IV – SUMMARY & CONCLUSIONS

LIST OF TABLES

APPENDIX A: DETAILED DEPRECIATION RATE CALCULATIONS

EXECUTIVE SUMMARY

EXECUTIVE SUMMARY

This report describes the Comprehensive Depreciation Study (the Study), completed by Burns & McDonnell Engineering Company (Burns & McDonnell) on behalf of Big Rivers Electric Corporation (Big Rivers; or the Cooperative), pertaining to Big Rivers' electric and transmission plant assets in service as of April 30, 2010. The Study was prepared in accordance with Big Rivers' Request for Proposal (RFP) dated May 1, 2010, Burns & McDonnell's proposal dated June 4, 2010, and Big Rivers' Purchase Order Number 119451, dated June 29, 2010.

INTRODUCTION

The Study desired by Big Rivers was to be performed for all facilities accounted for in accordance with Rural Utilities Service (RUS) Bulletin 1767B-1. Big Rivers completed and filed its last depreciation study with the RUS in 1998. Big Rivers requires a comprehensive depreciation study be performed in accordance with RUS Bulletin 1767B-1, Uniform System of Accounts. Big Rivers has committed to filing a general review of its operations and tariffs with the Kentucky Public Service Commission (KPSC) within three years of closing the generation plant "unwind" transaction from July, 2009. This Study was completed as a requirement for that filing with the KPSC.

Burns & McDonnell's approach to meeting the requirements for the Study was based substantially on performance of the physical site observations of the generating and transmission facilities by expert power plant design engineers and transmission system engineers, respectively. These engineers then applied their experience and engineering judgment in approximating the remaining lives of each of Big Rivers' generating facilities. The activities performed during the site visits at each generating station included:

- Observation of generating and transmission plant equipment and facilities
- Evaluation of equipment and facilities condition
- Interview of plant operating and maintenance staff and transmission staff
- Review of organization structure, procedures, and staffing levels
- Determination of facility operating and maintenance practices

- Assessment of facility operating and maintenance experiences
- Collection of pertinent cost and operating data and records
- Collection of environmental data
- Development of facilities descriptions

The projected remaining economic lives of the various transmission assets and generating assets for each plant were then factored into the depreciation rate analysis performed by Burns & McDonnell's depreciation consultants. The Study included analysis of the service life characteristics; projected net salvage values; and depreciation reserves for the generating assets, as well as for the transmission and general plant assets.

The information used in the analysis of Big Rivers' depreciation rates was provided by the Cooperative's staff. This included various computer-generated accounting data, certain performance results, budgets, inspection reports, technical documents such as drawings and specifications, contracts, policies and procedure manuals, and other documents such as prior related studies. Historical data from 1965 to 2010 that was recorded in Big Rivers' Continuing Property Records (CPR) system was used throughout the analyses. For plant categories where sufficient experience data was not available, publicly available industry data was utilized as a representative proxy.

In addition, site visits were conducted at each of Big Rivers' production facilities, representative transmission substations, representative transmission lines, and the headquarters offices in Henderson, Kentucky. Key production, environmental, and accounting staff were interviewed and the condition of the facilities was assessed during these site visits. The physical site observations of the system facilities did not include any internal inspections or examinations, environmental testing, or completion of any performance tests on the equipment and facilities. No system, structural, pipe stress, or other mathematical modeling analysis was included in the scope of the facilities observations.

Generally accepted depreciation study procedures widely used by the utility industry were followed. Actuarial analysis of average service lives and dispersions based on historical characteristics of the RUS account since inception were developed. Either the Whole Life procedure or the Life Span combined with the Remaining Life technique was used to calculate the proposed depreciation rate for each account, depending on the nature of the types of property units included in the account.

ENGINEERING ASSESSMENT

Estimated remaining useful lives for Big Rivers' generating plant assets were based, in part, on the American Society of Testing and Materials (ASTM) guidelines for high temperature creep design. Per these guidelines, the portions of a generating facility subject to creep stress should be designed to experience at least 200,000 hours of service or 5,000 thermal cycles. Assuming 8,000 hours of full-load operation per year, this equates to 25 years of service.

Because most equipment manufacturers are quite conservative in applying these guidelines, reaching these levels of service does not mean that a generating unit cannot provide reliable service for much longer periods. It does mean that creep-susceptible portions of a generating unit that has logged this level of operation should undergo metallurgical testing to detect the beginning of creep stress damage. Once damage is detected, the affected components should be evaluated regularly and repairs or replacement performed as indicated to facilitate the unit's successful return to service.

Burns & McDonnell recommends that Big Rivers continue to follow a comprehensive program of testing on those units approaching the service limits in the ASTM guidelines. Individual components should be either repaired or replaced as damage is identified. Since creep stress is a long-term phenomenon, there should be adequate time to procure and schedule replacement of any damaged components.

All of the Big Rivers generating units (except Wilson I) have reached the age when this testing program should be performed. This testing is currently being performed by Big Rivers (and should continue to be performed). Based on the results of these tests, there is no reason, from a mechanical engineering perspective, that all of Big Rivers' generating units cannot remain in service as long as they are economically viable to operate.

Based on Big Rivers' records of operation, maintenance and component replacements; other service documents; and on-site inspections; approximately 250,000 hours of additional operation was assumed to calculate the remaining useful life of each unit. The annual utilization factors from the prior depreciation study for each unit were retained and assumed to continue for purposes of translating the remaining operating hours into remaining years of service. The estimated operating hours to date (2009) and the estimated remaining useful life for each facility are discussed and shown in Section II, Table II-3.

DEPRECIATION RATE ANALYSIS

The Study was conducted to analyze the service life characteristics, net salvage indications, and depreciation reserve status based on historical data from Big Rivers' CPR system data, and then to derive appropriate depreciation rates for Big Rivers' electric plant in service and transmission system. Actuarial analyses were performed using Big Rivers' historical data and applied to individual accounts to estimate useful service lives and net salvage rates.

Two primary methods were used to calculate depreciation accruals: the Whole Life method (most General Plant accounts) and the Life Span method combined with the Remaining Life technique (all Production accounts, Transmission accounts, and Account 390 – Structures).

Burns & McDonnell's engineers and depreciation consultants performed analysis of available data and information in order to assess whether specific detailed estimates of terminal removal costs for each of the Big Rivers generating stations could be developed with reasonable substantiation. The significant potential costs that could be required for environmental remediation required at the Big Rivers plant sites were not considered in developing the net salvage values.. Instead, the historical removal costs provided by Big Rivers were considered in the projected net salvage values.

Table ES-1 shows each capital plant account balance and reserve balance as of April 30, 2010. Table ES-1 also summarizes the results of the depreciation rate analysis by showing the existing depreciation rates and annual depreciation expense compared to the proposed depreciation rates and annual depreciation expense. Detailed calculations for the proposed rates are provided in Appendix A.

Annual depreciation expense based on applying the **existing** depreciation rates to the April 30, 2010 balances in each account totaled $35.7 million. The application of the **proposed** depreciation rates to the same April 30, 2010 account balances resulted in estimated annual depreciation expense of approximately $39.6 million, representing an estimated increase in Big Rivers' total annual depreciation expense approximately $4.0 million. $2.2 million of the increase is the result of increasing the depreciation rate for Account 312 A-K Environmental Compliance.

Table ES-1: 2010 Depreciation Rate Study Summary

Account	Description	As of April 30, 2010 Plant Balance	Reserve Balance	Reserve Ratio	Existing Depreciation Rate	Average Service Life	Remaining Service Life	Net Salvage Factor	Proposed Depreciation Rate	Annual Depreciation Expense Existing	Proposed	Variance
		- $ -	- $ -		- % -	- Years -	- Years -	- % -	- % -	- $ -	- $ -	- $ -
310	Land & Land Improvements	4,537,577	0	0.0	N/A	N/A	N/A	N/A	N/A	-	-	-
PRODUCTION PLANT [1]												
340	Land	475,968	-	-	-	-	-	-	-	-	-	-
311	Structures	124,375,974	78,124,758	62.8	1.71%	62	30	-4.5%	1.38%	2,126,829	1,717,828	(409,001)
312	Boiler Plant	667,206,536	347,026,279	52.0	1.79%	60	28	-5.0%	1.88%	11,942,997	12,543,396	600,399
312 A-K	Boiler Plant - Env Compl	574,184,346	216,760,670	37.8	1.89%	53	28	-2.0%	2.28%	10,852,084	13,074,185	2,222,101
312 L-P	Short-Life Production Plant -Environmental	3,208,938	165,475	5.2	1.89%	10	5	0.0%	20.22%	60,649	648,949	588,300
312 V-Z	Short-Life Production Plant -Other	868,755	210,738	24.3	1.89%	10	5	0.0%	14.39%	16,419	125,054	108,634
314	Turbine	225,272,354	124,744,924	55.4	1.66%	60	28	-8.2%	1.91%	3,739,521	4,309,293	569,772
315	Electric Eqpt	60,355,721	35,350,377	58.6	1.60%	51	19	3.0%	1.99%	965,692	1,202,952	237,260
316	Misc Eqpt	3,014,912	42,128	1.4	1.83%	58	26	0.5%	3.78%	55,173	113,919	58,746
341	CT - Structures	154,233	115,766	75.1	2.31%	53	21	0.0%	1.17%	3,563	1,804	(1,759)
342	CT - Fuel Holders & Access.	1,436,912	564,590	39.3	2.32%	53	21	-134.8%	9.10%	33,336	130,751	97,414
343	CT - Prime Movers	4,915,886	3,637,977	74.0	2.47%	53	21	-38.3%	3.02%	121,422	148,408	26,986
344	CT - Generators	1,102,964	984,479	89.3	2.23%	53	22	0.0%	0.50%	24,596	5,511	(19,085)
345	CT - Access. Elec. Eqpt.	317,726	179,425	56.5	2.23%	53	21	0.0%	2.05%	7,085	6,510	(575)
	Subtotal	1,666,891,222	807,907,587							29,949,367	34,028,559	4,079,192
TRANSMISSION [1]												
350	Land	558,665	-	-	-	-	-	-	-	-	-	-
352	Structures	6,725,346	3,664,345	54.5	1.76%	53	25	-2.4%	1.90%	118,366	127,998	9,632
353	Station Eqpt	115,297,358	51,467,633	44.6	2.22%	53	25	-0.2%	2.23%	2,559,601	2,573,726	14,125
354	Towers	8,593,544	4,868,075	56.6	2.28%	58	30	0.0%	1.42%	195,933	122,186	(73,747)
355	Poles	41,558,164	22,321,791	53.7	3.24%	50	23	0.0%	2.06%	1,346,485	854,950	(491,535)
356	Lines	41,070,042	23,399,406	57.0	2.47%	53	26	0.0%	1.69%	1,014,430	692,966	(321,464)
	Subtotal	213,803,120	105,721,250							5,234,815	4,371,826	(862,989)
GENERAL PLANT [2]												
389	Land	407,251	-	-	-	-	-	-	-	-	-	-
390	Structures [1]	3,944,895	1,786,210	45.3	2.59%	43	12	21.8%	2.84%	102,173	111,928	9,755
391.0/391.6/391.7	Office Furniture & Eqpt	616,135	(282,102)	-45.8	1.11%	10	8	8.9%	17.12%	6,839	105,460	98,621
391.2	Computer	7,013,902	436,114	6.2	1.11%	10	9	1.2%	10.29%	77,854	721,713	643,859
392.2	Vehicles - General	1,699,130	995,277	58.6	5.62%	10	6	14.2%	4.39%	95,491	74,575	(20,916)
392.3	Vehicles - Transmission	1,257,240	625,460	49.7	5.62%	10	5	16.9%	6.14%	70,657	77,173	6,517
393	Stores Eqpt	98,766	69,468	70.3	3.57%	16	6	4.4%	4.40%	3,526	4,349	823
394	Tools	717,086	385,947	53.8	2.85%	16	9	2.7%	4.61%	20,437	33,072	12,635
395	Lab Eqpt	221,279	160,195	72.4	2.86%	16	6	2.1%	4.41%	6,329	9,768	3,440
396	Power Operated Eqpt [3]	504,739	392,925	77.8	3.70%	16	5	24.9%	3.70%	18,675	18,675	-
397	Communication Eqpt [4]	1,639,437	1,640,029	100.0	4.35%	16	1	-0.1%	4.35%	71,316	71,316	-
398	Miscellaneous Eqpt	163,645	3,925	2.4	5.44%	16	8	3.2%	11.80%	8,902	19,309	10,407
	Subtotal	18,283,504	6,213,447							482,199	1,247,338	765,140
TOTAL		$1,903,515,423	$919,842,284							$35,666,381	$39,647,724	$3,981,343

[1] Life Span Method depreciation
[2] Whole Life Method depreciation
[3] This rate was left unchanged because the calculated rate was negative.
[4] Depreciation rate is equal to the previous rate due to Big Rivers current $7 million Replacement Program.

SUMMARY & CONCLUSIONS

Based on our analysis of the information provided by Big Rivers and the results of our on-site observations of the Big Rivers system facilities, Burns & McDonnell has formulated estimates of the remaining useful service lives for each plant and the transmission system assets. From this, proposed depreciation rates have been developed for all of the Cooperative's generation, transmission, and general plant in service, utilizing historical accounting records data, other published depreciation survey information, and generally-accepted depreciation analysis methodologies.

Assuming that the recommended equipment testing on the generating plant assets is continued and assuming that any damaged components of the equipment are either repaired or replaced, Burns & McDonnell finds that there should be no reason, from a mechanical engineering perspective, that all of Big Rivers' generating units could not remain in reliable operating service well into the future. This conclusion is conditioned by the forthcoming statement of limiting conditions.

Therefore, Burns & McDonnell recommends to Big Rivers that it consider pursuing approval and implementation of the proposed depreciation rates for each RUS account as presented in this report. These proposed depreciation rates are projected to increase the total annual depreciation expense of Big Rivers by approximately 11 percent.

STATEMENT OF LIMITING CONDITIONS

The analysis and results of the Study developed and presented herein by Burns & McDonnell are based on sound engineering and economic theory. However, certain factors and parameters affecting the performance of the Study must be clearly stated. The estimated remaining useful lives, net salvage rates, and proposed depreciation rates are provided subject to the following limiting conditions:

1. All existing information and facts known to Big Rivers were assumed to have been made available.

2. Assessments of the condition of the assets were based solely on casual observations. No detailed testing of any of the equipment or facilities was performed by Burns & McDonnell.
3. Continuation of generally accepted levels of and procedures for operation and maintenance of the plant in service throughout the remaining life was assumed.
4. Emphasis on the engineering assessment of the generating assets and transmission assets was assumed. No physical inspection of transmission and general plant assets was made.

In the preparation of this report, the information provided to us by Big Rivers was used by Burns & McDonnell to make certain assumptions with respect to conditions that may exist in the future. While we believe the assumptions made are reasonable for the purposes of this report, we make no representation that the conditions assumed will, in fact, occur. In addition, while we have no reason to believe that the information provided to us by Big Rivers, and on which we have relied, is inaccurate in any material respect, we have not independently verified such information and cannot guarantee its accuracy or completeness. To the extent that actual future conditions differ from those assumed herein or from the information provided to us, the actual results will vary from those projected.

* * * * *

PART I - INTRODUCTION

PART I
INTRODUCTION

This report describes the Comprehensive Depreciation Study completed by Burns & McDonnell Engineering Company for Big Rivers Electric Corporation (as of April 30, 2010). The Study was prepared in accordance with Big Rivers' Request for Quotation, dated May 1, 2010, Burns & McDonnell's proposal, dated June 4, 2010, and Big Rivers' Purchase Order Number 119451, dated June 29, 2010. The Study desired by Big Rivers was to be performed for all facilities accounted for in accordance with RUS Bulletin 1767B-1, Uniform System of Accounts.

Part II of the Study, Engineering Assessment, is intended to address the issues identified by the RUS to be covered in the Study:

- Discussion of facility basic design and equipment
- Analysis of plant historical performance
- Review of on-site inspection and analysis of operating conditions
- Discussion of Big Rivers' operation, maintenance, and staffing
- Analysis of external and environmental factors affecting asset useful lives
- Statement of opinion regarding remaining economic lives and proper depreciation rates

Descriptions of each of Big Rivers' generating stations are provided, along with assessments of the recent historical operations and maintenance and the current physical condition of each plant developed through the on-site observations of the facilities. The engineering assessment presented in Part II addresses each of the above areas, with the exception of the development of proposed depreciation rates.

The analyses leading to formulation of proposed new depreciation rates for Big Rivers are described in Part III. Part III provides brief descriptions of the alternative methods used in calculating depreciation rates and identifies the specific method used, as well as the various considerations and assumptions made, in developing the actuarial analyses for each account. Detailed calculations for all the accounts are provided in Appendix A.

Part IV of the Study summarizes the results of the Study and quantifies the estimated impact of the proposed depreciation rates on Big Rivers' annual depreciation expense accrual.

BIG RIVERS ELECTRIC CORPORATION

Big Rivers is a generation and transmission cooperative that provides bulk wholesale electric service to its member distribution cooperatives, with delivery through high-voltage transmission facilities it owns and operates. Big Rivers was established as a cooperative and is operated under the authority of the RUS, an agency within the United States Department of Agriculture. Big Rivers is headquartered in Henderson, Kentucky and provides power for retail distribution to all or part of 22 counties in western Kentucky through its three member cooperatives:

- Jackson Purchase Energy Corporation, Paducah, KY
- Meade County Rural Electric Cooperative Corporation, Brandenburg, KY
- Kenergy Corp., Henderson, KY

Big Rivers owns and operates 1,444 MW of generating capacity in four power generating stations: Robert A. Reid (130 MW), Kenneth C. Coleman (443 MW), Robert D. Green (454 MW), and D.B. Wilson (417 MW). Total power capacity is 1,834 MW, including rights to Henderson Municipal Power and Light (HMPL) Station Two and contracted capacity from Southeastern Power Administration (SEPA).

Big Rivers also owns and operates approximately 1,260 miles of transmission lines, most of which are operated at 69 kilovolts (kV), 161 kV, or 345 kV. In addition, the Cooperative's transmission system includes electric substations with over 3,540 MVa of transformer capacity. General plant facilities of Big Rivers include its headquarters office buildings, a warehouse, the central lab, publications, and communications buildings, the vehicle and power-operated equipment fleets, and all types of equipment, furniture, computers, etc. used in the Cooperative's operations.

PURPOSE OF STUDY

Big Rivers completed and filed its last depreciation study with the RUS in 1998. Big Rivers now requires a comprehensive depreciation study be performed in accordance with RUS Bulletin 1767B-1, Uniform System of Accounts. Big Rivers has also committed to filing a general review of its operations and tariffs with the KPSC within three years of closing the generation plant "unwind" transaction from July, 2009. The KPSC has required that a new depreciation study be submitted as part of that filing.

Big Rivers solicited proposals for and retained Burns & McDonnell to perform the Study in accordance with the RUS' guidelines. This Study includes:

- A discussion of each production facility's basic design and equipment
- A discussion of the composition of the transmission system
- An analysis of each production facility's historical performance
- An on-site review and analysis of each transmission system and production facility's current operating condition
- A discussion of the operating and maintenance procedures and staffing for each production facility and the transmission system
- An analysis of external and environmental factors that may impact the transmission system and each production facility's remaining useful life

PROJECT APPROACH

Burns & McDonnell's approach to meeting the above stated requirements for the Study was based on the performance of physical site observations of the generating facilities and transmission system by expert power plant design engineers and transmission system design engineers. These engineers then applied their experience and engineering judgment in approximating the remaining lives of each of Big Rivers' generating facilities and the transmission system. The activities performed during the site visits at each generating station included:

- Observation of transmission and plant equipment and facilities

- Evaluation of equipment and facilities condition
- Interview of transmission and plant operating and maintenance staff
- Review of organization structure, procedures, and staffing levels
- Determination of transmission and plant operating and maintenance practices
- Assessment of transmission and plant operating and maintenance experiences
- Collection of pertinent cost and operating data and records
- Collection of environmental data
- Development of facilities descriptions

The physical site observations of the plant facilities and transmission system did not include any internal inspections or examinations, or completion of any performance tests on the equipment and facilities. No system, structural, pipe stress, or other mathematical modeling analysis was included in the scope of the facilities observations.

The significant potential costs that could be required for environmental remediation were not considered in developing the net salvage values. Instead, the historical removal costs provided by Big Rivers were considered in the projected net salvage values.

The projected remaining economic lives of the various generating and transmission assets and the estimates of terminal net salvage values were then factored into the depreciation rate analysis performed by Burns & McDonnell's depreciation consultants. The Study included analysis of the service life characteristics; net salvage values; depreciation reserves for the generating assets, transmission assets, and general plant assets. Raw historical plant account data from 1965 to 2010 was obtained from Big Rivers' CPR system.

Generally accepted depreciation study procedures and actuarial analyses widely used by the utility industry were followed. Actuarial analyses of average service lives and dispersions based on historical characteristics of the plant retired for each active RUS plant account since inception were developed. Either the Whole Life method or the Life Span method with the Remaining Life technique was used to calculate the proposed depreciation rate for each account, depending on the nature of the types of property units included in an account.

SOURCES OF DATA

Much of the information used in the analysis of Big Rivers' depreciation rates was provided by the Cooperative's staff. This included various computer-generated accounting data from Big Rivers' CPR system, certain performance results, budgets, inspection reports, technical documents such as drawings and specifications, contracts, policies and procedure manuals, and other documents such as prior related studies reports. Historical data from 1965 to 2010 as recorded in Big Rivers' CPR system was used throughout the analyses.

In addition, site visits were conducted at each of Big Rivers' electric generating facilities, system transmission substations, representative transmission lines, and the headquarters offices in Henderson, Kentucky. Key production, engineering, and accounting staff were interviewed and the condition of the facilities was discussed and assessed during these site visits. The physical site observations of the system facilities did not include any internal inspections or examinations, environmental testing, or completion of any performance tests on the equipment and facilities. No system, structural, pipe stress, environmental assessment, or other mathematical modeling analysis was included in the scope of the facilities observations.

In the preparation of the Study, the information provided by Big Rivers was used by Burns & McDonnell to make certain assumptions with respect to conditions, which may exist in the future. While Burns & McDonnell believes the assumptions made are reasonable for the purposes of this report, it makes no representation that the conditions assumed will, in fact, occur. In addition, while Burns & McDonnell has no reason to believe that the information provided to us by Big Rivers and on which it has relied is inaccurate in any material respect, Burns & McDonnell has not independently verified such information and cannot guarantee its accuracy or completeness. To the extent that actual future conditions differ from those assumed herein or from the information provided to Burns & McDonnell, the actual results will vary from those projected.

* * * * *

PART II – ENGINEERING ASSESSMENT

PART II
ENGINEERING ASSESSMENT

OVERVIEW

This section of the report provides a review of the engineering assessment of the Big Rivers plant assets in service as of April 30, 2010. The KPSC mandated that Big Rivers conduct a new depreciation rate study as part of its submission in connection with the its intent to file for a general review of its operations and tariffs within three years. During the Study, the following activities were conducted to examine Big Rivers' plant in service from an engineering perspective:

- A discussion of each production facility's basic design and equipment
- An on-site review and analysis of each production facility's current operating condition
- An analysis of each production facility's historical performance
- A discussion of the operating and maintenance procedures and staffing for each production facility
- An analysis of external and environmental factors that may impact on each facility's useful life.
- An opinion, based on the study's findings, regarding the remaining economic life of each facility and the proper depreciation rate schedule to be used prospectively
- A discussion of the composition of the transmission system

The engineering assessment presented in this section addresses each of the above areas. The analyses leading to formulation of proposed new depreciation rates for Big Rivers are described in Part III.

Generation Facilities

Table II-1 below provides a description of each unit of Big Rivers' fleet of generating facilities, including the commercial operation date, years in operation, net capacity, heat rate, fuel type, boiler and turbine manufacturer, and emission control equipment.

Table II-1: Big Rivers Power Plant Data

Unit	Commercial Operation Date	Years in Operation	Net Capacity (MW)	Heat Rate (Btu/kWh)	Fuel Type	Boiler Manufacturer	Turbine Manufacturer	Emission Control Equipment		
								SO_2 Control	NO_X Control	Particulate Control
Coleman 1	1969	41	150 MW	10,923	Pulverized Coal	Foster Wheeler	Westinghouse	FGD	Low NO_X Burners/ Overfire Air	Precipitator
Coleman 2	1970	40	138 MW	10,923	Pulverized Coal	Foster Wheeler	Westinghouse	FGD	Low NO_X Burners/ Overfire Air	Precipitator
Coleman 3	1972	38	155 MW	10,923	Pulverized Coal	Riley Stoker	General Electric	FGD	Low NO_X Burners/ Overfire Air	Precipitator
Green 1	1979	31	231 MW	11,202	Pulverized Coal	Babcock & Wilcox	General Electric	FGD	Low NO_X Burners	Precipitator
Green 2	1981	29	223 MW	11,202	Pulverized Coal	Babcock & Wilcox	Westinghouse	FGD	Low NO_X Burners	Precipitator
HMP&L 1	1973	37	153 MW	10,993	Pulverized Coal	Riley Stoker	General Electric	FGD	SCR	Precipitator
HMP&L 2	1974	36	159 MW	10,993	Pulverized Coal	Riley Stoker	Westinghouse	FGD	SCR	Precipitator
Reid 1	1966	44	65 MW	13,805	Pulverized Coal Natural Gas	Riley Stoker	General Electric	Uses Medium Sulfur Coal	Burns Natural Gas to reduce NO_X	Precipitator
Reid CT	1976	34	65 MW	11,750	#2 Oil Natural Gas	NA	General Electric Gas Turbine	NA	NA	NA
Wilson 1	1986	24	417 MW	11,333	Pulverized Coal	Foster Wheeler	Westinghouse	FGD	SCR	Precipitator

Remaining Useful Life

Estimated remaining useful lives for Big Rivers' generating plant assets were based, in part, on the American Society of Testing and Materials (ASTM) guidelines for high temperature creep design. Per these guidelines, the portions of a generating facility subject to creep stress should be designed to experience at least 200,000 hours of service or 5,000 thermal cycles. Assuming 8,000 hours of full-load operation per year, this equates to 25 years of service.

Because most equipment manufacturers are quite conservative in applying these guidelines, reaching these levels of service does not mean that a generating unit cannot provide reliable service for longer periods. It does mean that creep-susceptible portions of a generating unit that has logged this level of operation should undergo metallurgical testing to detect the beginning of creep stress damage. Once damage is detected, the affected components should be evaluated regularly and repairs or replacement performed as indicated to facilitate the unit's successful return to service.

Burns & McDonnell recommends that Big Rivers continue to follow a comprehensive program of testing on those units approaching the service limits in the ASTM guidelines. Individual components should be either repaired or replaced as damage is identified. Since creep stress is a long-term phenomenon, there should be adequate time to procure and schedule replacement of any damaged components.

All of the Big Rivers generating units (except Wilson I) have reached the age when this testing program should be performed. This testing is currently being performed by Big Rivers and there is no reason, from a mechanical engineering perspective, that all of Big Rivers' generating units cannot remain in service as long as they are economically viable to operate. The following table provides a summary of the most recent testing performed for each generation unit.

Table II-2: Big Rivers Recent Generation Testing Results

Plant	Last Test	Problems Found	Description	Action Taken
Coleman 1	May 2008	1	Hot reheat hanger attachment.	Addressed immediately through appropriate repairs.
Coleman 2	Oct. 2010	0	No deficiencies found.	-
Coleman 3	June 2009	1	Indication of early stage creep.	No operational limits, per EPRI guidelines. Retest in 3-5 years.
Green 1	Oct. 2008	0	No deficiencies found.	-
Green 2	May 2009	0	No deficiencies found.	-
HMP&L 1	March 2009	0	No relevant indications.	-
HMP&L 2	April 2010	0	No evidence of micro cracking or creep damage.	-
Reid 1	June 2008	1	Operating stress well within limits.	Retest in 5-10 years.
Wilson 1	Nov. 2009	0	No indications found.	-

Based on Big Rivers' records of operation, maintenance and component replacements; approximately 250,000 hours of additional operation was assumed as the remaining useful life of each unit. The annual utilization factors from the prior depreciation study for each unit were retained and assumed to continue for purposes of translating the remaining operating hours into remaining years of service. Table II-3 below shows the estimated operating hours to date (2009) and the estimated remaining useful life for each facility.

Table II-3: Big Rivers Power Plant Estimated Remaining Life

Name	Net Capacity (MW)	Date in Service	Typical Lifetime Availability	Typical Operating Hours per Year	5 Year Average % On Line	Actual Operating Hrs Based on 5 Yr Avg	Years in Service	Total Est. Hours to Date (Jan 2009)	Typical Estimated Remaining Unit Life
COLEMAN 1	150	1969	80.0%	7,008	87.3%	7,648	40	280,320	25
COLEMAN 2	138	1970	80.0%	7,008	93.1%	8,154	39	273,312	25
COLEMAN 3	155	1972	80.0%	7,008	89.5%	7,843	37	259,296	25
GREEN 1	231	1979	85.0%	7,446	93.9%	8,225	30	223,380	32
GREEN 2	223	1981	85.0%	7,446	92.0%	8,056	28	208,488	32
HMP&L - 1	153	1973	85.0%	7,446	85.6%	7,497	36	268,056	25
HMP&L - 2	159	1974	85.0%	7,446	91.4%	8,005	35	260,610	25
REID 1	65	1966	70.0%	6,132	40.3%	3,529	43	263,676	26
WILSON 1	417	1986	89.5%	7,840	88.2%	7,724	23	180,325	41

The life of these individual units can vary based on a number of factors including but not limited to operating hours and maintenance experience. The Green, HMP&L Station Two and Coleman facilities have multiple units, but are forecasted to retire in the same year, This is reasonable for three reasons. First, the units were installed within two to three years of each other. Second, most plant accounts are assigned to the entire generating station, not to individual units of the facility. Most importantly, it is realistic to assume that the entire facility would shut down before significant demolition activities begin to occur. Piecemeal removal at an operating facility would be costly and much of the plant infrastructure would need to remain in service in order to maintain the last unit's ability to function. Big Rivers would maintain and continue to operate each individual unit until such time as the decision was made to retire the entire generating station. Burns & McDonnell further considered the results of the on-site assessments of each of the Big Rivers generating stations in the estimation of the remaining useful lives.

GENERATION ASSETS

SEBREE SITE

The Sebree site is common to three plants owned and/or operated by Big Rivers: the Robert A. Reid Plant, the Robert D. Green Plant, and the Henderson Municipal Power & Light (HMP&L) Station Two. Although the plants are located on a common site, HMP&L Station Two is actually owned by the City of Henderson, Kentucky. Big Rivers operates HMP&L Station Two for the City. Contractual operations agreements between Big Rivers and the City of Henderson require that Big Rivers maintains separate plant operations, including operating and maintenance staffs (management staff and some specialists are common) and financial budgets/records, for the HMP&L Station Two and Reid stations, from the operations of the Green station.

The Sebree site is generally adequate for the operation of the three plants; however, the configuration of the units necessitates substantial coordination of activities among the plant staff when large areas of common space are required. This has not appeared to be a severe handicap to the site. This sharing of common facilities has produced a degree of operational and capital investment savings. For example, the river water intake structure for the Reid steam turbine unit is also used to provide river water supplies to the Green and HMP&L Station Two stations. Another example of this sharing of facilities relates to the barge unloading system used at the Reid station. When the original unloader was replaced at the time of construction of HMP&L Station Two, with a more conventional barge unloader, the new unloading system and coal handling served both Reid and HMP&L Station Two. Also, when the new flue gas desulfurization system was added to the HMP&L Station Two units the lime supply and sludge disposal systems of the Green units were used. There is also some coordination among the three generating plants in ash storage; however, this is limited by the difference in the nature of the ash handling requirements for the different types of units.

The Sebree site is located on the banks of the Green River. The main plant area is located at a sufficient elevation to ensure that 100-year floods should not affect the units' generation capabilities. Although a flood in excess of 100-year levels potentially could cause temporary interruptions of generating capability, no significant operational impact is anticipated.

ROBERT D. GREEN PLANT

Facility Description

The Robert D. Green Plant is located on the Sebree site near Sebree, Kentucky, along with the Robert A. Reid Plant and HMP&L Station Two. The Green Plant includes two units that are significantly larger than the units at either the Reid Plant or the HMP&L Station Two. Green

Unit 1 is rated for net continuous capacity of 231 MW and Green Unit 2 has a rated net capacity of 223 MW. Unit 1 began commercial operation in 1979 and Unit 2 became operational in 1981. Both units at the Green Plant are coal-fired steam generating units with Babcock & Wilcox boilers providing maximum steam capacity of 1,930,000 pounds per hour. Green 1 is equipped with a General Electric turbine-generator with a nameplate rating of 242,105 kW. Green 2 includes a Westinghouse turbine-generator rated at 242,133 kW.

Steam Turbines

Green 1 turbine generator was supplied by General Electric, while the Green 2 turbine generator was supplied by Westinghouse. Both turbines appear to be in good condition. Turbine 1 underwent a major turbine overhaul in 2007. The unit is on a regular turbine outage schedule of every two years for valves and every eight years for major turbine overhaul. Turbine 2 was last overhauled in 2009, with a generator retaining ring replacement included in the overhaul. The unit is on a regular turbine outage schedule of every two years for valves and every eight years for major turbine overhaul. All evidence and inspections indicate that both turbines are being well maintained.

Boilers

The two Babcock & Wilcox boilers were installed after the initial effects of the regulations limiting NO_X emissions from coal-fired power plant boilers were promulgated. As such, the boilers are equipped with B&W's dual register burners and multiple wind boxes.

Boiler 1 appears to be in excellent condition. The tubes in the secondary superheater were replaced in 2001. Weld overlays were installed on the East and West walls, and reheat tubes were replaced in 2007. Sootblower lanes are shielded and shields are replaced as deficiencies are found. Several hangers had deteriorated and were replaced in 2008. Tube samples of the waterwalls, superheat, and reheat collected in 2008 showed no significant deficiencies.

Boiler 2 appears to be in excellent condition. The tubes in the secondary superheater were replaced in 2001. Weld overlays were installed on the East and West walls in 2005 and 2009. Tubes in the reheat outlet bank were replaced in 2009. Sootblower lanes are shielded and shields are replaced as deficiencies are found. Several hangers had deteriorated and were replaced in

2009. Tube samples of the waterwalls, superheat, and reheat collected in 2009 showed no significant deficiencies.

Draft System

The two Green units are constructed with high efficiency precipitators and wet lime scrubbers. The precipitators appear to be in good condition and currently remove enough particulate to comply with the limit of 0.1 pounds per million Btu. Two precipitator fields were replaced in 2007 and two more in 2009. The FGD scrubbers appear to be in good condition and remove enough SO_2 to comply with the limit of 0.8 pounds per million Btu. The boilers were purchased with the earlier series of low NO_X burners from Babcock & Wilcox Company. Both units were retrofit in 2004 with a coal reburn technology designed by GE-EER. The combination reduces the NO_X emissions below the limit of 0.7 pounds per million Btu. The Ljungstrom air preheaters have had cold end baskets replaced in both units and are currently in good operating condition.

Waste Disposal

The primary water discharge is from the cooling tower blowdown. The blowdown from the cooling towers and other plant drains discharge to the ash ponds. The waste water is pH adjusted and metals are precipitated. Discharge from these ponds is sent to a plant common pond, which then discharges indirectly to the Green River. Due to the multiple-pond system, accidental discharges reaching the river are considered unlikely. Bottom ash is impounded in the pond. The Green plant's fly ash is used for flue gas desulfurization waste sludge fixation. Excess fly ash is marketed.

Water Supply Systems

The makeup water supply from the Green River to the plant is provided from the intake structure which was originally constructed as part of the circulating water system for Reid Unit 1. Separate water supply pumps serve the Green units. Of all the water requirements of the Green units, the largest user is makeup supply for the cooling towers. Regardless of its end use, all this water is run through a conventional water clarification and treatment facility. The Green station maintains its own chemistry lab and personnel, using common supervision with the HMP&L Station Two units. Plant management provided no indications that plant chemistry control was inadequate.

Fuel Supply and Handling

The primary fuel supply for the Green units has been from nearby Kentucky mines and is delivered by truck and/or barge. The fuel supply for the Green units is delivered separately from the other coal-fired units on the site, and is kept segregated throughout the storage and handling process. This is due to the differing fuel quality requirements as well as contractual issues between Big Rivers and the City of Henderson. There is adequate space on the plant site for fuel storage for the Green units of up to 60 days. The normal fuel inventory is substantially less than the site capacity. A barge unloading facility located on the Green River (separate from the HMP&L Station Two barge unloader) is capable of unloading and delivering coal to the Green units. Lime for use in the scrubbers is delivered by barge. The barge unloader conveyor system is set up to permit transfers of materials from the Green barge unloader to either the coal pile or the lime storage silos. Plant management provided no indication of fuel supply or handling issues during the site visit.

Historical Operating Performance

Burns & McDonnell reviewed the plant's historical operating performance to verify that the generating units have competitive heat rates and are capable of providing the level of reliability to meet Big Rivers' electric production requirements. A summary of the last four years' historical data is provided below in Table II-4.

Table II-4: Robert D. Green Historical Operating Performance Data

	Unit	Green Unit 1	Green Unit 2
Gross Generation Capacity	(MW)	250 MW	242 MW
Net Generation Capacity	(MW)	231 MW	223 MW
Net Capacity Factor	(%)	88.28%	87.09%
Heat Rate	(Btu/kWh)	11,097	11,299
Equivalent Availability Factor	(%)	91.73%	91.99%
Equivalent Forced Outage Rate	(%)	2.28%	2.05%

Both Green units have been performing well. Combined they have had a five year net heat rate of 11,202 Btu per kWh which is competitive with other coal fired power plants in the region. The availability of the units has also been good. Green Unit 1 had an EFOR of 1.9 percent in

2009 and 1.4 percent in 2010. Green Unit 2 had an EFOR of 0.81 percent in 2009 and 0.44 percent in 2010.

Remaining Useful Life

The Green Unit 1 and Unit 2 are in excellent condition for their age and service requirements. Provided that operations and maintenance continue as is, these units are estimated to be suitable for ongoing service through the year 2042. Of particular note is the Boiler Condition Spreadsheet that contains a status report on all of the major components in the boiler as well as the High Energy Piping (HEP) and hangers. A consistent program like this for monitoring status and identifying areas to address in future budgets is very good. The HEP and hanger review addresses the concern over creep damage with an aging plant. This program is critical and is currently being performed on all the units. The spreadsheet does indicate that a HEP and hanger review occurs on all the units.

HENDERSON MUNICIPAL POWER & LIGHT STATION TWO

Facility Description

HMP&L Station Two is also located on the plant site near Sebree, Kentucky, along with the Robert A. Reid Plant and the Robert D. Green Plant. HMP&L Station Two is owned by the City of Henderson, Kentucky through its municipal utility, Henderson Municipal Power & Light (HMP&L). Big Rivers operates HMP&L Station Two on behalf of the City. HMP&L Station Two includes two units similar in size to the three units at the Coleman Plant. HMP&L Unit 1 is rated for net continuous capacity of 153 MW and HMP&L Unit 2 has a rated net capacity of 159 MW. Unit 1 began commercial operations in 1973 and Unit 2 began commercial operations 1974. Both HMP&L Station Two units are coal-fired steam generating units with Riley boilers having steam flow capacity of 1,180,000 pounds per hour. Unit 1 is equipped with a General Electric turbine-generator with nameplate rating for the turbine of 175,984 kW. Unit 2 includes a Westinghouse turbine-generator rated at 178,724 kW.

Steam Turbines

HPM&L Unit 1 is equipped with a General Electric turbine-generator, and HMP&L Unit 2 is equipped with a Westinghouse turbine-generator. Both units appear to be in good condition.

Turbine 1 was last overhauled in 2008, and Turbine 2 was last overhauled in 2004. Both units are on a regular outage schedule of every 4 years for valves and every 8 years for major overhauls.

Boilers

The two boilers of the HMP&L Station Two appear to be well maintained. A program of monitoring boiler tube failures and tube wear has been activated. This has resulted in replacement of some sections of the reheaters, and similar monitoring and replacement programs should result in minimizing forced outages due to boiler tube failure.

Boiler 1 appears to be in good condition. The radiant superheat inlet and outlet elements were replaced in 2003. The front WW release header was replaced in 2005. A low water event occurred in 2007 causing some tubes to rupture and others to warp. The ruptured tubes were replaced with dutchmen and samples were removed for metallurgical analysis. No damage was detected. The boiler was hydro tested and returned to service. Tube samples were taken from the waterwalls, superheater, and reheat in 2009. No degradation was found in the waterwall. The radiant superheater outlet was suffering from severe coal ash corrosion. These tubes are scheduled to be replaced in 2017. The high temperature reheater was replaced during the 2009 outage. Hangers are being replaced as inspections dictate.

Boiler 2 appears to be in good condition. The radiant superheater inlet and outlet elements were replaced in 2004. The high temperature reheater elements were replaced in 2007. Tube samples taken in 2008 show the tubes to be in good condition. No significant deficiencies were found. Feedwater corrosion products were almost at the criterion for chemical cleaning. Hangers are being replaced base on the prioritization list.

Draft System

Precipitators are currently used for particulate emission removal with a limit of 0.21 pounds per MMBtu. The units both have an FGD system in service which is able to achieve a 95 percent SO_3 removal rate. This allows the Plant to meet the SO_2 limit of 5.2 pounds per MMBTu. Both units were retrofit in 2004 with Alstom designed SCR's capable of 90 percent NO_X removal which allow the plant to meet the NO_X limit of 0.5 pounds per MMBtu.

Waste Disposal

All the plant water discharges go through the ash pond. This includes neutralized demineralizer wastes, boiler blowdown, cooling tower blowdown, and miscellaneous plant drains. The ash ponds indirectly discharge to the Green River. Water discharges are monitored in the final pond, and water quality is reported to the state. Due to the multiple pond system, accidental discharges reaching the river are considered unlikely.

Water Supply Systems

The makeup water supply to the HMP&L Station Two units is from the circulating water system of Reid 1. This system, with operating and standby pumps at the river, is capable of delivering far more water than is normally needed by the two HMP&L Station Two units. The river intake was constructed in the 1960s, and is grandfathered for any Corps of Engineers river discharge permits. River water is delivered untreated to the cooling towers, which are equipped with side stream filters. Renovation of the cooling tower water chemistry control system and side stream filters to the circulating water system has apparently been successful.

Fuel Supply and Handling

The primary fuel supply for the HMP&L Station Two units has been from Kentucky mines and is delivered by truck and by barge. The fuel purchasing is in proportion to the utilization of the units. Big Rivers secures enough fuel to produce the unit capacity controlled by the cooperative. The City of Henderson procures enough fuel to produce their portion of the HMP&L Station Two capacity which varies as load growth occurs in Henderson. The supply has been from both Kentucky and Indiana mines, and is generally delivered by barge. Once either fuel is received on site, it is delivered either directly to the unit or to the HMP&L Station Two common storage. The coal for the Reid unit is purchased separately, and segregated in storage and use since the HMP&L Station Two units are capable of utilizing higher sulfur, less expensive coal, than the non-scrubbed Reid unit. Fuel for the Green Plant units is handled completely separately, since it is of a different quality. Maintenance of the coal handling systems appears to be adequate.

Historical Operating Performance

Burns & McDonnell reviewed the plant's historical operating performance to verify that the generating units have competitive heat rates and are capable of providing the level of reliability to meet Big Rivers' electric production requirements. A summary of the last five years historical data is provided below in Table II-5.

Table II-5: HMP&L Station Two Historical Operating Performance Data

	Unit	HMP&L Unit 1	HMP&L Unit 2
Gross Generation Capacity	(MW)	165 MW	172 MW
Net Generation Capacity	(MW)	153 MW	159 MW
Net Capacity Factor	(%)	80.83%	79.52%
Heat Rate	(Btu/kWh)	10,865	11,147
Equivalent Availability Factor	(%)	86.09%	88.95%
Equivalent Forced Outage Rate	(%)	10.46%	3.77%

Both HMP&L units have been performing well. Combined they have had a five year net heat rate of 10,993 Btu per kWh which is competitive with other coal fired power plants in the region. The availability of the units has also been reasonable with the exception of a turbine blade failure on Unit 1 in 2009 which resulted in 1,247 forced outage hours yielding an EFOR of 14.2 percent for the year. The Unit 1 EFOR was back down to 1.7 percent in 2010. HPM&L 2 had an EFOR of 1.1 percent in 2009 and 1.5 percent in 2010.

Remaining Useful Life

Of particular note is the Boiler Condition Spreadsheet that contains a status report on all of the major components in the boiler as well as the High Energy Piping and hangers. A consistent program like this for monitoring status and identifying areas to address in future budgets is consistent with sound maintenance practices. The HEP and hanger review addresses the concern over creep damage with an aging plant. This program is critical and is currently being performed on all the units. The spreadsheet does indicate that a HEP and hanger review occurs on all the units. The HMP&L Units are in excellent condition for their age and service requirements. Provided that operations and maintenance continue as is, these units are estimated to be suitable for ongoing service through the year 2035.

ROBERT A. REID PLANT

Facility Description

The Reid steam turbine generating unit is currently 44 years old. The equipment in this unit includes a Riley boiler with a steam flow capacity of 690,000 pounds per hour and a General Electric turbine-generator with nameplate capacities of 66,000 kilowatts (kW) for the turbine and 96,000 kVA for the generator. The unit is currently rated at 65 MW (see Table II-1).

Steam Turbine

Reid is equipped with a General Electric turbine-generator. The steam turbine was last overhauled in 2000 and does not have another major overhaul scheduled until 2017. The unit has historically been on a regular outage schedule of every four years for valves and every twelve years for major overhauls; however due to its low capacity factor (CF) it is able to run longer without a major overhaul.

Boilers

Reid 1 has a Riley Stoker boiler with two levels of burners on the front wall. The unit has had a waterwall tube replacement in 2006 with no major upgrades since. The boiler appears to be in good operating condition. The boiler is a pressurized furnace, with no induced draft fan.

Draft System

Precipitators are currently used for particulate emission removal with a limit of 0.28 pounds per MMBtu. The unit uses medium sulfur coal in order to meet the SO_2 limit of 5.2 pounds per MMBTU. In 2000, four of the boiler's eight burners were converted to burn natural gas to reduce NO_X emissions.

Waste Disposal

The fly ash of the Reid unit is used in the Green Plant’s flue gas desulfurization waste sludge fixation. The bottom ash from the unit is impounded in the ponds.

Water Supply Systems

Circulating water for the Reid unit comes directly from, and returns to, the Green River. This direct river cooling was established before introducing changes to river water temperature was regarded as environmentally degrading and, therefore, the Reid unit is a grandfathered installation. The two 100-percent circulating water pumps are adequate for the Reid unit; however, one of these pumps is run almost continuously since the Reid unit circulating water system also provides the water supplies for HMP&L Station Two. The water supply pumps for the Green units are also installed in the Reid intake structure. The significance of this water supply system is far greater than that of the Reid unit alone, since a loss of the intake structure could shut down both HMP&L Station Two units and both Green units, a total of over 700 MW of generating capacity. However, proper maintenance reduces the probability of this occurrence to a minimum level of concern.

Historical Operating Performance

Burns & McDonnell reviewed the plant's historical operating performance to verify that the generating units have competitive heat rates and are capable of providing the level of reliability to meet Big Rivers' electric production requirements. A summary of the last four years historical data is provided below in Table II-6.

Table II-6: Robert A. Reid Historical Operating Performance Data

	Unit	Reid Unit 1	Reid Unit 2
Gross Generation Capacity	(MW)	72 MW	65 MW
Net Generation Capacity	(MW)	65 MW	64 MW
Net Capacity Factor	(%)	18.77%	
Heat Rate	(Btu/kWh)	13,966	
Equivalent Availability Factor	(%)	86.26%	
Equivalent Forced Outage Rate	(%)	25.01%	

The plant has performed commendably over the years. However, the unit had one of the highest heat rates on Big Rivers' system. The five-year average heat rate for the unit was reported to be 13,805 Btu per kWh. This is relatively high for coal fired power plants in the region of the country which is why the unit is dispatched primarily as a peaking unit only. In addition, the average EFOR of 25.0 percent is considerably high when compared to other coal fired power plants in the region.

Remaining Useful Life

Of particular note is the Boiler Condition Spreadsheet that contains a status report on all of the major components in the boiler as well as the HEP and hangers. A consistent program like this for monitoring status and identifying areas to address in future budgets is consistent with sound maintenance practices. The HEP and hanger review addresses the concern over creep damage with an aging plant. This program is critical and is currently being performed on all the units. The spreadsheet does indicate that a HEP and hanger review occurs on all the units. The Reid Plant has not been run as many hours per year as other facilities and is in excellent condition for its age. If operations and maintenance continue and the plant is run at the same level as it has been run, this unit is estimated to be suitable for ongoing service through the year 2036.

D.B. WILSON STATION PLANT

Facility Description

The D. B. Wilson Plant is located at Island, Kentucky, approximately 55 miles from Henderson, Kentucky. This station consists of a single 417 MW unit commercialized in 1986. It is the newest and largest generating unit on the Big Rivers electric system. The plant site is configured for installation of one or more additional units and, therefore, the plant facilities, such as coal handling, water supply, ash handling, and sludge disposal, all have more than adequate capacity for the operating requirements.

Steam Turbine

The unit went commercial in 1986, and was given its first major overhaul in November 1990. The unit has typically been on a regular outage schedule of every 4 years for valves and every 8 years for major overhauls. The most recent major overhaul was in 2009 and the next is planned for 2016.

Boilers

Wilson 1 is a Foster Wheeler boiler capable of producing 3,484,000 lbs / hr of steam. The boiler appears to be in good condition. The last major boiler outage was in 2009. Tube samples were taken of the waterwalls and superheater. A map was created of the waterwall thickness readings to determine where future overlays should be installed. Tube analysis indicated a chemical clean was needed. The chemical clean is scheduled for the 2011 outage. Holes in the downcomers and cracks in the shelf under the cone-topped canisters were repaired in 2009. The A platen superheater showed no significant indications of corrosion, thinning, or creep. The B platen superheater tubes were replaced. Cracks were found in the inlet and outlet headers. The cracks were ground down and re-examined. All of them passed the WFMT examination after being ground down. Tubes were replaced in the finish superheater and alignment castings were installed. Major pitting, metal loss, and corrosion were found in the DA tank. The high energy piping was inspected with Fluorescent Mag Particle testing or UT Shear Wave testing. There were some indications of creep in the piping. The hangers are inspected regularly and adjusted or replaced as needed. Safety valves are cleaned, inspected, and lapped regularly.

Draft System

The Wilson unit is equipped with a precipitator for particulate emission removal and has a limit of 0.03 pounds per MMBtu. The unit is equipped with a FGD which has a 90 percent SO_2 removal efficiency. The unit has a NOx limit of 0.6 pounds per MMBtu, however, the unit was retrofit in 2004 with a Babcock Borsig designed SCR capable of 90 percent NO_X removal efficiency.

Waste Disposal

The solid waste from the FGD, fly ash, and lime is sent to the on-site landfill. The site waste water is pH adjusted and metals are precipitated out. The bottom ash is dewatered and incorporated into FGD waste. The excess fly ash is marketed and sold in the region.

Water Supply Systems

The water supply for the plant is from an independent water intake structure located on the Green River. It appears unlikely that there should ever be an interruption of water supply to the plant. Green River water requires pretreatment before use in the cooling tower or other potable water systems in the plant. This pretreatment system is sized for two operational units so there should be adequate capacity.

Fuel Supply and Handling

The redundant coal delivery systems for the plant, barge, and truck, permit supplying the full capacity of the plant from any one of the delivery systems.

Historical Operating Performance

Burns & McDonnell reviewed the plant's historical operating performance to verify that the generating units have competitive heat rates and are capable of providing the level of reliability to meet Big Rivers' electric production requirements. A summary of the last five years historical data is provided below in Table II-7.

Table II-7: D.B. Wilson Historical Operating Performance Data

	Unit	Wilson Unit 1
Gross Generation Capacity	(MW)	440 MW
Net Generation Capacity	(MW)	417 MW
Net Capacity Factor	(%)	82.46%
Heat Rate	(Btu/kWh)	11,387
Equivalent Availability Factor	(%)	85.00%
Equivalent Forced Outage Rate	(%)	5.36%

Remaining Useful Life

Of particular note is the Boiler Condition Spreadsheet that contains a status report on all of the major components in the boiler as well as the HEP and hangers. A program like this for monitoring status and identifying areas to address in future budgets is consistent with sound maintenance practices. The HEP and hanger review addresses the concern over creep damage with an aging plant. This program is critical and is currently being performed on all the units. The spreadsheet does indicate that a HEP and hanger review occurs on all the units. The details provided for the Wilson unit is the most comprehensive and complete. The Wilson Plant is in excellent condition for its age and service requirements. Provided that operations and maintenance continue as is, this unit is estimated to be suitable for ongoing service through the year 2051.

KENNETH C. COLEMAN PLANT

Facility Description

The Kenneth C. Coleman Plant consists of three coal-fired, steam turbine generating units located near Hawesville, Kentucky, approximately 60 miles east of Henderson, Kentucky. The plant is located on the west bank of the Ohio River. The land to the south is owned by Century Aluminum and is the site of an aluminum reduction plant, a primary customer of power from the Coleman Plant. The plant is located on the flood plain of the Ohio River and operation could be affected by extreme flood levels. In the past, the plant has experienced temporary isolation due to flooding of local access roads. However, the main plant area is located at a sufficient elevation to ensure that 100-year floods should not affect the plant's generation capabilities. Although a flood in excess of 100-year levels potentially could cause temporary interruptions of generating capability, this would not be anticipated to result in major disaster.

Coleman 1 was commercialized in 1969 and is rated for 150 MW of net capacity. The unit is equipped with a Foster Wheeler boiler capable of producing 1,220,000 pounds per hour of steam, and a Westinghouse turbine-generator with nameplate capacity of 160,000 kW. Coleman 2 was commercialized in 1970 and is rated for 138 MW of net capacity. The unit is equipped with a Foster Wheeler boiler capable of producing 1,220,000 pounds per hour of steam, and a Westinghouse turbine-generator with nameplate capacity of 160,000 kW. Coleman 3 was commercialized in 1972 and is rated for 155 MW of net capacity. The unit is equipped with a Riley boiler capable of producing 1,160,000 pounds per hour of steam, and a General Electric turbine-generator with nameplate capacity of 160,000 kW.

Steam Turbines

Turbines are being overhauled on a regular schedule, and the description of the maintenance activities required for the turbine appears to be normal for the age and type of machine. Turbine-generator 1 was last overhauled in 2008. At that time several of the L-2 blades required replacement. The turbine reheat stop valve bonnet studs were replaced. The turbine shaft was ruggedized and L-O turbine-generator end blades repaired. Turbine-generator 2 was last overhauled in 2007. During the overhaul they installed thermocouples in the turbine bearing and pedestals, restored the turbine-generator valve seats, and repaired the online filtration system. Turbine-generator 3 is scheduled to be overhauled in 2012. The turbines at the Coleman station appear to be maintained in satisfactory condition. The turbine overhaul schedules are typical for utility stations.

Boilers

Boiler 1 appears to be in reasonably good condition. Waterwall and arch tube samples taken during the 2008 outage proved the tubes to be in good condition, with waterside deposits limited, only minor pitting, and insignificant wall loss. Superheater tubes assessed during the 2008 outage showed significant wall loss due to fireside coal-ash corrosion. Creep analysis indicated that the tubes are below the minimum curve for creep. A repeat assessment of the superheater tubes has been recommended for 2013. All soot blower lanes are shielded, and the shields are replaced when deficiencies are found. All piping supports appear to be in good condition and operating properly.

Boiler 2 appears to be in good condition. Waterwall and arch tube samples taken during to 2007 outage showed no significant deficiencies. The economizer life assessment reported the tubes to be in excellent condition and showed negligible corrosion and no evidence of microstructural degradation. The superheater and reheater showed no evidence of overheating or creep. All soot blower lanes are shielded, and all piping supports appear to be in good condition.

Boiler 3 appears to be in good condition. Economizer, Waterwall, and arch tube samples taken during the 2009 outage showed minimal wall thinning, typical microstructure, and no thermal degradation. The stainless steel tubes in the reheater showed no evidence of creep or overheat, and none of the measured wall thickness values were below Minimum Wall Thickness (MWT). Ultrasonic Testing and Magnetic Testing of the welds on the high energy piping showed no relevant indications. All supports were found to be in good condition and did not require service.

Draft System

Low NO_X burners were installed and resulted in NO_X levels for all three units of below 0.5 lbs per MMBtu. In 2004 all three boilers were retrofitted with over fire air combustion equipment to further reduce NO_X emissions. In 2006 the Station was retrofitted with a Wheelabrator Air Pollution Control designed limestone scrubber that combines all three generation units into a single FGD absorber capable of 95 percent SO_2 removal.

Waste Disposal

Aside from the circulating water, all plant discharges, including the coal pile runoff, are directed to a newer ash pond. This newer ash pond is a clay-lined structure, which was designed to meet NPDES requirements at the time of its construction in 1980. The bottom ash system sluices directly into the ponds. The required operating time appears to have adequate margin for reliable operation. The site is large enough to accommodate the waste disposal requirements for quite a few years, as long as the plant continues the current practice of dredging the ash pond and disposing of ash off site. The fly ash system is conventional sluice water driven hydrovactor that discharges to an air-separating tank. The fly ash is then ponded with the bottom ash.

Water Supply Systems

The plant cooling water system is a direct, once-through cooling design supplied by the Ohio River. This system was in existence before restrictions on temperature rise or discharge requirements were placed in effect for the Ohio River. Because these units are grandfathered, it is not anticipated that the circulating water supply system design will have to be changed in the future. The plant water supply for service water, demineralizer makeup, and other clear water surfaces originally came from wells located fairly close to the Coleman Plant. As time passed, those wells began to show high mineral content and, therefore, new wells were constructed further out toward the perimeter of the property. These newer wells also began to show high mineral content. The source of the elevated mineral content in the groundwater is believed to have been at least partially derived from an adjacent superfund site. This deteriorating plant service water quality has caused the plant to make two modifications within the last few years. First, a reverse osmosis (RO) unit was installed to act as a pre-filter for the demineralizers. This has brought the demineralizers within normal operating capability to supply water to the system, since the (RO) unit removes about 90 percent of the total dissolved solids in the input water. The second modification was to bring in rural water district potable water into the plant. A sizable water main was installed from the main supply near the access highway to bring potable water to the plant. The well system is still used to supply all the plant service water requirements except potable water.

Fuel Supply and Handling

The Coleman Plant burns coal as the main fuel. Propane and natural gas are available as ignition fuels only. These fuels cannot generate enough steam to accomplish anything more than to start up the units. With the addition of the FGD in 2006 the plant now has the ability to burn high sulfur coal. The majority of the plant's coal supply is purchased on short-term contracts (less than five years), supplemented by spot-market purchases. There appears to be adequate coal supply available to accommodate operation of the Coleman Plant for the foreseeable future. The mills have had gear reducer replacements and liner replacements on an as needed basis.

Historical Operating Performance

Burns & McDonnell reviewed the plant’s historical operating performance to verify that the generating units have competitive heat rates and are capable of providing the level of reliability to meet Big Rivers’ electric production requirements. A summary of the last five years historical data is provided below in Table II-8.

Table II-8: Kenneth C. Coleman Historical Operating Performance Data

	Unit	Coleman Unit 1	Coleman Unit 2	Coleman Unit 3
Gross Generation Capacity	(MW)	160 MW	160 MW	165 MW
Net Generation Capacity	(MW)	150 MW	138 MW	155 MW
Net Capacity Factor	(%)	71.64%	74.14%	70.61%
Heat Rate	(Btu/kWh)	10,738	11,622	10,606
Equivalent Availability Factor	(%)	86.61%	91.25%	86.33%
Equivalent Forced Outage Rate	(%)	4.79%	2.54%	7.94%

All three Coleman units have been performing well. Combined they have had a 5 year net heat rate of 10,923 Btu per kWh. The availability of the units has also been good. Coleman 1 had an EFOR of 2.5 percent in 2009 and 1.6 percent in 2010. Coleman 2 had an EFOR of 0.99 percent in 2009 and 2.8 percent in 2010. Coleman 3 had an EFOR of 2.6 percent in 2009 and 1.5 percent in 2010.

Remaining Useful Life

Coleman Units 1, 2, and 3 are in good condition for their age and type. Provided that the inspections and maintenance activities continue as they have been, then the units can be expected to give satisfactory service for at least another 25 years. Of particular note is the Boiler Condition Spreadsheet that contains a status report on all of the major components in the boiler as well as the HEP and hangers. A consistent program like this for monitoring status and identifying areas to address in future budgets is very good. The HEP and hanger review addresses the concern over creep damage with an aging plant. This program is critical and is currently being performed on all the units. The spreadsheet does indicate that a HEP and hanger review occurs on all the units.

ROBERT A. REID COMBUSTION TURBINE

Facility Description

This General Electric Frame 7 combustion turbine was placed in operation in 1976, with a net output rating of 65 MW. It is capable of firing #2 fuel oil or natural gas. Considered part of the

Reid station, this unit is also located at the Sebree, Kentucky site with the HMP&L Station Two and Green stations.

Remaining Useful Life

The relatively low number of operating hours for the Reid combustion turbine indicates that, with continued maintenance it should provide reasonably available capacity for a number of years into the future. There currently are enough similar units being operated in a similar manner throughout the country to ensure that replacement and maintenance parts will continue to be available.

TRANSMISSION ASSETS

This section of the report on the Study provides a review of the engineering assessment of the major electric substation assets of Big Rivers that were in service as of April 30, 2010. The Kentucky Public Service Commission mandated that Big Rivers conduct a new depreciation study as part of its submission in connection with the its intent to file for a general review of its operations and tariffs within three years. During the Study, the following efforts were conducted to examine Big Rivers' substations in service from an engineering perspective:

1. Review of Big Rivers' retirement records and history
2. Analysis of current operating and maintenance programs as well as each facility's current operating conditions
3. Analysis of the external or environmental factors that may impact the depreciation rates
4. Estimation of the remaining service life of major transmission facilities

The engineering assessment presented in this part of the Study report addresses each of the above areas. The analyses leading to formulation of proposed new depreciation rates for Big Rivers are described in Part III.

Remaining Unit Life

Estimated remaining useful lives for Big Rivers' transmission assets were based primarily on national industry standards regarding the expected useful life of major electric substation equipment.

Burns & McDonnell recommends that Big Rivers continue to follow a comprehensive program of testing on all major equipment approaching the manufacturer service limits. Individual components should be either repaired or replaced as damage is identified. Certain tests should continue to be performed on an annual basis, such as analysis of oil samples retrieved from transformers. Other tests, such as thermal imaging of electrical connections, can be done less frequently.

Electrical insulation is subject to loss of dielectric capability, particularly when subjected to heat. Testing programs are generally able to determine the capability of the components, so replacement or repairs can be initiated before the component affects the plant capability or availability. These programs must be implemented and the frequency increased as the equipment ages.

Several of the Big Rivers transmission substations are approaching the age when an electrical insulation testing program should be performed. Assuming the testing recommended is conducted and assuming any damaged components are either repaired or replaced, there would be no reason, from an electrical engineering perspective, that all of Big Rivers' transmission substations cannot remain in service as long as they are economically viable to operate.

Burns & McDonnell further considered the results of the on-site assessments of the major Big Rivers transmission substations in the estimation of the remaining useful lives. The assessments of the major transmission substations are presented in the remainder of this part of the Study.

ROBERT A. REID EHV SUBSTATION

Facility Description

The Reid EHV Substation is a 345kV to 161kV electric substation. The substation contains two 345/161kV transformers, two 345kV circuit switchers and seven 161kV circuit breakers. The substation also contains a 161kV circuit breaker that is owned by the City as part of the City's transmission loop.

A control building located within the substation contains all of the electrical controls associated with the both the circuit switchers and breakers. The control building also houses all of the protection equipment needed to provide adequate electrical protection for both the substation transformers and the associated transmission lines that enter and exit the substation.

Condition Assessment

Physical observation of the Reid EHV substation was made on August 23, 2010. The nameplates on the major substation equipment state the equipment was constructed and installed in 1982. The substation appears to be in good working condition. There are no signs of deterioration or rust located on the steel structures or any of the major equipment. Also, there are no signs of current or past oil leaks from any of the oil insulated equipment.

Maintenance

Based on all observations of the electric substation, maintenance of the major equipment appears to have been performed on a regular basis. The transformers and circuit breakers will need to continue to have regular maintenance in order to maintain good working order.

Remaining Life Assessment

The Reid EHV substation is approximately 28 years old. Assuming a continued level of maintenance on the substation, the Reid substation as a whole can expect to be still functioning properly for an additional 30 years. This results in a projected retirement year for the substation of 2040. For the major equipment located within the substation, such as the transformers, circuit breakers, and control building, this equipment requires a greater level of care and maintenance in order to function for an additional 30 years. Typically, substation transformers and circuit breakers begin being replaced within the electric industry once they have achieved 40 years of useful life. However, given regular and proper maintenance, this equipment can last 60 years.

Associated equipment, such as steel structures, concrete foundations, chain link fences, etc, are subject to weather conditions and deteriorate at the same speed as those same types of structures located in other types of facilities.

KENNETH C. COLEMAN EHV SUBSTATION

Facility Description

The Coleman EHV Substation is located near Hawesville, Kentucky, approximately 60 miles east of Henderson, Kentucky. The electric substation is located adjacent to the Kenneth C. Coleman Generating Facility. The Coleman EHV Substation is a 345kV to 161kV electric substation. The substation contains two 345/161kV transformers, two 345kV circuit switchers and eight 161kV circuit breakers.

A control building located within the substation contains all of the electrical controls associated with the both the circuit switchers and breakers. The control building also houses all of the protection equipment needed to provide adequate protection for both the substation transformers and the associated transmission lines that enter and exit the substation.

Maintenance

Based on all observations of the electric substation, maintenance of the major equipment appears to have been performed on a regular basis. The transformers and circuit breakers will need to continue to have regular maintenance performed on these devices in order to maintain good working order.

Condition Assessment

Physical observation of the Coleman EHV substation was made on August 23, 2010. The nameplates on the major substation equipment state the equipment was constructed and installed in 1987. The substation appears to be in good working condition. There are no signs of deterioration or rust located on the steel structures or equipment. Also, there are no signs of current or past oil leaks from any of the oil insulated equipment.

Remaining Life Assessment

The Coleman EHV substation is approximately 23 years old. Assuming a continued level of maintenance on the substation, the Coleman substation as a whole can expect to be still functioning properly for an additional 35 years. This resulted in a projected retirement year for the unit of 2045. For the major equipment located within the substation, such as the transformers, circuit breakers, and control building, this equipment requires a greater level of care and maintenance in order to function for an additional 35 years. Typically, substation transformers and circuit breakers are replaced within the electric industry any time after 40 years of useful life has passed. However, given regular and proper maintenance, this equipment can last 60 years. Associated equipment, such as steel structures, concrete foundations, chain link fences, etc, are subject to weather conditions and deteriorate at the same speed as those same types of structures located in other types of facilities.

D. B. WILSON STATION EHV SUBSTATION

Facility Description

The Wilson EHV Substation is located at Island, Kentucky, approximately 55 miles from Henderson, Kentucky. This station is located through the entrance to the D.B. Wilson Generating Plant, and is a 345kV to 161kV electric substation. The station currently has two 345/161kV transformers, four 345kV circuit breakers and five 161kV circuit breakers.

A control building located within the substation contains all of the electrical controls associated with the both the circuit switchers and breakers. The control building also houses all of the protection equipment needed to provide adequate protection for both the substation transformers and the associated transmission lines that enter and exit the substation.

Maintenance

Based on all observations of the electric substation, maintenance of the major equipment appears to have been performed on a regular basis. One of the 161kV circuit breakers has been replaced, thus eliminating one of the original oil circuit breakers and installing the newer SF6 type gas circuit breakers. The transformers and circuit breakers will need to have regular maintenance continued on these devices in order to maintain good working order.

Condition Assessment

Physical observation of the Wilson EHV substation was made on August 23, 2010. The nameplates on the major substation equipment state the equipment was constructed and installed in 1982. The substation appears to be in good working condition. There are no signs of deterioration or rust located on the steel structures or equipment. Also, there are no signs of current or past oil leaks from any of the oil insulated equipment.

Remaining Life Assessment

The Wilson EHV substation is approximately 28 years old. Assuming a continued level of maintenance on the substation, the Wilson substation as a whole can expect to be still functioning properly for an additional 30 years. This resulted in a projected retirement year for the unit of 2040. For the major equipment located within the substation, such as the transformers, circuit breakers, and control building, this equipment requires a greater level of care and maintenance in order to function for an additional 30 years. Typically, substation transformers and circuit breakers are replaced within the electric industry any time after 40 years of useful life. However, given regular and proper maintenance, this equipment can last 60 years. Associated equipment, such as steel structures, concrete foundations, chain link fences, etc, are subject to weather conditions and deteriorate at the same speed as those same types of structures located in other types of facilities.

HANCOCK SUBSTATION

Facility Description

The Hancock Substation is located near Hawesville, Kentucky, approximately 60 miles east of Henderson, Kentucky. This substation is located within five miles of the Kenneth C. Coleman Generating Station, and is a 161kV to 69kV electric substation. The station currently has two 161/69kV transformers, five 161kV circuit breakers and four 69kV circuit breakers.

A control building located within the substation contains all of the electrical controls associated with the both the circuit switchers and breakers. The control building also houses all of the protection equipment needed to provide adequate protection for both the substation transformers and the associated transmission lines that enter and exit the substation.

Condition Assessment

Physical observation of the Hancock substation was made on August 23, 2010. The 161kV circuit breakers contained nameplates that state the breakers were manufactured in 2001. However, the substation is far greater in age than the circuit breakers. Located throughout the substation were brown colored glass insulators. This particular style of insulator has not been manufactured by major electric manufacturers since the 1960's. The existing steel structures were beginning to show signs of rust and deterioration, which is expected given the estimated age of the substation.

Maintenance

All of the 161kV circuit breakers had been replaced in 2001, eliminating the original oil circuit breakers and installing newer SF6 type gas circuit breakers. Based on the estimated age of the substation, additional maintenance will need to be performed on the transformers and the remaining oil circuit breakers will need to have regular maintenance continued on these devices in order to maintain good working order. Also, there are no signs of current or past oil leaks from any of the oil insulated equipment.

Remaining Life Assessment

The Hancock Substation is approximately 40 years old. Typically, substation transformers and circuit breakers are replaced within the electric industry any time after 40 years of useful life. However, given regular and proper maintenance, this equipment can last between 50 and 60 years. Brown insulators are considered obsolete by industry standards, and may need to be considered as part of future maintenance work. However, assuming a continued level of maintenance on the substation, the Hancock substation appears to be in good working order and could continue to function properly for an additional 20 years. This resulted in a projected retirement year for the unit of 2030. For the major oil filled equipment located within the substation, such as the transformers and circuit breakers, this equipment requires a greater level of care and maintenance in order to function for an additional 20 years.

HARDINSBURG SUBSTATION

Facility Description

The Hardinsburg Substation is located near Hardinsburg, Kentucky, approximately 80 miles east of Henderson, Kentucky. This substation is a 161kV to 69kV electric substation. The station currently has two 161/69kV transformers, five 161kV circuit breakers and seven 69kV circuit breakers.

A control building located within the substation contains all of the electrical controls associated with the both the circuit switchers and breakers. The control building also houses all of the protection equipment needed to provide adequate protection for both the substation transformers and the associated transmission lines that enter and exit the substation.

Condition Assessment

Physical observation of the Hardinsburg substation was made on August 23, 2010. The equipment located within the substation contained nameplates stating their construction in 1968. The steel structures were beginning to show signs of rust and deterioration, which is expected given the estimated age of the substation. However the concrete foundations, ground and conduit connections appeared to be in good operating shape.

Maintenance

Based on the age of the substation, maintenance will need to be performed on the transformers and oil circuit breakers in order to maintain good working order. There were no signs of past or current oil leaks from existing equipment. This demonstrates that the equipment is being properly inspected and maintained on a regular basis.

Remaining Life Assessment

The Hardinsburg Substation is 42 years old. Typically, substation transformers and circuit breakers are replaced within the electric industry any time after 40 years of useful life. However, given regular and proper maintenance, this equipment can last between 50 and 60 years. Several of the insulators are considered obsolete by industry standards, and may need to be considered as part of future maintenance work. However, assuming a continued level of maintenance on the substation, the Hardinsburg substation appears to be in good working order and could continue to function properly for an additional 20 years. This resulted in a projected retirement year for the unit of 2030. For the major oil filled equipment located within the substation, such as the transformers and circuit breakers, this equipment requires a greater level of care and maintenance in order to function for an additional 20 years.

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PART III – DEPRECIATION RATE ANALYSIS

PART III
DEPRECIATION RATE ANALYSIS

Part III of this report on the Comprehensive Depreciation Study (the Study) describes the methodology and presents the results of the analysis performed in the formulation of proposed new depreciation rates for the electric generation and transmission assets of Big Rivers. The depreciation rate analysis was performed based on the electric generation and transmission historical plant records of Big Rivers as of April 30, 2010. The methodologies and basis for completing this Study is similar to the process utilized in completing the 1998 Depreciation Rate Study.

STUDY SCOPE & PURPOSE

This depreciation rate analysis was conducted to analyze the service life characteristics, net salvage indications, and depreciation reserve status based on historical data from Big Rivers' CPR system data, and then to derive appropriate depreciation rates for Big Rivers' system plant in service.

The procedures used to analyze Big Rivers' historical data pertaining to useful service lives and net salvage rates are discussed for the assets represented by each plant account. This narrative description of the depreciation rate analysis completed for Big Rivers includes a variety of concepts related to common utility depreciation terminology and study techniques. Various reference materials are readily available that provide thorough explanations of these concepts.[1]

For plant assets in certain accounts there was found to be an insufficient amount of historical plant additions and retirement data in the CPR system on which to perform statistically valid actuarial studies. In these cases, engineering estimates were made based on the historical data from similar accounts and the Engineer's Assessment in Section II. This data, combined with the engineering judgment of the depreciation consultants, was relied upon in the completion of the analysis of those accounts with limited historical data. In addition, consideration to extending

[1] For further information, refer to industry publications "Public Utility Depreciation Practices", National Association of Regulatory Utility Commissioners (NARUC), August 1996 and "Depreciation Systems", Wolf, Frank and Fitch, Chester, Iowa State University Press, 1994.

useful lives can be given based on an engineering assessment of proper maintenance, overhauls and replacements.

DEPRECIATION RATE STUDY METHODS

Two primary methods have been used to calculate depreciation accruals: the Whole Life method (most General Plant accounts) and the Life Span method combined with the Remaining Life technique (all Transmission accounts and all Production accounts and Account 390 – Structures).

Whole Life Method

For each account where used, the Whole Life method uses the account average service life (ASL) and the average net salvage percentage (NS) for the account to calculate the annual depreciation rate according to the following formula:

$$\frac{1 - NS}{ASL}$$

Whole life depreciation rates are appropriate for mass property type of accounts where there are a large number of relatively small property units with no definite or planned final retirement, retirements of individual units are independent of each other, and additions are generally independent of existing units. Typical property falling in this category includes tools, vehicles, computers, and furniture.

Estimates of average service life and dispersion were studied using the retirement rate method of actuarial analysis based upon the historical nature of the characteristics of the plant retired from each account since inception. Accounts for which insufficient retirement activity had occurred on which to conduct actuarial analysis, or the results of such an analysis were inconclusive, other publicly available industry information and the engineering judgment of the depreciation consultant were relied upon to estimate reasonable average service lives and/or average net salvage values.

Life Span Method

The Life Span method calculates lives for an asset group or account based on the assumption that all property units in the group will retire concurrently at a single forecasted point in time, whether the units are part of the initial installation or later additions. Typical property falling in this category includes poles, transformers, conductors, power production facilities and buildings. Forecasting reasonable retirement dates is the most critical aspect of the Life Span method.

During the life of an operational power plant and building, portions of the facility are retired and replaced. These items typically include roofs, HVAC equipment, boiler tubes and walls, pumps, piping, and parking lots allocated to the cost of the facility. Because not all items of plant live the entire length of time a power plant or building remains in service, these so-called interim retirements tend to decrease the life of the dollars in the group or account. Therefore, it is important in a depreciation study to analyze the historical interim retirement amounts and whether the interim retirement rates are expected to continue at the same pace over the remaining life of the unit. Interim retirements can be studied mathematically using the system of Iowa curves, the Gompertz-Makeham formula, or derived interim retirement rate curves. As the information was readily available, interim retirement life tables were developed separately for each of the accounts under the Life Span method.

Although detailed interim retirement records are maintained for each Cooperative building and production facility, interim retirements for most locations are relatively few and little applicable life knowledge would be derived from attempting an analysis on such a thin available data set. Therefore, to improve the validity of the interim retirement rate analysis, an interim retirement rate calculation was performed for each account as a whole, rather than by account and then by location.

Technical engineering experts assessed the Big Rivers electric plant facilities regarding their design, performance, operation and maintenance, and condition, and provided estimates of final retirement dates for each production plant and each general plant structure to the depreciation consultant as input to the depreciation model. The Engineering Assessment of the major system facilities are detailed in Part II of the Study. For each production account and buildings account, an average year of final retirement (AYFR) was calculated for each major facility using the direct weighted average of individual retirement years and plant balances to retire. This AYFR and the aforementioned interim retirement rates are inputs to the remaining life (RL) calculation for each account.

The Remaining Life depreciation rate automatically adjusts for past under- and over-accruals by building those amounts into the depreciation rate calculation using the reserve ratio (RR). The RR is the depreciation reserve amount divided by the plant balance at the point in time of the study, (April 30, 2010 for this study). The net salvage parameter in the Remaining Life rate equation is the future net salvage rate (FS). The Remaining Life depreciation rate is expressed mathematically as:

$$\frac{1 - FS - RR}{\text{Remaining Life}}$$

Sources of Industry Information

Actuarial methods are most accurate and applicable to determination of historic trends for assessing average service lives and salvage specific to a plant account when there is significant annual turnover of plant in that account. However, the limited activity in several accounts prevented actuarial analysis.

Accounts for which insufficient retirement activity had occurred on which to conduct actuarial analysis, or for which the results of such an analysis were inconclusive, other publicly available industry information, the Engineer's Assessment in Section II and the engineering judgment of the depreciation consultant were relied upon to estimate reasonable average service lives. Three engineering publications that provide electric industry information were also considered as a resource for making certain assumptions or for the evaluation of lifespan and salvage value parameters:

1. "Depreciation Statistics from 100 Large United States Electric Utilities – FERC Jurisdiction", Society of Depreciation Professionals Journal, Mougin, Clarence, 1992. (hereinafter "SDP report").

2. “A Survey of Depreciation Statistics”, Edison Electric Institute, Robinson, Earl, 1995. (hereinafter “EEI report”).

3. “Power Plant Removal Costs Revisited”, Society of Depreciation Professionals Journal, Ferguson, John, 1997. (hereinafter “Ferguson report”).

Net Salvage Analysis

The net salvage value for each transmission and general plant account was calculated as an average of the available historical data by system account provided by Big Rivers. The net salvage figures used in the depreciation rate formula for production and the building account are for final net salvage, i.e. the gross proceeds realized less any removal cost to raze the structures represented in the account, if any.

Burns & McDonnell’s engineers and depreciation consultants performed analysis of available data and information provided by Big Rivers in order to assess whether specific detailed estimates of non-legal terminal removal costs for each of the Big Rivers generating stations could be developed with reasonable substantiation. Sufficient data was provided by Big Rivers such that the historical removal costs could be utilized in the development of projected non-legal terminal net salvage values. Accordingly, the net salvage values in the depreciation study were developed exclusive of any engineering estimates of potential legal asset retirement obligations for substantial environmental remediation based upon future, unknown environmental regulatory requirements. Instead the historical removal costs provided by Big Rivers were considered in the projected net salvage values.

Removal Costs

From mid 1998 until July of 2009 (lease period) removal costs associated with plant additions were capitalized by Western Kentucky Energy (WKE) and then reported as capital additions to Big Rivers. Big Rivers had no control over this methodology. Going forward, Big Rivers will record removal costs according to RUS guidelines as they did previously from 1965 to mid 1998. Removal costs have a direct and significant effect on depreciation rates. With the knowledge that in the future Big Rivers will record removal costs as they did previously from 1965 to 1998, removal costs from 1998 to 2010 need to be included in the analysis. Since there is no actual data available for the Production Plant removal costs from 1998 to 2010, removal costs were estimated based on 33 years of actual removal costs incurred from 1965 to mid 1998 for each Production Plant account.

Sufficient data was provided by Big Rivers such that the historical removal costs could be utilized in the development of projected non-legal terminal net salvage values. Accordingly, the net salvage values in the depreciation study were developed exclusive of any engineering estimates of potential legal asset retirement obligations for substantial environmental remediation based upon future, unknown environmental regulatory requirements.

Actual removal costs for Big Rivers for the period 1965 to 1998 totaled $1.6 million. The estimated removal costs for the period 1998 to 2010 totaled $4.8 million (which is 0.25 percent of Big Rivers' $1.9 billion of utility plant in service). Big Rivers has concluded, and Burns & McDonnell concurs, that the effect of capitalizing such estimated $4.8 million of removal cost is immaterial to Big Rivers' financial statements taken as a whole. Accordingly, Big Rivers will forego making an adjustment to its continuing property records.

DEPRECIATION RATE ANALYSIS

Table III-1 summarizes the results of the depreciation rate analysis by capital plant account balance as of April 30, 2010. Table III-1 summarizes the results of the depreciation rate analysis by showing the existing depreciation rates and annual depreciation expense compared to the proposed depreciation rates and annual depreciation expense. Table III-1 also shows the year-end plant account balances, reserve ratios, average service lives, remaining service lives and net salvage factors.

Table III-1: 2010 Depreciation Rate Study Summary

Account	Description	As of April 30, 2010 Plant Balance	Reserve Balance	Reserve Ratio	Existing Depreciation Rate	Average Service Life	Remaining Service Life	Net Salvage Factor	Proposed Depreciation Rate	Annual Depreciation Expense Existing	Proposed	Variance
		- $ -	- $ -		- % -	- Years -	- Years -	- % -	- % -	- $ -	- $ -	- $ -
310	Land & Land Improvements	4,537,577	0	0.0	N/A	N/A	N/A	N/A	N/A	-	-	-
PRODUCTION PLANT [1]												
340	Land	475,968	-	-	-	-	-	-	-	-	-	-
311	Structures	124,375,974	78,124,758	62.8	1.71%	62	30	-4.5%	1.38%	2,126,829	1,717,828	(409,001)
312	Boiler Plant	667,206,536	347,026,279	52.0	1.79%	60	28	-5.0%	1.88%	11,942,997	12,543,396	600,399
312 A-K	Boiler Plant - Env Compl	574,184,346	216,760,670	37.8	1.89%	53	28	-2.0%	2.28%	10,852,084	13,074,185	2,222,101
312 L-P	Short-Life Production Plant -Environmental	3,208,938	165,475	5.2	1.89%	10	5	0.0%	20.22%	60,649	648,949	588,300
312 V-Z	Short-Life Production Plant -Other	868,755	210,738	24.3	1.89%	10	5	0.0%	14.39%	16,419	125,054	108,634
314	Turbine	225,272,354	124,744,924	55.4	1.66%	60	28	-8.2%	1.91%	3,739,521	4,309,293	569,772
315	Electric Eqpt	60,355,721	35,350,377	58.6	1.60%	51	19	3.0%	1.99%	965,692	1,202,952	237,260
316	Misc Eqpt	3,014,912	42,128	1.4	1.83%	58	26	0.5%	3.78%	55,173	113,919	58,746
341	CT - Structures	154,233	115,766	75.1	2.31%	53	21	0.0%	1.17%	3,563	1,804	(1,759)
342	CT - Fuel Holders & Access.	1,436,912	564,590	39.3	2.32%	53	21	-134.8%	9.10%	33,336	130,751	97,414
343	CT - Prime Movers	4,915,886	3,637,977	74.0	2.47%	53	21	-38.3%	3.02%	121,422	148,408	26,986
344	CT - Generators	1,102,964	984,479	89.3	2.23%	53	22	0.0%	0.50%	24,596	5,511	(19,085)
345	CT - Access. Elec. Eqpt.	317,726	179,425	56.5	2.23%	53	21	0.0%	2.05%	7,085	6,510	(575)
	Subtotal	1,666,891,222	807,907,587							29,949,367	34,028,559	4,079,192
TRANSMISSION [1]												
350	Land	558,665	-	-	-	-	-	-	-	-	-	-
352	Structures	6,725,346	3,664,345	54.5	1.76%	53	25	-2.4%	1.90%	118,366	127,998	9,632
353	Station Eqpt	115,297,358	51,467,633	44.6	2.22%	53	25	-0.2%	2.23%	2,559,601	2,573,726	14,125
354	Towers	8,593,544	4,868,075	56.6	2.28%	58	30	0.0%	1.42%	195,933	122,186	(73,747)
355	Poles	41,558,164	22,321,791	53.7	3.24%	50	23	0.0%	2.06%	1,346,485	854,950	(491,535)
356	Lines	41,070,042	23,399,406	57.0	2.47%	53	26	0.0%	1.69%	1,014,430	692,966	(321,464)
	Subtotal	213,803,120	105,721,250							5,234,815	4,371,826	(862,989)
GENERAL PLANT [2]												
389	Land	407,251	-	-	-	-	-	-	-	-	-	-
390	Structures [1]	3,944,895	1,786,210	45.3	2.59%	43	12	21.8%	2.84%	102,173	111,928	9,755
391.0/391.6/391.7	Office Furniture & Eqpt	616,135	(282,102)	-45.8	1.11%	10	8	8.9%	17.12%	6,839	105,460	98,621
391.2	Computer	7,013,902	436,114	6.2	1.11%	10	9	1.2%	10.29%	77,854	721,713	643,859
392.2	Vehicles - General	1,699,130	995,277	58.6	5.62%	10	6	14.2%	4.39%	95,491	74,575	(20,916)
392.3	Vehicles - Transmission	1,257,240	625,460	49.7	5.62%	10	5	16.9%	6.14%	70,657	77,173	6,517
393	Stores Eqpt	98,766	69,468	70.3	3.57%	16	6	4.4%	4.40%	3,526	4,349	823
394	Tools	717,086	385,947	53.8	2.85%	16	9	2.7%	4.61%	20,437	33,072	12,635
395	Lab Eqpt	221,279	160,195	72.4	2.86%	16	6	2.1%	4.41%	6,329	9,768	3,440
396	Power Operated Eqpt [3]	504,739	392,925	77.8	3.70%	16	5	24.9%	3.70%	18,675	18,675	-
397	Communication Eqpt [4]	1,639,437	1,640,029	100.0	4.35%	16	1	-0.1%	4.35%	71,316	71,316	-
398	Miscellaneous Eqpt	163,645	3,925	2.4	5.44%	16	8	3.2%	11.80%	8,902	19,309	10,407
	Subtotal	18,283,504	6,213,447							482,199	1,247,338	765,140

[1] Life Span Method depreciation
[2] Whole Life Method depreciation
[3] This rate was left unchanged because the calculated rate was negative.
[4] Depreciation rate is equal to the previous rate due to Big Rivers current $7 million Replacement Program.

TOTAL		$1,903,515,423	$919,842,284							$35,666,381	$39,647,724	$3,981,343

The existing depreciation rates in effect for Big Rivers' system assets were developed in the previous depreciation study based on the year-end 1997 plant in service and were implemented effective July 1, 1998.

The annual depreciation expense calculated in Table III-1 based on the application of the **existing depreciation rates** to the April 30, 2010 plant balances is approximately $35.7 million.

The application of the **proposed depreciation rates** to the April 30, 2010 plant balances resulted in calculated total annual depreciation expense of approximately $39.6 million, representing an estimated increase in Big Rivers' total annual depreciation expense of approximately $4.0 million.

Discussion of the depreciation analysis performed on each Big Rivers plant category or account that resulted in the information shown in Table III-1 is presented below. Detailed calculations for all the accounts shown in Table III-1 are provided in Appendix A.

Steam Production Plant Accounts: 311 to 316

Actuarial analyses based on historical data obtained from Big Rivers CPR system were used to develop the depreciation rates and remaining life for Accounts 311 to 315. Insufficient plant additions prior to retirement activity prevented a reliable actuarial analysis of Account 316 (Miscellaneous Equipment).

The current best estimates of future retirement dates for each generating station as described in Part II: Engineering Assessment were also used as inputs to the Life Span model along with the actuarial analysis and engineers' judgment for each plant account. The life of these individual units can vary based on a number of factors including but not limited to operating hours and maintenance experience. The Green, HMP&L Station Two and Coleman facilities have multiple units, but are forecasted to retire in the same year, This is reasonable for three reasons. First, the units were installed within two to three years of each other. Second, most plant accounts are assigned to the entire generating station, not to individual units of the facility. Most importantly, it is realistic to assume that the entire facility would shut down before significant demolition activities begin to occur. Piecemeal removal at an operating facility would be costly and much of the plant infrastructure would need to remain in service in order to maintain the last unit's ability to function.

Due to the caustic nature of scrubber operations, scrubber equipment dealing with sulfur dioxide removal and related piping will be expected to have a shorter life than that expected for the vast majority of the production plant. That life expectancy is directly related to the design, wear and tear from variable amounts of daily operation, and the levels of removal based on the particular coal mix being burned.

Account 312 contains some much newer environmental compliance assets such as scrubber equipment that have a shorter expected life than the other assets in Account 312. These assets were broken out into Account 312 A-K. In addition, assets such as mist eliminator panels and slag grinders with even shorter useful lives were subdivided into Account 312 V-Z and to Account 312 L-P (if they were related to environmental compliance). Despite having a shorter useful life than other assets in Account 312, the remaining life of these environmental assets is still constrained by the remaining life of the plant as a whole because the environmental assets would be retired when the overall plant is retired.

The D. B. Wilson Station is significantly newer than the other facilities. As such, its Plant Balance is significantly larger in comparison to the other facilities. A simple average of the Remaining Service Life of each facility is 28 years. An average of the Remaining Service lives of each facility weighted by size (MW) is also 28 years. If the Remaining Service Life of each facility is weighted by the Plant Balances in Account 311 –Structures, Account 312 –Boiler Plant, and Account 314 –Turbine the weighted average Remaining Service Life increases to 30 years. As such, the Remaining Service Life for Account 311 –Structures was assumed to be 30 years and the Remaining Service Life for Account 312 –Boiler Plant and Account 314 –Turbine was assumed to be 28 years.

Big Rivers sold personal property to WKE at the inception of the lease in July, 1998. This transaction was recorded as salvage value. Therefore, the salvage values associated with the transaction have been subtracted from the overall balance of salvage value for the purpose of determining depreciation rates.

Insufficient plant additions prior to retirement activity prevented a reliable actuarial analysis of Account 316 (Miscellaneous Equipment). As a result, other publicly available industry information, the Engineer's Assessment in Section II and the engineering judgment of the depreciation consultant were relied upon to estimate a reasonable average service life for this account.

The net salvage rates for Accounts 311 to 316 were calculated from the available historical data from 1965 to 2010 in the Big Rivers CPR system provided by Big Rivers.

Other Production (Combustion Turbine) Accounts: 341 to 346

The investment in Other Production accounts is related to the one 65 MW combustion turbine (CT) located at the Reid plant. These accounts were studied in a method identical to the Steam Production accounts (except Account 316): actuarial analyses based on historical data obtained from Big Rivers CPR system were used to develop the depreciation rates and remaining life for Accounts 341 to 346.

The net salvage rates for Accounts 341 to 346 were calculated from the available historical data from 1965 to 2010 in the Big Rivers CPR system provided by Big Rivers.

Transmission Accounts: 352 to 356

The investment in Transmission Accounts is derived from Big Rivers' structures, substations and substation equipment, transmission towers, poles and transmission lines. These accounts were studied in a method identical to the Other Production accounts: actuarial analyses based on historical data obtained from Big Rivers CPR system were used to develop the depreciation rates and remaining life for Accounts 352 to 356.

The net salvage rates for Accounts 352 to 356 were calculated from the available historical data from 1965 to 2010 in the Big Rivers CPR system provided by Big Rivers. However, the retirement and salvage data for Account 354 -Towers is extremely limited. This results in an unrealistically high Net Salvage Factor of 56%. After removing the outlying values, the Net Salvage Factor for Account 354 -Towers is 0%. As of April 30, 2010 there was little or no retirement activity for RUS Account 353 – Station Equipment (transformers), Account 354 – Towers, Account 355 –Poles, and Account 356 -Lines in Big Rivers' property records. Therefore, the Life Span Method was used to develop depreciation rates for these accounts.

General Plant Accounts: 390 to 398

Structures – Account: 390

This account contains the investment for Cooperative buildings identified as Headquarters, Transmission Office/Warehouse, Publications, Communication, Central Laboratory, and 4th Street Warehouse. Actuarial analyses based on historical data obtained from Big Rivers CPR system were used to develop the depreciation rates and remaining life for Account 390.

The net salvage rate of 21.8 percent for Account 390 was calculated from the available historical data from 1965 to 2010 in the Big Rivers CPR system provided by Big Rivers.

Office Furniture & Equipment: Accounts 391.0, 391.6 & 391.7

These accounts contain the investment for items typically found in a business office, including desks, tables, bookcases, chairs, copiers, and fax machines. Due to the similarity of content, the three sub-accounts were analyzed together.

Retirement activity was greater than additions and prevented a reliable actuarial analysis of these accounts. As a result, other publicly available industry information, the Engineer's Assessment in Section II and the engineering judgment of the depreciation consultant were relied upon to estimate a reasonable average service life for this account.

The net salvage rate of 8.9 percent for Accounts 391.0, 391.6 and 391.7 was calculated from the available historical data from 1965 to 2010 in the Big Rivers CPR system provided by Big Rivers.

Computer Equipment: Account 391.2

This account contains the investment for the Big Rivers computer system, software, personal computers, tape drives, peripherals, printers, and the facilities management system.

Insufficient plant additions prior to retirement activity prevented a reliable actuarial analysis of these accounts because system additions were marginally greater than retirements. As a result, other publicly available industry information, the Engineer's Assessment in Section II and the engineering judgment of the depreciation consultant were relied upon to estimate a reasonable average service life for this account.

The net salvage rate of 1.2 percent for Account 391.2 was calculated from the available historical data from 1965 to 2010 in the Big Rivers CPR system provided by Big Rivers.

Vehicles, General: Account 392.2

This account contains investment for Cooperative cars, vans, light and medium duty trucks, truck mounted tool cabinets, and a variety of air compressor, generator, and equipment trailers.

Actuarial analyses based on historical data obtained from Big Rivers CPR system were used to develop the depreciation rates and remaining life for Account 392.2.

The net salvage rate of 14.2 percent for Account 392.2 was calculated from the available historical data from 1965 to 2010 in the Big Rivers CPR system provided by Big Rivers.

Vehicles, Transmission: Account 392.3

This account contains investment for heavy-duty trucks, a crane, a lowboy, and a digger derrick.

Actuarial analyses based on historical data obtained from Big Rivers CPR system were used to develop the depreciation rates and remaining life for Account 392.3.

The net salvage rate of 16.9 percent for Account 392.3 was calculated from the available historical data from 1965 to 2010 in the Big Rivers CPR system provided by Big Rivers.

Stores Equipment: Account 393

This account contains investment for items typically found in a warehouse, predominantly shelves and bins. Other items include lockers, pallet movers, and a forklift.

Actuarial analyses based on historical data obtained from Big Rivers CPR system were used to develop the depreciation rates and remaining life for Account 393.

The net salvage rate of 4.4 percent for Account 393 was calculated from the available historical data from 1965 to 2010 in the Big Rivers CPR system provided by Big Rivers.

Tools, Shop & Garage Equipment: Account 394

This account title is most descriptive of the investment in the account. Typical items found in account 394 include non-expensed line truck tools, test equipment, ladders, chain saws, tampers, lifts, tanks, air compressors, and an oil purification unit.

Actuarial analyses based on historical data obtained from Big Rivers CPR system were used to develop the depreciation rates and remaining life for Account 394.

The net salvage rate of 2.7 percent for Account 394 was calculated from the available historical data from 1965 to 2010 in the Big Rivers CPR system provided by Big Rivers.

Laboratory Equipment: Account 395

This account contains a variety of electrical and material laboratory tools, including power supplies, test gear, oscilloscopes, microscopes, analyzers, a gas chromatograph, a solvent extraction system, and a spectrophotometer.

Actuarial analyses based on historical data obtained from Big Rivers CPR system were used to develop the depreciation rates and remaining life for Account 395.

The net salvage rate of 2.1 percent for Account 395 was calculated from the available historical data from 1965 to 2010 in the Big Rivers CPR system provided by Big Rivers.

Power Operated Equipment: Account 396

The investment in this account includes tractors, trenchers, mowers, go-tracts, a bulldozer, and a boat and trailer.

Actuarial analyses based on historical data obtained from Big Rivers CPR system were used to develop the depreciation rates and remaining life for Account 396. The calculated depreciation rate for this account is negative. However, when considering actual account activity and anticipated account additions, the depreciation rate for this account should remain at its current rate of 3.70%.

The net salvage rate of 24.9 percent for Account 396 was calculated from the available historical data from 1965 to 2010 in the Big Rivers CPR system provided by Big Rivers.

Communications Equipment: Account 397

The investment in this account included Motorola mobile and hand radios, mobile base radio system with console and related towers, telephone systems and upgrades, data circuits, antennas, and pagers.

Actuarial analyses based on historical data obtained from Big Rivers CPR system were performed and the resulting depreciation rate was 0.53 percent. Similar to Account 396 –Power Operated Equipment, a large purchase ($7 million in new equipment) is going to be made soon to replace old equipment. Therefore, the depreciation rate for this account remains unchanged from the prior rate of 4.35%.

The net salvage rate of -0.1 percent for Account 397 was calculated from the available historical data from 1965 to 2010 in the Big Rivers CPR system provided by Big Rivers.

Miscellaneous Equipment: Account 398

The investment in this account includes equipment not categorized into other accounts including video equipment, cameras, kitchen equipment, vacuum cleaners, and a mobile office trailer.

Insufficient plant additions prior to retirement activity prevented a reliable actuarial analysis of these accounts because system additions were marginally greater than retirements. As a result, other publicly available industry information, the Engineer's Assessment and the engineering judgment of the depreciation consultant were relied upon to estimate a reasonable average service life for this account.

The net salvage rate of 3.2 percent for Account 398 was calculated from the available historical data from 1965 to 2010 in the Big Rivers CPR system provided by Big Rivers.

Detailed calculations for all the accounts shown in Table III-1 are provided in Appendix A.

* * * * *

PART IV – SUMMARY & CONCLUSIONS

PART IV
SUMMARY & CONCLUSIONS

Burns & McDonnell has completed its assessment and analysis of the remaining useful lives and the depreciation rates pertaining to the electric plant assets of Big Rivers Electric Corporation as reflected in this Comprehensive Depreciation Study. The Study was prepared in accordance with, and satisfies the requirements of, the Rural Utilities Service as issued to Big Rivers subsequent to its last depreciation study.

The proposed depreciation rates have been developed for all of Big Rivers' generation, transmission, and general plant in service assets based on historical plant accounting records provided by Big Rivers CPR system, other published depreciation survey information, and generally-accepted depreciation analysis methodologies. Based on the analysis of the information provided by Big Rivers and the results of the on-site observations of the Big Rivers generation and transmission facilities, Burns & McDonnell has formulated estimates of the remaining useful service lives for each plant.

Table III-1 presented the proposed remaining life estimates and the corresponding proposed depreciation rates for each plant account balance of Big Rivers' electric and transmission plant in service as of April 30, 2010. Table III-1 also provided comparison calculations of Big Rivers' annual depreciation expense, calculated using the existing depreciation rates and the proposed depreciation rates. That comparison showed that the proposed depreciation rates, if implemented by Big Rivers, would result in an estimated increase in depreciation expense of approximately $4.0 million per year based on April 30, 2010 account balances.

Assuming that the recommended equipment testing on the generating plant assets is conducted and assuming that any damaged components of the equipment are either repaired or replaced, Burns & McDonnell finds that from a mechanical engineering perspective, all of Big Rivers' generating units could remain in reliable operating service well into the future. This conclusion is conditioned by the limiting conditions previously identified.

Therefore, Burns & McDonnell recommends to Big Rivers that it consider pursuing approval and implementation of the proposed depreciation rates for each RUS plant account as presented in this report. These proposed depreciation rates are projected to increase total annual depreciation expenses of Big Rivers by approximately 11 percent.

In the preparation of this report, the information provided by Big Rivers was used by Burns & McDonnell to make certain assumptions with respect to conditions that may exist in the future. Burns & McDonnell believes the assumptions made are reasonable for the purposes of this report and makes no representation that the conditions assumed will, in fact, occur. In addition, while Burns & McDonnell has no reason to believe that the information provided by Big Rivers, and on which was relied upon, is inaccurate in any material respect, it has not been independently verified and its accuracy or completeness cannot be guaranteed. To the extent that actual future conditions differ from those assumed herein or from the information provided, actual results may vary from those projected.

* * * * *

APPENDIX A

Big Rivers Electric Corporation
2010 Depreciation Rate Study - Interim Retirement Rate Analysis

Burns & McDonnell SINCE 1898

Production Structures Account: 311

Date of Retirement (Mid Year): 2037
Interim Retirement Rate: 0.00066
Study Date, Year-End: 2009
Future Life from Study Date: 28.5
Remaining Life (F/E + .5) = 28.2

Development of Interim Retirement Rate					
Activity Year	Additions	Retirements	Removal Costs	Yr-End Plant Balance	Interim Retirement Rate
A	B	C	D	E	F = C / E
1950				$ -	0.00000
1951				$ -	0.00000
1952				$ -	0.00000
1953	0	0	0	$ -	0.00000
1954	0	0	0	$ -	0.00000
1955	0	0	0	$ -	0.00000
1956	0	0	0	$ -	0.00000
1957	0	0	0	$ -	0.00000
1958	0	0	0	$ -	0.00000
1959	0	0	0	$ -	0.00000
1960	0	0	0	$ -	0.00000
1961	0	0	0	$ -	0.00000
1962	0	0	0	$ -	0.00000
1963	0	0	0	$ -	0.00000
1964	0	0	0	$ -	0.00000
1965	2,387,104	0	6,879	$ 2,393,983	0.00000
1966	0	0	0	$ 2,393,983	0.00000
1967	0	0	0	$ 2,393,983	0.00000
1968	0	0	0	$ 2,393,983	0.00000
1969	5,316,911	0	4,040	$ 7,714,934	0.00000
1970	3,088,656	0	5,000	$ 10,808,590	0.00000
1971	4,646,588	0	357	$ 15,455,536	0.00000
1972	15,076	9,237	0	$ 15,461,375	0.00060
1973	37,913	0	0	$ 15,499,289	0.00000
1974	27,452	49,315	537	$ 15,477,963	0.00319
1975	466,603	10,019	298	$ 15,934,844	0.00063
1976	89,169	51,378	0	$ 15,972,635	0.00322
1977	126,318	404	0	$ 16,098,549	0.00003
1978	293,082	9,807	0	$ 16,381,824	0.00060
1979	12,146,870	6,495	3,651	$ 28,525,850	0.00023
1980	514,964	4,484	0	$ 29,036,329	0.00015
1981	13,836,470	0	1,079	$ 42,873,879	0.00000
1982	380,544	6,724	0	$ 43,247,698	0.00016
1983	591,717	582	0	$ 43,838,833	0.00001
1984	383,328	209,902	1,891	$ 44,014,150	0.00477
1985	410,671	26,160	429	$ 44,399,089	0.00059
1986	72,148,221	22,532	5,414	$ 116,530,192	0.00019
1987	60,368	15,673	0	$ 116,574,887	0.00013
1988	297,810	10,603	0	$ 116,862,094	0.00009
1989	183,496	15,906	0	$ 117,029,684	0.00014
1990	293,938	5,170	0	$ 117,318,452	0.00004
1991	160,650	1,284	0	$ 117,477,818	0.00001
1992	152,276	19,338	0	$ 117,610,756	0.00016
1993	112,866	141,852	0	$ 117,581,771	0.00121
1994	100,775	32,440	0	$ 117,650,105	0.00028
1995	9,584	292	0	$ 117,659,398	0.00000
1996	0	1,677	0	$ 117,657,720	0.00001
1997	3,083	1,701	0	$ 117,659,102	0.00001
1998	12,000	4,884	0	$ 117,666,218	0.00004
1999	104,892	130,509	0	$ 117,640,601	0.00111
2000	329,091	594,813	0	$ 117,374,879	0.00507
2001	749,931	32,702	0	$ 118,092,108	0.00028
2002	504,946	260,690	0	$ 118,336,364	0.00220
2003	751,888	100,439	0	$ 118,987,813	0.00084
2004	253,068	87,316	0	$ 119,153,566	0.00073
2005	169,285	30,893	0	$ 119,291,958	0.00026
2006	288,443	7,200	0	$ 119,573,201	0.00006
2007	299,533	19,441	0	$ 119,853,293	0.00016
2008	341,876	184,086	0	$ 120,011,083	0.00153
2009	2,356,108	39,450	0	$ 122,327,741	0.00032
TOTAL	$ 124,443,565	$ 2,145,397	$ 29,573	$ 3,266,238,105	0.00066

Interim Retirement Life Table					
Year Placed	Age at 12/31/2009	Annual Retirement Rate	Annual Survival Ratio	Life Table	Unrealized Life of Original Plant [1]
A	B	C	D = (1- C)	E	F
2009	0.5	0.00066	0.99934	0.99967	27.72578
2008	1.5	0.00066	0.99934	0.99901	27.70757
2007	2.5	0.00066	0.99934	0.99836	27.68937
2006	3.5	0.00066	0.99934	0.99770	27.67119
2005	4.5	0.00066	0.99934	0.99705	27.65301
2004	5.5	0.00066	0.99934	0.99639	27.63485
2003	6.5	0.00066	0.99934	0.99574	27.61669
2002	7.5	0.00066	0.99934	0.99508	27.59855
2001	8.5	0.00066	0.99934	0.99443	27.58043
2000	9.5	0.00066	0.99934	0.99378	27.56231
1999	10.5	0.00066	0.99934	0.99312	27.54421
1998	11.5	0.00066	0.99934	0.99247	27.52612
1997	12.5	0.00066	0.99934	0.99182	27.50803
1996	13.5	0.00066	0.99934	0.99117	27.48997
1995	14.5	0.00066	0.99934	0.99052	27.47191
1994	15.5	0.00066	0.99934	0.98987	27.45387
1993	16.5	0.00066	0.99934	0.98922	27.43583
1992	17.5	0.00066	0.99934	0.98857	27.41781
1991	18.5	0.00066	0.99934	0.98792	27.39980
1990	19.5	0.00066	0.99934	0.98727	27.38181
1989	20.5	0.00066	0.99934	0.98662	27.36382
1988	21.5	0.00066	0.99934	0.98597	27.34585
1987	22.5	0.00066	0.99934	0.98533	27.32788
1986	23.5	0.00066	0.99934	0.98468	27.30993
1985	24.5	0.00066	0.99934	0.98403	27.29200
1984	25.5	0.00066	0.99934	0.98338	27.27407
1983	26.5	0.00066	0.99934	0.98274	27.25615
1982	27.5	0.00066	0.99934	0.98209	27.23825
1981	28.5	0.00066	0.99934	0.98145	27.22036
1980	29.5	0.00066	0.99934	0.98080	27.20248
1979	30.5	0.00066	0.99934	0.98016	27.18461
1978	31.5	0.00066	0.99934	0.97952	27.16676
1977	32.5	0.00066	0.99934	0.97887	26.18789
1976	33.5	0.00066	0.99934	0.97823	25.20966
1975	34.5	0.00066	0.99934	0.97759	24.23207
1974	35.5	0.00066	0.99934	0.97694	23.25512
1973	36.5	0.00066	0.99934	0.97630	22.27882
1972	37.5	0.00066	0.99934	0.97566	21.30316
1971	38.5	0.00066	0.99934	0.97502	20.32814
1970	39.5	0.00066	0.99934	0.97438	19.35376
1969	40.5	0.00066	0.99934	0.97374	18.38002
1968	41.5	0.00066	0.99934	0.97310	17.40692
1967	42.5	0.00066	0.99934	0.97246	16.43446
1966	43.5	0.00066	0.99934	0.97182	15.46263
1965	44.5	0.00066	0.99934	0.97118	14.49145
1964	45.5	0.00066	0.99934	0.97055	13.52090
1963	46.5	0.00066	0.99934	0.96991	12.55099
1962	47.5	0.00066	0.99934	0.96927	11.58172
1961	48.5	0.00066	0.99934	0.96864	10.61309
1960	49.5	0.00066	0.99934	0.96800	9.64509
1959	50.5	0.00066	0.99934	0.96736	8.67773
1958	51.5	0.00066	0.99934	0.96673	7.71100
1957	52.5	0.00066	0.99934	0.96609	6.74490
1956	53.5	0.00066	0.99934	0.96546	5.77945
1955	54.5	0.00066	0.99934	0.96482	4.81462
1954	55.5	0.00066	0.99934	0.96419	3.85043
1953	56.5	0.00066	0.99934	0.96356	2.88688
1952	57.5	0.00066	0.99934	0.96292	1.92395
1951	58.5	0.00066	0.99934	0.96229	0.96166
1950	59.5	0.00066	0.99934	0.96166	-

[1] Unrealized Life = Sum Life Table from (n-1) for (Future Life - .5) values

Big Rivers Electric Corporation
2010 Depreciation Rate Study - Interim Retirement Rate Analysis

Production Boiler Plant Account: 312

Date of Retirement (Mid Year):	2035
Interim Retirement Rate:	0.00308
Study Date, Year-End:	2009
Future Life from Study Date:	26.0
Remaining Life (F/E + .5) =	25.4

Development of Interim Retirement Rate

Activity Year	Additions	Retirements	Removal Costs	Yr-End Plant Balance	Interim Retirement Rate
A	B	C	D	E	F = C / E
1950				$ -	0.00000
1951				$ -	0.00000
1952				$ -	0.00000
1953	0	0	0	$ -	0.00000
1954	0	0	0	$ -	0.00000
1955	0	0	0	$ -	0.00000
1956	0	0	0	$ -	0.00000
1957	0	0	0	$ -	0.00000
1958	0	0	0	$ -	0.00000
1959	0	0	0	$ -	0.00000
1960	0	0	0	$ -	0.00000
1961	0	0	0	$ -	0.00000
1962	0	0	0	$ -	0.00000
1963	0	0	0	$ -	0.00000
1964	0	0	0	$ -	0.00000
1965	3,916,288	0	29,615	$ 3,945,902	0.00000
1966	0	0	0	$ 3,945,902	0.00000
1967	0	0	0	$ 3,945,902	0.00000
1968	0	0	0	$ 3,945,902	0.00000
1969	7,858,376	6,000	190,953	$ 11,989,231	0.00050
1970	6,220,732	5,360	293,878	$ 18,498,481	0.00029
1971	9,980,100	0	159,041	$ 28,637,622	0.00000
1972	182,490	35,260	1,019	$ 28,785,871	0.00122
1973	84,361	47,785	0	$ 28,822,448	0.00166
1974	135,999	980	0	$ 28,957,466	0.00003
1975	40,000	72,300	0	$ 28,925,167	0.00250
1976	7,336	807	771	$ 28,932,467	0.00003
1977	1,095,499	193,134	0	$ 29,834,832	0.00647
1978	477,024	18,000	0	$ 30,293,856	0.00059
1979	66,406,550	2,559	23,021	$ 96,720,868	0.00003
1980	2,717,381	325,053	2,119	$ 99,115,315	0.00328
1981	67,373,001	41,201	235,173	$ 166,682,289	0.00025
1982	739,077	234,532	5,315	$ 167,192,149	0.00140
1983	1,102,532	110,071	3,604	$ 168,188,215	0.00065
1984	3,424,227	713,794	5,987	$ 170,904,636	0.00418
1985	566,092	345,044	700	$ 171,126,384	0.00202
1986	384,348,232	44,591	5,994	$ 555,436,019	0.00008
1987	776,001	449,385	11,952	$ 555,774,587	0.00081
1988	280,438	163,385	5,342	$ 555,896,982	0.00029
1989	1,396,615	853,365	360	$ 556,440,592	0.00153
1990	2,154,435	729,927	113	$ 557,865,213	0.00131
1991	839,541	430,079	160	$ 558,274,835	0.00077
1992	2,194,697	771,819	0	$ 559,697,713	0.00138
1993	170,138	2,547,906	0	$ 557,319,945	0.00457
1994	1,084,716	953,892	0	$ 557,450,769	0.00171
1995	914,144	455,049	0	$ 557,909,864	0.00082
1996	255,860	118,764	0	$ 558,046,960	0.00021
1997	427,596	1,098,445	0	$ 557,376,111	0.00197
1998	1,219,719	6,723,594	0	$ 551,872,236	0.01218
1999	2,031,435	2,387,306	0	$ 551,516,365	0.00433
2000	10,112,631	1,740,646	0	$ 559,888,350	0.00311
2001	9,846,079	4,009,239	0	$ 565,725,190	0.00709
2002	4,734,655	2,524,814	0	$ 567,935,031	0.00445
2003	7,219,552	6,319,165	0	$ 568,835,419	0.01111
2004	7,970,539	1,256,416	0	$ 575,549,541	0.00218
2005	7,816,847	1,901,318	0	$ 581,465,070	0.00327
2006	7,689,092	1,890,342	0	$ 587,263,821	0.00322
2007	11,599,504	986,959	0	$ 597,876,366	0.00165
2008	10,508,691	3,467,092	0	$ 604,917,965	0.00573
2009	22,475,295	1,987,827	0	$ 625,405,433	0.00318
TOTAL	$ 670,393,520	$ 45,963,205	$ 975,118	$ 14,945,131,282	0.00308

Interim Retirement Life Table

Year Placed	Age at 12/31/2009	Annual Retirement Rate	Annual Survival Ratio	Life Table	Unrealized Life of Original Plant [1]
A	B	C	D = (1- C)	E	F
2009	0.5	0.00308	0.99692	0.99846	24.90931
2008	1.5	0.00308	0.99692	0.99539	24.83270
2007	2.5	0.00308	0.99692	0.99233	24.75633
2006	3.5	0.00308	0.99692	0.98928	24.68020
2005	4.5	0.00308	0.99692	0.98624	24.60429
2004	5.5	0.00308	0.99692	0.98320	24.52862
2003	6.5	0.00308	0.99692	0.98018	24.45319
2002	7.5	0.00308	0.99692	0.97716	24.37798
2001	8.5	0.00308	0.99692	0.97416	24.30301
2000	9.5	0.00308	0.99692	0.97116	24.22826
1999	10.5	0.00308	0.99692	0.96818	24.15375
1998	11.5	0.00308	0.99692	0.96520	24.07947
1997	12.5	0.00308	0.99692	0.96223	24.00541
1996	13.5	0.00308	0.99692	0.95927	23.93158
1995	14.5	0.00308	0.99692	0.95632	23.85798
1994	15.5	0.00308	0.99692	0.95338	23.78461
1993	16.5	0.00308	0.99692	0.95045	23.71146
1992	17.5	0.00308	0.99692	0.94752	23.63854
1991	18.5	0.00308	0.99692	0.94461	23.56584
1990	19.5	0.00308	0.99692	0.94171	23.49336
1989	20.5	0.00308	0.99692	0.93881	23.42111
1988	21.5	0.00308	0.99692	0.93592	23.34908
1987	22.5	0.00308	0.99692	0.93304	23.27727
1986	23.5	0.00308	0.99692	0.93017	23.20568
1985	24.5	0.00308	0.99692	0.92731	23.13431
1984	25.5	0.00308	0.99692	0.92446	23.06316
1983	26.5	0.00308	0.99692	0.92162	22.99223
1982	27.5	0.00308	0.99692	0.91878	22.92152
1981	28.5	0.00308	0.99692	0.91596	22.85103
1980	29.5	0.00308	0.99692	0.91314	22.78075
1979	30.5	0.00308	0.99692	0.91033	22.71069
1978	31.5	0.00308	0.99692	0.90753	22.64084
1977	32.5	0.00308	0.99692	0.90474	22.57121
1976	33.5	0.00308	0.99692	0.90196	22.50179
1975	34.5	0.00308	0.99692	0.89919	21.60261
1974	35.5	0.00308	0.99692	0.89642	20.70619
1973	36.5	0.00308	0.99692	0.89366	19.81252
1972	37.5	0.00308	0.99692	0.89091	18.92161
1971	38.5	0.00308	0.99692	0.88817	18.03344
1970	39.5	0.00308	0.99692	0.88544	17.14799
1969	40.5	0.00308	0.99692	0.88272	16.26527
1968	41.5	0.00308	0.99692	0.88001	15.38527
1967	42.5	0.00308	0.99692	0.87730	14.50797
1966	43.5	0.00308	0.99692	0.87460	13.63337
1965	44.5	0.00308	0.99692	0.87191	12.76146
1964	45.5	0.00308	0.99692	0.86923	11.89223
1963	46.5	0.00308	0.99692	0.86656	11.02567
1962	47.5	0.00308	0.99692	0.86389	10.16178
1961	48.5	0.00308	0.99692	0.86123	9.30054
1960	49.5	0.00308	0.99692	0.85859	8.44196
1959	50.5	0.00308	0.99692	0.85595	7.58601
1958	51.5	0.00308	0.99692	0.85331	6.73270
1957	52.5	0.00308	0.99692	0.85069	5.88201
1956	53.5	0.00308	0.99692	0.84807	5.03394
1955	54.5	0.00308	0.99692	0.84546	4.18848
1954	55.5	0.00308	0.99692	0.84286	3.34561
1953	56.5	0.00308	0.99692	0.84027	2.50534
1952	57.5	0.00308	0.99692	0.83769	1.66765
1951	58.5	0.00308	0.99692	0.83511	0.83254
1950	59.5	0.00308	0.99692	0.83254	-

[1] Unrealized Life = Sum Life Table from (n-1) for (Future Life - .5) values

Big Rivers Electric Corporation
2010 Depreciation Rate Study - Interim Retirement Rate Analysis

Production Boiler Plant Env Comp Account: 312 A-K

Date of Retirement (Mid Year):	2030
Interim Retirement Rate:	0.00158
Study Date, Year-End:	2009
Future Life from Study Date:	21.1
Remaining Life (F/E + .5) =	28.8

Development of Interim Retirement Rate

Activity Year	Additions	Retirements	Removal Costs	Yr-End Plant Balance	Interim Retirement Rate
A	B	C	D	E	F = C / E
1950				$ -	0.00000
1951				$ -	0.00000
1952				$ -	0.00000
1953	0	0	0	$ -	0.00000
1954	0	0	0	$ -	0.00000
1955	0	0	0	$ -	0.00000
1956	0	0	0	$ -	0.00000
1957	0	0	0	$ -	0.00000
1958	0	0	0	$ -	0.00000
1959	0	0	0	$ -	0.00000
1960	0	0	0	$ -	0.00000
1961	0	0	0	$ -	0.00000
1962	0	0	0	$ -	0.00000
1963	0	0	0	$ -	0.00000
1964	0	0	0	$ -	0.00000
1965	44,570	0	0	$ 44,570	0.00000
1966	0	0	0	$ 44,570	0.00000
1967	0	0	0	$ 44,570	0.00000
1968	0	0	0	$ 44,570	0.00000
1969	700,874	0	0	$ 745,444	0.00000
1970	771,874	0	0	$ 1,517,318	0.00000
1971	528,902	0	0	$ 2,046,220	0.00000
1972	1,374	0	0	$ 2,047,595	0.00000
1973	380,587	0	0	$ 2,428,182	0.00000
1974	0	0	0	$ 2,428,182	0.00000
1975	52,494	0	0	$ 2,480,676	0.00000
1976	0	0	0	$ 2,480,676	0.00000
1977	216,624	0	0	$ 2,697,300	0.00000
1978	93,337	0	0	$ 2,790,637	0.00000
1979	38,873,298	0	84,968	$ 41,748,903	0.00000
1980	3,378,499	0	647	$ 45,128,049	0.00000
1981	35,350,822	0	8,538	$ 80,487,408	0.00000
1982	247,347	0	0	$ 80,734,755	0.00000
1983	1,374,682	0	0	$ 82,109,438	0.00000
1984	660,393	0	9	$ 82,769,839	0.00000
1985	243,512	0	0	$ 83,013,351	0.00000
1986	187,168,630	0	54,164	$ 270,236,145	0.00000
1987	69,775	0	0	$ 270,305,920	0.00000
1988	68,549	0	0	$ 270,374,469	0.00000
1989	19,814	0	0	$ 270,394,283	0.00000
1990	1,075,429	0	0	$ 271,469,712	0.00000
1991	349,038	0	214	$ 271,818,964	0.00000
1992	79,882	0	0	$ 271,898,846	0.00000
1993	4,899,560	0	0	$ 276,798,405	0.00000
1994	895,543	81,250	0	$ 277,612,698	0.00029
1995	37,056,711	1,122,550	0	$ 313,546,859	0.00358
1996	3,656,557	894,795	0	$ 316,308,621	0.00283
1997	1,778,459	449,630	0	$ 317,637,450	0.00142
1998	263,573	714,153	0	$ 317,186,870	0.00225
1999	1,331,517	873,952	0	$ 317,644,435	0.00275
2000	497,198	351,164	0	$ 317,790,469	0.00111
2001	2,817,186	261,585	0	$ 320,346,070	0.00082
2002	1,582,029	295,920	0	$ 321,632,179	0.00092
2003	80,152,968	934,849	0	$ 400,850,298	0.00233
2004	53,198,911	2,021,299	0	$ 452,027,909	0.00447
2005	1,915,969	1,337,010	0	$ 452,606,869	0.00295
2006	1,038,027	270,526	0	$ 453,374,369	0.00060
2007	4,462,599	1,300,047	0	$ 456,536,921	0.00285
2008	3,268,623	1,044,842	0	$ 458,760,701	0.00228
2009	104,277,773	1,902,711	0	$ 561,135,763	0.00339
TOTAL	$ 574,843,507	$ 13,856,283	$ 148,539	$ 8,746,127,477	0.00158

Interim Retirement Life Table

Year Placed	Age at 12/31/2009	Annual Retirement Rate	Annual Survival Ratio	Life Table	Unrealized Life of Original Plant [1]
A	B	C	D = (1- C)	E	F
2009	0.5	0.00158	0.99842	0.99921	28.29849
2008	1.5	0.00158	0.99842	0.99762	28.25366
2007	2.5	0.00158	0.99842	0.99604	28.20889
2006	3.5	0.00158	0.99842	0.99447	28.16420
2005	4.5	0.00158	0.99842	0.99289	28.11958
2004	5.5	0.00158	0.99842	0.99132	28.07503
2003	6.5	0.00158	0.99842	0.98975	28.03056
2002	7.5	0.00158	0.99842	0.98818	27.98615
2001	8.5	0.00158	0.99842	0.98661	27.94181
2000	9.5	0.00158	0.99842	0.98505	27.89754
1999	10.5	0.00158	0.99842	0.98349	27.85334
1998	11.5	0.00158	0.99842	0.98193	27.80922
1997	12.5	0.00158	0.99842	0.98038	27.76516
1996	13.5	0.00158	0.99842	0.97882	27.72117
1995	14.5	0.00158	0.99842	0.97727	27.67725
1994	15.5	0.00158	0.99842	0.97572	27.63341
1993	16.5	0.00158	0.99842	0.97418	27.58963
1992	17.5	0.00158	0.99842	0.97263	27.54592
1991	18.5	0.00158	0.99842	0.97109	27.50228
1990	19.5	0.00158	0.99842	0.96956	27.45871
1989	20.5	0.00158	0.99842	0.96802	27.41520
1988	21.5	0.00158	0.99842	0.96649	27.37177
1987	22.5	0.00158	0.99842	0.96495	27.32841
1986	23.5	0.00158	0.99842	0.96343	27.28511
1985	24.5	0.00158	0.99842	0.96190	27.24188
1984	25.5	0.00158	0.99842	0.96038	27.19872
1983	26.5	0.00158	0.99842	0.95885	27.15563
1982	27.5	0.00158	0.99842	0.95734	27.11261
1981	28.5	0.00158	0.99842	0.95582	27.06966
1980	29.5	0.00158	0.99842	0.95430	27.02677
1979	30.5	0.00158	0.99842	0.95279	26.98395
1978	31.5	0.00158	0.99842	0.95128	26.03267
1977	32.5	0.00158	0.99842	0.94978	25.08290
1976	33.5	0.00158	0.99842	0.94827	24.13462
1975	34.5	0.00158	0.99842	0.94677	23.18786
1974	35.5	0.00158	0.99842	0.94527	22.24259
1973	36.5	0.00158	0.99842	0.94377	21.29882
1972	37.5	0.00158	0.99842	0.94228	20.35654
1971	38.5	0.00158	0.99842	0.94078	19.41576
1970	39.5	0.00158	0.99842	0.93929	18.47646
1969	40.5	0.00158	0.99842	0.93780	17.53866
1968	41.5	0.00158	0.99842	0.93632	16.60234
1967	42.5	0.00158	0.99842	0.93484	15.66751
1966	43.5	0.00158	0.99842	0.93335	14.73415
1965	44.5	0.00158	0.99842	0.93188	13.80228
1964	45.5	0.00158	0.99842	0.93040	12.87188
1963	46.5	0.00158	0.99842	0.92893	11.94295
1962	47.5	0.00158	0.99842	0.92745	11.01550
1961	48.5	0.00158	0.99842	0.92598	10.08951
1960	49.5	0.00158	0.99842	0.92452	9.16500
1959	50.5	0.00158	0.99842	0.92305	8.24194
1958	51.5	0.00158	0.99842	0.92159	7.32035
1957	52.5	0.00158	0.99842	0.92013	6.40022
1956	53.5	0.00158	0.99842	0.91867	5.48155
1955	54.5	0.00158	0.99842	0.91722	4.56433
1954	55.5	0.00158	0.99842	0.91576	3.64857
1953	56.5	0.00158	0.99842	0.91431	2.73426
1952	57.5	0.00158	0.99842	0.91286	1.82139
1951	58.5	0.00158	0.99842	0.91142	0.90997
1950	59.5	0.00158	0.99842	0.90997	-

[1] Unrealized Life = Sum Life Table from (n-1) for (Future Life - .5) values

Big Rivers Electric Corporation
2010 Depreciation Rate Study - Interim Retirement Rate Analysis

Production Short-Life Production Plant -Envi Account: PROD 312 L-P

Date of Retirement (Mid Year):	2014
Interim Retirement Rate:	0.16680
Study Date, Year-End:	2009
Future Life from Study Date:	5.0
Remaining Life (F/E + .5) =	4.7

Development of Interim Retirement Rate

Activity Year	Additions	Retirements	Removal Costs	Yr-End Plant Balance	Interim Retirement Rate
A	B	C	D	E	F = C / E
1950				$ -	0.00000
1951				$ -	0.00000
1952				$ -	0.00000
1953	0	0	0	$ -	0.00000
1954	0	0	0	$ -	0.00000
1955	0	0	0	$ -	0.00000
1956	0	0	0	$ -	0.00000
1957	0	0	0	$ -	0.00000
1958	0	0	0	$ -	0.00000
1959	0	0	0	$ -	0.00000
1960	0	0	0	$ -	0.00000
1961	0	0	0	$ -	0.00000
1962	0	0	0	$ -	0.00000
1963	0	0	0	$ -	0.00000
1964	0	0	0	$ -	0.00000
1965	0	0	0	$ -	0.00000
1966	0	0	0	$ -	0.00000
1967	0	0	0	$ -	0.00000
1968	0	0	0	$ -	0.00000
1969	0	0	0	$ -	0.00000
1970	0	0	0	$ -	0.00000
1971	0	0	0	$ -	0.00000
1972	0	0	0	$ -	0.00000
1973	0	0	0	$ -	0.00000
1974	0	0	0	$ -	0.00000
1975	0	0	0	$ -	0.00000
1976	0	0	0	$ -	0.00000
1977	0	0	0	$ -	0.00000
1978	0	0	0	$ -	0.00000
1979	0	0	0	$ -	0.00000
1980	0	0	0	$ -	0.00000
1981	0	0	0	$ -	0.00000
1982	0	0	0	$ -	0.00000
1983	0	0	0	$ -	0.00000
1984	0	0	0	$ -	0.00000
1985	0	0	0	$ -	0.00000
1986	0	0	0	$ -	0.00000
1987	0	0	0	$ -	0.00000
1988	0	0	0	$ -	0.00000
1989	0	0	0	$ -	0.00000
1990	0	0	0	$ -	0.00000
1991	0	0	0	$ -	0.00000
1992	0	0	0	$ -	0.00000
1993	0	0	0	$ -	0.00000
1994	0	0	0	$ -	0.00000
1995	0	0	0	$ -	0.00000
1996	0	0	0	$ -	0.00000
1997	0	0	0	$ -	0.00000
1998	0	0	0	$ -	0.00000
1999	0	0	0	$ -	0.00000
2000	0	0	0	$ -	0.00000
2001	0	0	0	$ -	0.00000
2002	185,953	0	0	$ 185,953	0.00000
2003	394,231	0	0	$ 580,184	0.00000
2004	0	44,130	0	$ 536,054	0.08232
2005	246,373	124,232	0	$ 658,195	0.18875
2006	0	0	0	$ 658,195	0.00000
2007	413,100	414,060	0	$ 657,235	0.63000
2008	0	137,386	0	$ 519,849	0.26428
2009	0	0	0	$ 519,849	0.00000
TOTAL	$ 1,239,656	$ 719,807	$ -	$ 4,315,513	0.16680

Interim Retirement Life Table

Year Placed	Age at 12/31/2009	Annual Retirement Rate	Annual Survival Ratio	Life Table	Unrealized Life of Original Plant [1]
A	B	C	D = (1- C)	E	F
2009	0.5	0.16680	0.83320	0.91660	3.84041
2008	1.5	0.16680	0.83320	0.76372	3.19985
2007	2.5	0.16680	0.83320	0.63633	2.66613
2006	3.5	0.16680	0.83320	0.53020	2.22143
2005	4.5	0.16680	0.83320	0.44176	1.85091
2004	5.5	0.16680	0.83320	0.36808	1.54219
2003	6.5	0.16680	0.83320	0.30668	1.28496
2002	7.5	0.16680	0.83320	0.25553	1.07063
2001	8.5	0.16680	0.83320	0.21291	0.89205
2000	9.5	0.16680	0.83320	0.17740	0.74326
1999	10.5	0.16680	0.83320	0.14781	0.61929
1998	11.5	0.16680	0.83320	0.12315	0.51600
1997	12.5	0.16680	0.83320	0.10261	0.42993
1996	13.5	0.16680	0.83320	0.08550	0.35822
1995	14.5	0.16680	0.83320	0.07124	0.29847
1994	15.5	0.16680	0.83320	0.05935	0.24869
1993	16.5	0.16680	0.83320	0.04945	0.20721
1992	17.5	0.16680	0.83320	0.04121	0.17265
1991	18.5	0.16680	0.83320	0.03433	0.14385
1990	19.5	0.16680	0.83320	0.02861	0.11986
1989	20.5	0.16680	0.83320	0.02383	0.09986
1988	21.5	0.16680	0.83320	0.01986	0.08321
1987	22.5	0.16680	0.83320	0.01655	0.06933
1986	23.5	0.16680	0.83320	0.01379	0.05777
1985	24.5	0.16680	0.83320	0.01149	0.04813
1984	25.5	0.16680	0.83320	0.00957	0.04010
1983	26.5	0.16680	0.83320	0.00797	0.03341
1982	27.5	0.16680	0.83320	0.00664	0.02784
1981	28.5	0.16680	0.83320	0.00554	0.02320
1980	29.5	0.16680	0.83320	0.00461	0.01933
1979	30.5	0.16680	0.83320	0.00384	0.01610
1978	31.5	0.16680	0.83320	0.00320	0.01342
1977	32.5	0.16680	0.83320	0.00267	0.01118
1976	33.5	0.16680	0.83320	0.00222	0.00932
1975	34.5	0.16680	0.83320	0.00185	0.00776
1974	35.5	0.16680	0.83320	0.00154	0.00647
1973	36.5	0.16680	0.83320	0.00129	0.00539
1972	37.5	0.16680	0.83320	0.00107	0.00449
1971	38.5	0.16680	0.83320	0.00089	0.00374
1970	39.5	0.16680	0.83320	0.00074	0.00312
1969	40.5	0.16680	0.83320	0.00062	0.00260
1968	41.5	0.16680	0.83320	0.00052	0.00216
1967	42.5	0.16680	0.83320	0.00043	0.00180
1966	43.5	0.16680	0.83320	0.00036	0.00150
1965	44.5	0.16680	0.83320	0.00030	0.00125
1964	45.5	0.16680	0.83320	0.00025	0.00104
1963	46.5	0.16680	0.83320	0.00021	0.00087
1962	47.5	0.16680	0.83320	0.00017	0.00072
1961	48.5	0.16680	0.83320	0.00014	0.00060
1960	49.5	0.16680	0.83320	0.00012	0.00050
1959	50.5	0.16680	0.83320	0.00010	0.00040
1958	51.5	0.16680	0.83320	0.00008	0.00032
1957	52.5	0.16680	0.83320	0.00007	0.00025
1956	53.5	0.16680	0.83320	0.00006	0.00019
1955	54.5	0.16680	0.83320	0.00005	0.00014
1954	55.5	0.16680	0.83320	0.00004	0.00010
1953	56.5	0.16680	0.83320	0.00003	0.00007
1952	57.5	0.16680	0.83320	0.00003	0.00004
1951	58.5	0.16680	0.83320	0.00002	0.00002
1950	59.5	0.16680	0.83320	0.00002	-

[1] Unrealized Life = Sum Life Table from (n-1) for (Future Life - .5) values

Big Rivers Electric Corporation
2010 Depreciation Rate Study - Interim Retirement Rate Analysis

Burns & McDonnell SINCE 1898

Production Short-Life Production Plant -Oth Account: PROD 312 V-Z

Date of Retirement (Mid Year):	2014
Interim Retirement Rate:	0.01622
Study Date, Year-End:	2009
Future Life from Study Date:	5.0
Remaining Life (F/E + .5) =	5.3

Development of Interim Retirement Rate

Activity Year	Additions	Retirements	Removal Costs	Yr-End Plant Balance	Interim Retirement Rate
A	B	C	D	E	F = C / E
1950				$ -	0.00000
1951				$ -	0.00000
1952				$ -	0.00000
1953	0	0	0	$ -	0.00000
1954	0	0	0	$ -	0.00000
1955	0	0	0	$ -	0.00000
1956	0	0	0	$ -	0.00000
1957	0	0	0	$ -	0.00000
1958	0	0	0	$ -	0.00000
1959	0	0	0	$ -	0.00000
1960	0	0	0	$ -	0.00000
1961	0	0	0	$ -	0.00000
1962	0	0	0	$ -	0.00000
1963	0	0	0	$ -	0.00000
1964	0	0	0	$ -	0.00000
1965	0	0	0	$ -	0.00000
1966	0	0	0	$ -	0.00000
1967	0	0	0	$ -	0.00000
1968	0	0	0	$ -	0.00000
1969	0	0	0	$ -	0.00000
1970	0	0	0	$ -	0.00000
1971	0	0	0	$ -	0.00000
1972	0	0	0	$ -	0.00000
1973	0	0	0	$ -	0.00000
1974	0	0	0	$ -	0.00000
1975	102,791	0	0	$ 102,791	0.00000
1976	0	0	0	$ 102,791	0.00000
1977	81,320	0	0	$ 184,111	0.00000
1978	0	0	0	$ 184,111	0.00000
1979	0	0	0	$ 184,111	0.00000
1980	0	0	0	$ 184,111	0.00000
1981	0	0	0	$ 184,111	0.00000
1982	0	0	0	$ 184,111	0.00000
1983	0	0	0	$ 184,111	0.00000
1984	0	0	0	$ 184,111	0.00000
1985	0	0	0	$ 184,111	0.00000
1986	0	0	0	$ 184,111	0.00000
1987	0	0	0	$ 184,111	0.00000
1988	0	0	0	$ 184,111	0.00000
1989	0	0	0	$ 184,111	0.00000
1990	0	0	0	$ 184,111	0.00000
1991	0	0	0	$ 184,111	0.00000
1992	0	0	0	$ 184,111	0.00000
1993	0	0	0	$ 184,111	0.00000
1994	0	0	0	$ 184,111	0.00000
1995	0	0	0	$ 184,111	0.00000
1996	0	0	0	$ 184,111	0.00000
1997	0	0	0	$ 184,111	0.00000
1998	0	0	0	$ 184,111	0.00000
1999	0	46,482	0	$ 137,628	0.33774
2000	0	0	0	$ 137,628	0.00000
2001	29,494	0	0	$ 167,122	0.00000
2002	0	0	0	$ 167,122	0.00000
2003	0	0	0	$ 167,122	0.00000
2004	135,678	0	0	$ 302,801	0.00000
2005	0	0	0	$ 302,801	0.00000
2006	195,609	29,494	0	$ 468,916	0.06290
2007	128,037	54,814	0	$ 542,138	0.10111
2008	132,958	0	0	$ 675,096	0.00000
2009	62,867	0	0	$ 737,963	0.00000
TOTAL	$ 868,755	$ 130,791	$ -	$ 8,062,355	0.01622

Interim Retirement Life Table

Year Placed	Age at 12/31/2009	Annual Retirement Rate	Annual Survival Ratio	Life Table	Unrealized Life of Original Plant [1]
A	B	C	D = (1- C)	E	F
2009	0.5	0.01622	0.98378	0.99189	4.72324
2008	1.5	0.01622	0.98378	0.97580	4.64662
2007	2.5	0.01622	0.98378	0.95997	4.57124
2006	3.5	0.01622	0.98378	0.94440	4.49708
2005	4.5	0.01622	0.98378	0.92907	4.42413
2004	5.5	0.01622	0.98378	0.91400	4.35236
2003	6.5	0.01622	0.98378	0.89918	4.28175
2002	7.5	0.01622	0.98378	0.88459	4.21229
2001	8.5	0.01622	0.98378	0.87024	4.14396
2000	9.5	0.01622	0.98378	0.85612	4.07673
1999	10.5	0.01622	0.98378	0.84223	4.01060
1998	11.5	0.01622	0.98378	0.82857	3.94553
1997	12.5	0.01622	0.98378	0.81513	3.88153
1996	13.5	0.01622	0.98378	0.80190	3.81856
1995	14.5	0.01622	0.98378	0.78890	3.75661
1994	15.5	0.01622	0.98378	0.77610	3.69567
1993	16.5	0.01622	0.98378	0.76351	3.63572
1992	17.5	0.01622	0.98378	0.75112	3.57674
1991	18.5	0.01622	0.98378	0.73894	3.51872
1990	19.5	0.01622	0.98378	0.72695	3.46163
1989	20.5	0.01622	0.98378	0.71516	3.40548
1988	21.5	0.01622	0.98378	0.70355	3.35023
1987	22.5	0.01622	0.98378	0.69214	3.29588
1986	23.5	0.01622	0.98378	0.68091	3.24242
1985	24.5	0.01622	0.98378	0.66987	3.18982
1984	25.5	0.01622	0.98378	0.65900	3.13807
1983	26.5	0.01622	0.98378	0.64831	3.08716
1982	27.5	0.01622	0.98378	0.63779	3.03708
1981	28.5	0.01622	0.98378	0.62745	2.98781
1980	29.5	0.01622	0.98378	0.61727	2.93934
1979	30.5	0.01622	0.98378	0.60725	2.89166
1978	31.5	0.01622	0.98378	0.59740	2.84475
1977	32.5	0.01622	0.98378	0.58771	2.79860
1976	33.5	0.01622	0.98378	0.57818	2.75320
1975	34.5	0.01622	0.98378	0.56880	2.70854
1974	35.5	0.01622	0.98378	0.55957	2.66460
1973	36.5	0.01622	0.98378	0.55049	2.62137
1972	37.5	0.01622	0.98378	0.54156	2.57885
1971	38.5	0.01622	0.98378	0.53278	2.53701
1970	39.5	0.01622	0.98378	0.52413	2.49585
1969	40.5	0.01622	0.98378	0.51563	2.45536
1968	41.5	0.01622	0.98378	0.50727	2.41553
1967	42.5	0.01622	0.98378	0.49904	2.37635
1966	43.5	0.01622	0.98378	0.49094	2.33780
1965	44.5	0.01622	0.98378	0.48298	2.29987
1964	45.5	0.01622	0.98378	0.47514	2.26256
1963	46.5	0.01622	0.98378	0.46743	2.22586
1962	47.5	0.01622	0.98378	0.45985	2.18975
1961	48.5	0.01622	0.98378	0.45239	2.15423
1960	49.5	0.01622	0.98378	0.44505	2.11928
1959	50.5	0.01622	0.98378	0.43783	2.08490
1958	51.5	0.01622	0.98378	0.43073	2.05108
1957	52.5	0.01622	0.98378	0.42374	2.01780
1956	53.5	0.01622	0.98378	0.41687	1.98507
1955	54.5	0.01622	0.98378	0.41011	1.95287
1954	55.5	0.01622	0.98378	0.40345	1.54941
1953	56.5	0.01622	0.98378	0.39691	1.15251
1952	57.5	0.01622	0.98378	0.39047	0.76204
1951	58.5	0.01622	0.98378	0.38413	0.37790
1950	59.5	0.01622	0.98378	0.37790	-

[1] Unrealized Life = Sum Life Table from (n-1) for (Future Life - .5) values

Big Rivers Electric Corporation
2010 Depreciation Rate Study - Interim Retirement Rate Analysis

Production Turbine   Account: 314

Date of Retirement (Mid Year):	2035
Interim Retirement Rate:	0.00226
Study Date, Year-End:	2009
Future Life from Study Date:	26.0
Remaining Life (F/E + .5) =	25.7

Development of Interim Retirement Rate

Activity Year	Additions	Retirements	Removal Costs	Yr-End Plant Balance	Interim Retirement Rate
A	B	C	D	E	F = C / E
1950				$ -	0.00000
1951				$ -	0.00000
1952				$ -	0.00000
1953	0	0	0	$ -	0.00000
1954	0	0	0	$ -	0.00000
1955	0	0	0	$ -	0.00000
1956	0	0	0	$ -	0.00000
1957	0	0	0	$ -	0.00000
1958	0	0	0	$ -	0.00000
1959	0	0	0	$ -	0.00000
1960	0	0	0	$ -	0.00000
1961	0	0	0	$ -	0.00000
1962	0	0	0	$ -	0.00000
1963	0	0	0	$ -	0.00000
1964	0	0	0	$ -	0.00000
1965	2,796,515	0	31,664	$ 2,828,179	0.00000
1966	0	0	0	$ 2,828,179	0.00000
1967	0	0	0	$ 2,828,179	0.00000
1968	0	0	0	$ 2,828,179	0.00000
1969	5,207,206	0	1,908	$ 8,037,293	0.00000
1970	5,109,447	0	111,046	$ 13,257,786	0.00000
1971	5,592,461	0	2,874	$ 18,853,121	0.00000
1972	1,342	0	0	$ 18,854,463	0.00000
1973	0	0	0	$ 18,854,463	0.00000
1974	4,504	0	0	$ 18,858,967	0.00000
1975	0	0	0	$ 18,858,967	0.00000
1976	2,333	0	28	$ 18,861,329	0.00000
1977	57,374	2,004	0	$ 18,916,698	0.00011
1978	11,010	1,844	0	$ 18,925,864	0.00010
1979	23,074,937	0	3,445	$ 42,004,246	0.00000
1980	7,990	0	0	$ 42,012,236	0.00000
1981	27,432,065	0	78,282	$ 69,522,583	0.00000
1982	26,800	0	0	$ 69,549,383	0.00000
1983	83,586	0	50	$ 69,633,019	0.00000
1984	499,185	69,117	341	$ 70,063,429	0.00099
1985	29,881	0	0	$ 70,093,310	0.00000
1986	122,282,418	0	100	$ 192,375,827	0.00000
1987	17,819	5,500	0	$ 192,388,146	0.00003
1988	429,682	0	0	$ 192,817,829	0.00000
1989	1,168,803	293,352	0	$ 193,693,279	0.00151
1990	37,733	0	0	$ 193,731,012	0.00000
1991	486,727	4,957	0	$ 194,212,781	0.00003
1992	3,121,487	1,124,186	0	$ 196,210,082	0.00573
1993	1,495,730	914,753	0	$ 196,791,060	0.00465
1994	294,144	8,633	0	$ 197,076,571	0.00004
1995	182,041	139,494	0	$ 197,119,119	0.00071
1996	0	0	0	$ 197,119,119	0.00000
1997	33,629	82,124	0	$ 197,070,624	0.00042
1998	41,614	100,106	0	$ 197,012,132	0.00051
1999	1,685,960	35	0	$ 198,698,057	0.00000
2000	336,847	626,847	0	$ 198,408,056	0.00316
2001	2,732,008	650,720	0	$ 200,489,344	0.00325
2002	1,777,170	2,332,032	0	$ 199,934,481	0.01166
2003	3,470,385	1,128,858	0	$ 202,276,009	0.00558
2004	2,901,597	566,547	0	$ 204,611,058	0.00277
2005	2,306,239	715,673	0	$ 206,201,624	0.00347
2006	698,755	202,380	0	$ 206,697,999	0.00098
2007	2,963,416	823,013	0	$ 208,838,403	0.00394
2008	1,940,927	1,296,832	0	$ 209,482,498	0.00619
2009	5,760,515	1,115,416	0	$ 214,127,597	0.00521
TOTAL	$ 226,102,282	$ 12,204,425	$ 229,740	$ 5,403,852,583	0.00226

Interim Retirement Life Table

Year Placed	Age at 12/31/2009	Annual Retirement Rate	Annual Survival Ratio	Life Table	Unrealized Life of Original Plant [1]
A	B	C	D = (1- C)	E	F
2009	0.5	0.00226	0.99774	0.99887	25.19352
2008	1.5	0.00226	0.99774	0.99661	25.13662
2007	2.5	0.00226	0.99774	0.99436	25.07985
2006	3.5	0.00226	0.99774	0.99212	25.02320
2005	4.5	0.00226	0.99774	0.98988	24.96669
2004	5.5	0.00226	0.99774	0.98764	24.91030
2003	6.5	0.00226	0.99774	0.98541	24.85405
2002	7.5	0.00226	0.99774	0.98319	24.79791
2001	8.5	0.00226	0.99774	0.98097	24.74191
2000	9.5	0.00226	0.99774	0.97875	24.68603
1999	10.5	0.00226	0.99774	0.97654	24.63028
1998	11.5	0.00226	0.99774	0.97433	24.57465
1997	12.5	0.00226	0.99774	0.97213	24.51915
1996	13.5	0.00226	0.99774	0.96994	24.46377
1995	14.5	0.00226	0.99774	0.96775	24.40852
1994	15.5	0.00226	0.99774	0.96556	24.35340
1993	16.5	0.00226	0.99774	0.96338	24.29840
1992	17.5	0.00226	0.99774	0.96121	24.24352
1991	18.5	0.00226	0.99774	0.95903	24.18876
1990	19.5	0.00226	0.99774	0.95687	24.13414
1989	20.5	0.00226	0.99774	0.95471	24.07963
1988	21.5	0.00226	0.99774	0.95255	24.02525
1987	22.5	0.00226	0.99774	0.95040	23.97099
1986	23.5	0.00226	0.99774	0.94825	23.91685
1985	24.5	0.00226	0.99774	0.94611	23.86283
1984	25.5	0.00226	0.99774	0.94398	23.80894
1983	26.5	0.00226	0.99774	0.94184	23.75517
1982	27.5	0.00226	0.99774	0.93972	23.70152
1981	28.5	0.00226	0.99774	0.93759	23.64799
1980	29.5	0.00226	0.99774	0.93548	23.59458
1979	30.5	0.00226	0.99774	0.93336	23.54129
1978	31.5	0.00226	0.99774	0.93126	23.48813
1977	32.5	0.00226	0.99774	0.92915	23.43508
1976	33.5	0.00226	0.99774	0.92705	23.38215
1975	34.5	0.00226	0.99774	0.92496	22.45719
1974	35.5	0.00226	0.99774	0.92287	21.53432
1973	36.5	0.00226	0.99774	0.92079	20.61353
1972	37.5	0.00226	0.99774	0.91871	19.69483
1971	38.5	0.00226	0.99774	0.91663	18.77819
1970	39.5	0.00226	0.99774	0.91456	17.86363
1969	40.5	0.00226	0.99774	0.91250	16.95113
1968	41.5	0.00226	0.99774	0.91044	16.04070
1967	42.5	0.00226	0.99774	0.90838	15.13232
1966	43.5	0.00226	0.99774	0.90633	14.22599
1965	44.5	0.00226	0.99774	0.90428	13.32171
1964	45.5	0.00226	0.99774	0.90224	12.41947
1963	46.5	0.00226	0.99774	0.90020	11.51927
1962	47.5	0.00226	0.99774	0.89817	10.62110
1961	48.5	0.00226	0.99774	0.89614	9.72496
1960	49.5	0.00226	0.99774	0.89412	8.83084
1959	50.5	0.00226	0.99774	0.89210	7.93875
1958	51.5	0.00226	0.99774	0.89008	7.04867
1957	52.5	0.00226	0.99774	0.88807	6.16059
1956	53.5	0.00226	0.99774	0.88607	5.27453
1955	54.5	0.00226	0.99774	0.88406	4.39046
1954	55.5	0.00226	0.99774	0.88207	3.50840
1953	56.5	0.00226	0.99774	0.88008	2.62832
1952	57.5	0.00226	0.99774	0.87809	1.75023
1951	58.5	0.00226	0.99774	0.87611	0.87413
1950	59.5	0.00226	0.99774	0.87413	-

[1] Unrealized Life = Sum Life Table from (n-1) for (Future Life - .5) values

Big Rivers Electric Corporation
2010 Depreciation Rate Study - Interim Retirement Rate Analysis

Burns & McDonnell SINCE 1898

Production Electric Eqpt Account: 315

Date of Retirement (Mid Year): 2028
Interim Retirement Rate: 0.00112
Study Date, Year-End: 2009
Future Life from Study Date: 19.4
Remaining Life (F/E + .5) = 19.3

Development of Interim Retirement Rate

Activity Year	Additions	Retirements	Removal Costs	Yr-End Plant Balance	Interim Retirement Rate
A	B	C	D	E	F = C / E
1950				$ -	0.00000
1951				$ -	0.00000
1952				$ -	0.00000
1953	0	0	0	$ -	0.00000
1954	0	0	0	$ -	0.00000
1955	0	0	0	$ -	0.00000
1956	0	0	0	$ -	0.00000
1957	0	0	0	$ -	0.00000
1958	0	0	0	$ -	0.00000
1959	0	0	0	$ -	0.00000
1960	0	0	0	$ -	0.00000
1961	0	0	0	$ -	0.00000
1962	0	0	0	$ -	0.00000
1963	0	0	0	$ -	0.00000
1964	0	0	0	$ -	0.00000
1965	806,672	0	4,197	$ 810,870	0.00000
1966	0	0	0	$ 810,870	0.00000
1967	0	0	0	$ 810,870	0.00000
1968	0	0	0	$ 810,870	0.00000
1969	1,657,054	0	429	$ 2,468,352	0.00000
1970	1,211,816	0	0	$ 3,680,168	0.00000
1971	2,214,896	0	0	$ 5,895,063	0.00000
1972	0	0	0	$ 5,895,063	0.00000
1973	0	0	0	$ 5,895,063	0.00000
1974	563	0	0	$ 5,895,627	0.00000
1975	1,109	1,104	0	$ 5,895,632	0.00019
1976	638	0	0	$ 5,896,270	0.00000
1977	9,764	0	0	$ 5,906,034	0.00000
1978	51,819	0	0	$ 5,957,853	0.00000
1979	8,001,493	0	0	$ 13,959,346	0.00000
1980	1,282	0	0	$ 13,960,628	0.00000
1981	7,135,784	0	4,685	$ 21,101,097	0.00000
1982	124,942	0	0	$ 21,226,039	0.00000
1983	35,591	119,116	0	$ 21,142,514	0.00563
1984	372,343	393,929	0	$ 21,120,928	0.01865
1985	0	0	0	$ 21,120,928	0.00000
1986	33,607,081	1,604	0	$ 54,726,405	0.00003
1987	2,963	11,228	872	$ 54,719,012	0.00021
1988	50,734	24,761	821	$ 54,745,806	0.00045
1989	12,496	2,515	0	$ 54,755,788	0.00005
1990	0	0	0	$ 54,755,788	0.00000
1991	26,492	0	0	$ 54,782,280	0.00000
1992	0	8,694	0	$ 54,773,586	0.00016
1993	0	758	0	$ 54,772,828	0.00001
1994	39,463	17,049	0	$ 54,795,241	0.00031
1995	13,012	0	0	$ 54,808,253	0.00000
1996	0	15,661	0	$ 54,792,592	0.00029
1997	0	0	0	$ 54,792,592	0.00000
1998	11,822	0	0	$ 54,804,414	0.00000
1999	0	0	0	$ 54,804,414	0.00000
2000	14,681	13,170	0	$ 54,805,925	0.00024
2001	144,537	77,933	0	$ 54,872,529	0.00142
2002	72,066	17,065	0	$ 54,927,530	0.00031
2003	64,918	37,206	0	$ 54,955,242	0.00068
2004	765,626	81,116	0	$ 55,639,752	0.00146
2005	539,116	142,019	0	$ 56,036,850	0.00253
2006	979,575	259,551	0	$ 56,756,874	0.00457
2007	569,965	166,701	0	$ 57,160,138	0.00292
2008	949,772	265,189	0	$ 57,844,721	0.00458
2009	885,908	38,948	0	$ 58,691,681	0.00066
TOTAL	$ 60,375,995	$ 1,695,318	$ 11,004	$ 1,518,780,323	0.00112

Interim Retirement Life Table

Year Placed	Age at 12/31/2009	Annual Retirement Rate	Annual Survival Ratio	Life Table	Unrealized Life of Original Plant [1]
A	B	C	D = (1- C)	E	F
2009	0.5	0.00112	0.99888	0.99944	18.77884
2008	1.5	0.00112	0.99888	0.99833	18.75788
2007	2.5	0.00112	0.99888	0.99721	18.73694
2006	3.5	0.00112	0.99888	0.99610	18.71603
2005	4.5	0.00112	0.99888	0.99499	18.69514
2004	5.5	0.00112	0.99888	0.99388	18.67427
2003	6.5	0.00112	0.99888	0.99277	18.65342
2002	7.5	0.00112	0.99888	0.99166	18.63260
2001	8.5	0.00112	0.99888	0.99055	18.61180
2000	9.5	0.00112	0.99888	0.98945	18.59103
1999	10.5	0.00112	0.99888	0.98834	18.57028
1998	11.5	0.00112	0.99888	0.98724	18.54955
1997	12.5	0.00112	0.99888	0.98614	18.52884
1996	13.5	0.00112	0.99888	0.98504	18.50816
1995	14.5	0.00112	0.99888	0.98394	18.48750
1994	15.5	0.00112	0.99888	0.98284	18.46686
1993	16.5	0.00112	0.99888	0.98174	18.44625
1992	17.5	0.00112	0.99888	0.98064	18.42566
1991	18.5	0.00112	0.99888	0.97955	18.40509
1990	19.5	0.00112	0.99888	0.97846	18.38455
1989	20.5	0.00112	0.99888	0.97736	18.36403
1988	21.5	0.00112	0.99888	0.97627	18.34353
1987	22.5	0.00112	0.99888	0.97518	18.32305
1986	23.5	0.00112	0.99888	0.97410	18.30260
1985	24.5	0.00112	0.99888	0.97301	18.28217
1984	25.5	0.00112	0.99888	0.97192	18.26176
1983	26.5	0.00112	0.99888	0.97084	18.24138
1982	27.5	0.00112	0.99888	0.96975	18.22101
1981	28.5	0.00112	0.99888	0.96867	18.20068
1980	29.5	0.00112	0.99888	0.96759	18.18036
1979	30.5	0.00112	0.99888	0.96651	18.16007
1978	31.5	0.00112	0.99888	0.96543	18.13980
1977	32.5	0.00112	0.99888	0.96435	18.11955
1976	33.5	0.00112	0.99888	0.96328	18.09932
1975	34.5	0.00112	0.99888	0.96220	18.07912
1974	35.5	0.00112	0.99888	0.96113	18.05894
1973	36.5	0.00112	0.99888	0.96005	18.03878
1972	37.5	0.00112	0.99888	0.95898	18.01864
1971	38.5	0.00112	0.99888	0.95791	17.99853
1970	39.5	0.00112	0.99888	0.95684	17.97844
1969	40.5	0.00112	0.99888	0.95578	17.95837
1968	41.5	0.00112	0.99888	0.95471	17.00366
1967	42.5	0.00112	0.99888	0.95364	16.05002
1966	43.5	0.00112	0.99888	0.95258	15.09744
1965	44.5	0.00112	0.99888	0.95151	14.14593
1964	45.5	0.00112	0.99888	0.95045	13.19548
1963	46.5	0.00112	0.99888	0.94939	12.24608
1962	47.5	0.00112	0.99888	0.94833	11.29775
1961	48.5	0.00112	0.99888	0.94727	10.35048
1960	49.5	0.00112	0.99888	0.94622	9.40426
1959	50.5	0.00112	0.99888	0.94516	8.45910
1958	51.5	0.00112	0.99888	0.94410	7.51500
1957	52.5	0.00112	0.99888	0.94305	6.57195
1956	53.5	0.00112	0.99888	0.94200	5.62995
1955	54.5	0.00112	0.99888	0.94095	4.68900
1954	55.5	0.00112	0.99888	0.93990	3.74911
1953	56.5	0.00112	0.99888	0.93885	2.81026
1952	57.5	0.00112	0.99888	0.93780	1.87246
1951	58.5	0.00112	0.99888	0.93675	0.93571
1950	59.5	0.00112	0.99888	0.93571	-

[1] Unrealized Life = Sum Life Table from (n-1) for (Future Life - .5) values

Big Rivers Electric Corporation
2010 Depreciation Rate Study - Interim Retirement Rate Analysis

Production Misc. Eqpt   Account: 316

Date of Retirement (Mid Year):	2035
Interim Retirement Rate:	3.66941
Study Date, Year-End:	2009
Future Life from Study Date:	26.0
Remaining Life (F/E + .5) =	-1.20E+13

Development of Interim Retirement Rate

Activity Year	Additions	Retirements	Removal Costs	Yr-End Plant Balance	Interim Retirement Rate
A	B	C	D	E	F = C / E
1950				$ -	0.00000
1951				$ -	0.00000
1952				$ -	0.00000
1953	0	0	0	$ -	0.00000
1954	0	0	0	$ -	0.00000
1955	0	0	0	$ -	0.00000
1956	0	0	0	$ -	0.00000
1957	0	0	0	$ -	0.00000
1958	0	0	0	$ -	0.00000
1959	0	0	0	$ -	0.00000
1960	0	0	0	$ -	0.00000
1961	0	0	0	$ -	0.00000
1962	0	0	0	$ -	0.00000
1963	0	0	0	$ -	0.00000
1964	0	0	0	$ -	0.00000
1965	0	0	0	$ -	0.00000
1966	0	0	0	$ -	0.00000
1967	0	0	0	$ -	0.00000
1968	0	0	0	$ -	0.00000
1969	0	0	30	$ 30	0.00000
1970	0	0	30	$ 59	0.00000
1971	0	0	0	$ 59	0.00000
1972	0	0	0	$ 59	0.00000
1973	0	0	0	$ 59	0.00000
1974	0	0	0	$ 59	0.00000
1975	0	124	0	$ -	0.00000
1976	0	0	0	$ -	0.00000
1977	0	0	0	$ -	0.00000
1978	0	1,112	0	$ -	0.00000
1979	0	20,679	621	$ -	0.00000
1980	0	16,761	0	$ -	0.00000
1981	0	51,746	1,137	$ -	0.00000
1982	0	18,445	0	$ -	0.00000
1983	0	18,310	0	$ -	0.00000
1984	0	26,377	261	$ -	0.00000
1985	0	7,983	0	$ -	0.00000
1986	0	64,031	0	$ -	0.00000
1987	0	57,750	0	$ -	0.00000
1988	0	71,125	0	$ -	0.00000
1989	0	69,253	0	$ -	0.00000
1990	0	9,590	0	$ -	0.00000
1991	0	80,545	0	$ -	0.00000
1992	0	81,279	0	$ -	0.00000
1993	0	160,956	0	$ -	0.00000
1994	0	473,344	0	$ -	0.00000
1995	0	11,860	0	$ -	0.00000
1996	0	10,815	0	$ -	0.00000
1997	0	8,359	0	$ -	0.00000
1998	0	9,863,366	0	$ -	0.00000
1999	0	0	0	$ -	0.00000
2000	0	0	0	$ -	0.00000
2001	0	0	0	$ -	0.00000
2002	0	0	0	$ -	0.00000
2003	0	0	0	$ -	0.00000
2004	0	0	0	$ -	0.00000
2005	0	0	0	$ -	0.00000
2006	0	0	0	$ -	0.00000
2007	0	0	0	$ -	0.00000
2008	0	0	0	$ -	0.00000
2009	3,031,173	0	0	$ 3,031,173	0.00000
TOTAL	$ 3,031,173	$ 11,123,809	$ 2,078	$ 3,031,498	3.66941

Interim Retirement Life Table

Year Placed	Age at 12/31/2009	Annual Retirement Rate	Annual Survival Ratio	Life Table	Unrealized Life of Original Plant [1]
A	B	C	D = (1- C)	E	F
2009	0.5	3.66941	(2.66941)	(0.83)	1.01E+13
2008	1.5	3.66941	(2.66941)	2.23	-2.68E+13
2007	2.5	3.66941	(2.66941)	(5.95)	7.16E+13
2006	3.5	3.66941	(2.66941)	15.88	-1.91E+14
2005	4.5	3.66941	(2.66941)	(42)	5.10E+14
2004	5.5	3.66941	(2.66941)	113	-1.36E+15
2003	6.5	3.66941	(2.66941)	(302)	3.64E+15
2002	7.5	3.66941	(2.66941)	806	-9.71E+15
2001	8.5	3.66941	(2.66941)	(2,152)	2.59E+16
2000	9.5	3.66941	(2.66941)	5,745	-6.92E+16
1999	10.5	3.66941	(2.66941)	(15,335)	1.85E+17
1998	11.5	3.66941	(2.66941)	40,936	-4.93E+17
1997	12.5	3.66941	(2.66941)	(109,274)	1.32E+18
1996	13.5	3.66941	(2.66941)	291,696	-3.51E+18
1995	14.5	3.66941	(2.66941)	(778,657)	9.38E+18
1994	15.5	3.66941	(2.66941)	2,078,556	-2.50E+19
1993	16.5	3.66941	(2.66941)	(5,548,517)	6.68E+19
1992	17.5	3.66941	(2.66941)	14,811,266	-1.78E+20
1991	18.5	3.66941	(2.66941)	(39,537,338)	4.76E+20
1990	19.5	3.66941	(2.66941)	105,541,358	-1.27E+21
1989	20.5	3.66941	(2.66941)	(281,733,134)	3.39E+21
1988	21.5	3.66941	(2.66941)	7.52E+08	-9.06E+21
1987	22.5	3.66941	(2.66941)	-2.01E+09	2.42E+22
1986	23.5	3.66941	(2.66941)	5.36E+09	-6.45E+22
1985	24.5	3.66941	(2.66941)	-1.43E+10	1.72E+23
1984	25.5	3.66941	(2.66941)	3.82E+10	-4.60E+23
1983	26.5	3.66941	(2.66941)	-1.02E+11	1.23E+24
1982	27.5	3.66941	(2.66941)	2.72E+11	-3.28E+24
1981	28.5	3.66941	(2.66941)	-7.26E+11	8.75E+24
1980	29.5	3.66941	(2.66941)	1.94E+12	8.75E+24
1979	30.5	3.66941	(2.66941)	-5.18E+12	8.75E+24
1978	31.5	3.66941	(2.66941)	1.38E+13	8.75E+24
1977	32.5	3.66941	(2.66941)	-3.69E+13	8.75E+24
1976	33.5	3.66941	(2.66941)	9.85E+13	8.75E+24
1975	34.5	3.66941	(2.66941)	-2.63E+14	8.75E+24
1974	35.5	3.66941	(2.66941)	7.02E+14	8.75E+24
1973	36.5	3.66941	(2.66941)	-1.87E+15	8.75E+24
1972	37.5	3.66941	(2.66941)	5.00E+15	8.75E+24
1971	38.5	3.66941	(2.66941)	-1.33E+16	8.75E+24
1970	39.5	3.66941	(2.66941)	3.56E+16	8.75E+24
1969	40.5	3.66941	(2.66941)	-9.51E+16	8.75E+24
1968	41.5	3.66941	(2.66941)	2.54E+17	8.75E+24
1967	42.5	3.66941	(2.66941)	-6.78E+17	8.75E+24
1966	43.5	3.66941	(2.66941)	1.81E+18	8.75E+24
1965	44.5	3.66941	(2.66941)	-4.83E+18	8.75E+24
1964	45.5	3.66941	(2.66941)	1.29E+19	8.75E+24
1963	46.5	3.66941	(2.66941)	-3.44E+19	8.75E+24
1962	47.5	3.66941	(2.66941)	9.18E+19	8.75E+24
1961	48.5	3.66941	(2.66941)	-2.45E+20	8.75E+24
1960	49.5	3.66941	(2.66941)	6.54E+20	8.75E+24
1959	50.5	3.66941	(2.66941)	-1.75E+21	8.75E+24
1958	51.5	3.66941	(2.66941)	4.66E+21	8.74E+24
1957	52.5	3.66941	(2.66941)	-1.24E+22	8.76E+24
1956	53.5	3.66941	(2.66941)	3.32E+22	8.72E+24
1955	54.5	3.66941	(2.66941)	-8.87E+22	8.81E+24
1954	55.5	3.66941	(2.66941)	2.37E+23	8.57E+24
1953	56.5	3.66941	(2.66941)	-6.32E+23	9.21E+24
1952	57.5	3.66941	(2.66941)	1.69E+24	7.52E+24
1951	58.5	3.66941	(2.66941)	-4.50E+24	1.20E+25
1950	59.5	3.66941	(2.66941)	1.20E+25	0.00E+00

[1] Unrealized Life = Sum Life Table from (n-1) for (Future Life - .5) values

Big Rivers Electric Corporation
2010 Depreciation Rate Study - Interim Retirement Rate Analysis

Burns & McDonnell SINCE 1898

Production CT - Structures   Account: 341

Date of Retirement (Mid Year):	2030
Interim Retirement Rate:	0.00078
Study Date, Year-End:	2009
Future Life from Study Date:	21.0
Remaining Life (F/E + .5) =	21.3

Development of Interim Retirement Rate

Activity Year	Additions	Retirements	Removal Costs	Yr-End Plant Balance	Interim Retirement Rate
A	B	C	D	E	F = C / E
1950				$ -	0.00000
1951				$ -	0.00000
1952				$ -	0.00000
1953	0	0	0	$ -	0.00000
1954	0	0	0	$ -	0.00000
1955	0	0	0	$ -	0.00000
1956	0	0	0	$ -	0.00000
1957	0	0	0	$ -	0.00000
1958	0	0	0	$ -	0.00000
1959	0	0	0	$ -	0.00000
1960	0	0	0	$ -	0.00000
1961	0	0	0	$ -	0.00000
1962	0	0	0	$ -	0.00000
1963	0	0	0	$ -	0.00000
1964	0	0	0	$ -	0.00000
1965	0	0	0	$ -	0.00000
1966	0	0	0	$ -	0.00000
1967	0	0	0	$ -	0.00000
1968	0	0	0	$ -	0.00000
1969	0	0	0	$ -	0.00000
1970	0	0	0	$ -	0.00000
1971	0	0	0	$ -	0.00000
1972	0	0	0	$ -	0.00000
1973	0	0	0	$ -	0.00000
1974	0	0	0	$ -	0.00000
1975	0	0	0	$ -	0.00000
1976	108,617	0	0	$ 108,617	0.00000
1977	0	0	0	$ 108,617	0.00000
1978	0	0	0	$ 108,617	0.00000
1979	17,703	0	0	$ 126,320	0.00000
1980	0	0	0	$ 126,320	0.00000
1981	0	0	0	$ 126,320	0.00000
1982	0	0	0	$ 126,320	0.00000
1983	0	210	0	$ 126,110	0.00166
1984	0	0	0	$ 126,110	0.00000
1985	0	0	0	$ 126,110	0.00000
1986	0	525	0	$ 125,585	0.00418
1987	0	272	0	$ 125,313	0.00217
1988	0	0	0	$ 125,313	0.00000
1989	0	0	0	$ 125,313	0.00000
1990	0	0	0	$ 125,313	0.00000
1991	0	0	0	$ 125,313	0.00000
1992	0	0	0	$ 125,313	0.00000
1993	0	0	0	$ 125,313	0.00000
1994	0	1,080	0	$ 124,233	0.00870
1995	0	0	0	$ 124,233	0.00000
1996	0	0	0	$ 124,233	0.00000
1997	0	0	0	$ 124,233	0.00000
1998	0	0	0	$ 124,233	0.00000
1999	0	0	0	$ 124,233	0.00000
2000	0	0	0	$ 124,233	0.00000
2001	27,913	1,378	0	$ 150,768	0.00914
2002	0	0	0	$ 150,768	0.00000
2003	0	18	0	$ 150,750	0.00012
2004	0	0	0	$ 150,750	0.00000
2005	0	0	0	$ 150,750	0.00000
2006	0	0	0	$ 150,750	0.00000
2007	0	0	0	$ 150,750	0.00000
2008	0	0	0	$ 150,750	0.00000
2009	0	0	0	$ 150,750	0.00000
TOTAL	$ 154,233	$ 3,483	$ -	$ 4,438,657	0.00078

Interim Retirement Life Table

Year Placed	Age at 12/31/2009	Annual Retirement Rate	Annual Survival Ratio	Life Table	Unrealized Life of Original Plant [1]
A	B	C	D = (1- C)	E	F
2009	0.5	0.00078	0.99922	0.99961	20.81152
2008	1.5	0.00078	0.99922	0.99882	20.79519
2007	2.5	0.00078	0.99922	0.99804	20.77887
2006	3.5	0.00078	0.99922	0.99726	20.76256
2005	4.5	0.00078	0.99922	0.99647	20.74627
2004	5.5	0.00078	0.99922	0.99569	20.72999
2003	6.5	0.00078	0.99922	0.99491	20.71373
2002	7.5	0.00078	0.99922	0.99413	20.69747
2001	8.5	0.00078	0.99922	0.99335	20.68123
2000	9.5	0.00078	0.99922	0.99257	20.66501
1999	10.5	0.00078	0.99922	0.99179	20.64879
1998	11.5	0.00078	0.99922	0.99101	20.63259
1997	12.5	0.00078	0.99922	0.99024	20.61640
1996	13.5	0.00078	0.99922	0.98946	20.60022
1995	14.5	0.00078	0.99922	0.98868	20.58406
1994	15.5	0.00078	0.99922	0.98791	20.56790
1993	16.5	0.00078	0.99922	0.98713	20.55177
1992	17.5	0.00078	0.99922	0.98636	20.53564
1991	18.5	0.00078	0.99922	0.98558	20.51953
1990	19.5	0.00078	0.99922	0.98481	20.50342
1989	20.5	0.00078	0.99922	0.98404	20.48734
1988	21.5	0.00078	0.99922	0.98326	20.47126
1987	22.5	0.00078	0.99922	0.98249	20.45520
1986	23.5	0.00078	0.99922	0.98172	20.43915
1985	24.5	0.00078	0.99922	0.98095	20.42311
1984	25.5	0.00078	0.99922	0.98018	20.40708
1983	26.5	0.00078	0.99922	0.97941	20.39107
1982	27.5	0.00078	0.99922	0.97864	20.37507
1981	28.5	0.00078	0.99922	0.97788	20.35908
1980	29.5	0.00078	0.99922	0.97711	20.34311
1979	30.5	0.00078	0.99922	0.97634	20.32714
1978	31.5	0.00078	0.99922	0.97558	20.31119
1977	32.5	0.00078	0.99922	0.97481	20.29526
1976	33.5	0.00078	0.99922	0.97405	20.27933
1975	34.5	0.00078	0.99922	0.97328	20.26342
1974	35.5	0.00078	0.99922	0.97252	20.24752
1973	36.5	0.00078	0.99922	0.97175	20.23163
1972	37.5	0.00078	0.99922	0.97099	20.21576
1971	38.5	0.00078	0.99922	0.97023	20.19989
1970	39.5	0.00078	0.99922	0.96947	19.23042
1969	40.5	0.00078	0.99922	0.96871	18.26172
1968	41.5	0.00078	0.99922	0.96795	17.29377
1967	42.5	0.00078	0.99922	0.96719	16.32658
1966	43.5	0.00078	0.99922	0.96643	15.36015
1965	44.5	0.00078	0.99922	0.96567	14.39448
1964	45.5	0.00078	0.99922	0.96491	13.42956
1963	46.5	0.00078	0.99922	0.96416	12.46541
1962	47.5	0.00078	0.99922	0.96340	11.50201
1961	48.5	0.00078	0.99922	0.96264	10.53936
1960	49.5	0.00078	0.99922	0.96189	9.57747
1959	50.5	0.00078	0.99922	0.96113	8.61634
1958	51.5	0.00078	0.99922	0.96038	7.65596
1957	52.5	0.00078	0.99922	0.95963	6.69633
1956	53.5	0.00078	0.99922	0.95887	5.73746
1955	54.5	0.00078	0.99922	0.95812	4.77934
1954	55.5	0.00078	0.99922	0.95737	3.82197
1953	56.5	0.00078	0.99922	0.95662	2.86535
1952	57.5	0.00078	0.99922	0.95587	1.90948
1951	58.5	0.00078	0.99922	0.95512	0.95437
1950	59.5	0.00078	0.99922	0.95437	-

[1] Unrealized Life = Sum Life Table from (n-1) for (Future Life - .5) values

Big Rivers Electric Corporation
2010 Depreciation Rate Study - Interim Retirement Rate Analysis

Production CT - Fuel Holders & Access. Account: 342

Date of Retirement (Mid Year):	2030
Interim Retirement Rate:	0.00007
Study Date, Year-End:	2009
Future Life from Study Date:	21.0
Remaining Life (F/E + .5) =	21.5

Development of Interim Retirement Rate

Activity Year	Additions	Retirements	Removal Costs	Yr-End Plant Balance	Interim Retirement Rate
A	B	C	D	E	F = C / E
1950				$ -	0.00000
1951				$ -	0.00000
1952				$ -	0.00000
1953	0	0	0	$ -	0.00000
1954	0	0	0	$ -	0.00000
1955	0	0	0	$ -	0.00000
1956	0	0	0	$ -	0.00000
1957	0	0	0	$ -	0.00000
1958	0	0	0	$ -	0.00000
1959	0	0	0	$ -	0.00000
1960	0	0	0	$ -	0.00000
1961	0	0	0	$ -	0.00000
1962	0	0	0	$ -	0.00000
1963	0	0	0	$ -	0.00000
1964	0	0	0	$ -	0.00000
1965	0	0	0	$ -	0.00000
1966	0	0	0	$ -	0.00000
1967	0	0	0	$ -	0.00000
1968	0	0	0	$ -	0.00000
1969	0	0	0	$ -	0.00000
1970	0	0	0	$ -	0.00000
1971	0	0	0	$ -	0.00000
1972	0	0	0	$ -	0.00000
1973	0	0	0	$ -	0.00000
1974	0	0	0	$ -	0.00000
1975	0	0	0	$ -	0.00000
1976	399,772	0	2,192	$ 401,963	0.00000
1977	0	0	0	$ 401,963	0.00000
1978	30,299	0	0	$ 432,262	0.00000
1979	0	0	0	$ 432,262	0.00000
1980	0	0	0	$ 432,262	0.00000
1981	0	0	0	$ 432,262	0.00000
1982	0	0	0	$ 432,262	0.00000
1983	0	0	0	$ 432,262	0.00000
1984	0	0	0	$ 432,262	0.00000
1985	0	0	0	$ 432,262	0.00000
1986	0	0	0	$ 432,262	0.00000
1987	0	0	0	$ 432,262	0.00000
1988	0	0	0	$ 432,262	0.00000
1989	0	0	0	$ 432,262	0.00000
1990	0	0	0	$ 432,262	0.00000
1991	0	0	0	$ 432,262	0.00000
1992	0	0	0	$ 432,262	0.00000
1993	8,958	1,626	0	$ 439,594	0.00370
1994	0	0	0	$ 439,594	0.00000
1995	0	0	0	$ 439,594	0.00000
1996	0	0	0	$ 439,594	0.00000
1997	0	0	0	$ 439,594	0.00000
1998	0	0	0	$ 439,594	0.00000
1999	0	0	0	$ 439,594	0.00000
2000	0	0	0	$ 439,594	0.00000
2001	19,473	0	0	$ 459,067	0.00000
2002	978,410	0	0	$ 1,437,477	0.00000
2003	0	0	0	$ 1,437,477	0.00000
2004	0	0	0	$ 1,437,477	0.00000
2005	0	0	0	$ 1,437,477	0.00000
2006	0	0	0	$ 1,437,477	0.00000
2007	0	0	0	$ 1,437,477	0.00000
2008	0	0	0	$ 1,437,477	0.00000
2009	0	0	0	$ 1,437,477	0.00000
TOTAL	$ 1,436,912	$ 1,626	$ 2,192	$ 22,763,497	0.00007

Interim Retirement Life Table

Year Placed	Age at 12/31/2009	Annual Retirement Rate	Annual Survival Ratio	Life Table	Unrealized Life of Original Plant [1]
A	B	C	D = (1- C)	E	F
2009	0.5	0.00007	0.99993	0.99996	20.98276
2008	1.5	0.00007	0.99993	0.99989	20.98126
2007	2.5	0.00007	0.99993	0.99982	20.97976
2006	3.5	0.00007	0.99993	0.99975	20.97826
2005	4.5	0.00007	0.99993	0.99968	20.97676
2004	5.5	0.00007	0.99993	0.99961	20.97527
2003	6.5	0.00007	0.99993	0.99954	20.97377
2002	7.5	0.00007	0.99993	0.99946	20.97227
2001	8.5	0.00007	0.99993	0.99939	20.97077
2000	9.5	0.00007	0.99993	0.99932	20.96927
1999	10.5	0.00007	0.99993	0.99925	20.96778
1998	11.5	0.00007	0.99993	0.99918	20.96628
1997	12.5	0.00007	0.99993	0.99911	20.96478
1996	13.5	0.00007	0.99993	0.99904	20.96328
1995	14.5	0.00007	0.99993	0.99896	20.96178
1994	15.5	0.00007	0.99993	0.99889	20.96029
1993	16.5	0.00007	0.99993	0.99882	20.95879
1992	17.5	0.00007	0.99993	0.99875	20.95729
1991	18.5	0.00007	0.99993	0.99868	20.95580
1990	19.5	0.00007	0.99993	0.99861	20.95430
1989	20.5	0.00007	0.99993	0.99854	20.95280
1988	21.5	0.00007	0.99993	0.99847	20.95131
1987	22.5	0.00007	0.99993	0.99839	20.94981
1986	23.5	0.00007	0.99993	0.99832	20.94831
1985	24.5	0.00007	0.99993	0.99825	20.94682
1984	25.5	0.00007	0.99993	0.99818	20.94532
1983	26.5	0.00007	0.99993	0.99811	20.94382
1982	27.5	0.00007	0.99993	0.99804	20.94233
1981	28.5	0.00007	0.99993	0.99797	20.94083
1980	29.5	0.00007	0.99993	0.99789	20.93934
1979	30.5	0.00007	0.99993	0.99782	20.93784
1978	31.5	0.00007	0.99993	0.99775	20.93635
1977	32.5	0.00007	0.99993	0.99768	20.93485
1976	33.5	0.00007	0.99993	0.99761	20.93335
1975	34.5	0.00007	0.99993	0.99754	20.93186
1974	35.5	0.00007	0.99993	0.99747	20.93036
1973	36.5	0.00007	0.99993	0.99740	20.92887
1972	37.5	0.00007	0.99993	0.99732	20.92737
1971	38.5	0.00007	0.99993	0.99725	20.92588
1970	39.5	0.00007	0.99993	0.99718	19.92870
1969	40.5	0.00007	0.99993	0.99711	18.93159
1968	41.5	0.00007	0.99993	0.99704	17.93455
1967	42.5	0.00007	0.99993	0.99697	16.93758
1966	43.5	0.00007	0.99993	0.99690	15.94068
1965	44.5	0.00007	0.99993	0.99683	14.94385
1964	45.5	0.00007	0.99993	0.99676	13.94710
1963	46.5	0.00007	0.99993	0.99668	12.95041
1962	47.5	0.00007	0.99993	0.99661	11.95380
1961	48.5	0.00007	0.99993	0.99654	10.95726
1960	49.5	0.00007	0.99993	0.99647	9.96079
1959	50.5	0.00007	0.99993	0.99640	8.96439
1958	51.5	0.00007	0.99993	0.99633	7.96806
1957	52.5	0.00007	0.99993	0.99626	6.97181
1956	53.5	0.00007	0.99993	0.99619	5.97562
1955	54.5	0.00007	0.99993	0.99611	4.97951
1954	55.5	0.00007	0.99993	0.99604	3.98346
1953	56.5	0.00007	0.99993	0.99597	2.98749
1952	57.5	0.00007	0.99993	0.99590	1.99159
1951	58.5	0.00007	0.99993	0.99583	0.99576
1950	59.5	0.00007	0.99993	0.99576	-

[1] Unrealized Life = Sum Life Table from (n-1) for (Future Life - .5) values

Big Rivers Electric Corporation
2010 Depreciation Rate Study - Interim Retirement Rate Analysis

Burns & McDonnell SINCE 1898

Production CT - Prime Movers Account: 343

Date of Retirement (Mid Year): 2030
Interim Retirement Rate: 0.00085
Study Date, Year-End: 2009
Future Life from Study Date: 21.0
Remaining Life (F/E + .5) = 21.3

Development of Interim Retirement Rate

Activity Year	Additions	Retirements	Removal Costs	Yr-End Plant Balance	Interim Retirement Rate
A	B	C	D	E	F = C / E
1950				$ -	0.00000
1951				$ -	0.00000
1952				$ -	0.00000
1953	0	0	0	$ -	0.00000
1954	0	0	0	$ -	0.00000
1955	0	0	0	$ -	0.00000
1956	0	0	0	$ -	0.00000
1957	0	0	0	$ -	0.00000
1958	0	0	0	$ -	0.00000
1959	0	0	0	$ -	0.00000
1960	0	0	0	$ -	0.00000
1961	0	0	0	$ -	0.00000
1962	0	0	0	$ -	0.00000
1963	0	0	0	$ -	0.00000
1964	0	0	0	$ -	0.00000
1965	0	0	0	$ -	0.00000
1966	0	0	0	$ -	0.00000
1967	0	0	0	$ -	0.00000
1968	0	0	0	$ -	0.00000
1969	0	0	0	$ -	0.00000
1970	0	0	0	$ -	0.00000
1971	0	0	0	$ -	0.00000
1972	0	0	0	$ -	0.00000
1973	0	0	0	$ -	0.00000
1974	0	0	0	$ -	0.00000
1975	0	0	0	$ -	0.00000
1976	3,778,442	0	45,438	$ 3,823,879	0.00000
1977	0	0	0	$ 3,823,879	0.00000
1978	0	0	0	$ 3,823,879	0.00000
1979	0	0	0	$ 3,823,879	0.00000
1980	0	0	0	$ 3,823,879	0.00000
1981	0	0	0	$ 3,823,879	0.00000
1982	0	0	0	$ 3,823,879	0.00000
1983	0	0	0	$ 3,823,879	0.00000
1984	0	0	0	$ 3,823,879	0.00000
1985	0	0	0	$ 3,823,879	0.00000
1986	0	0	0	$ 3,823,879	0.00000
1987	0	0	0	$ 3,823,879	0.00000
1988	0	0	0	$ 3,823,879	0.00000
1989	0	0	0	$ 3,823,879	0.00000
1990	0	0	0	$ 3,823,879	0.00000
1991	0	0	0	$ 3,823,879	0.00000
1992	0	0	0	$ 3,823,879	0.00000
1993	0	0	0	$ 3,823,879	0.00000
1994	0	0	0	$ 3,823,879	0.00000
1995	0	0	0	$ 3,823,879	0.00000
1996	287,722	118,571	0	$ 3,993,030	0.02969
1997	0	0	0	$ 3,993,030	0.00000
1998	0	0	0	$ 3,993,030	0.00000
1999	0	0	0	$ 3,993,030	0.00000
2000	0	0	0	$ 3,993,030	0.00000
2001	0	0	0	$ 3,993,030	0.00000
2002	816,466	0	0	$ 4,809,496	0.00000
2003	18,577	0	0	$ 4,828,073	0.00000
2004	0	0	0	$ 4,828,073	0.00000
2005	0	0	0	$ 4,828,073	0.00000
2006	0	0	0	$ 4,828,073	0.00000
2007	0	0	0	$ 4,828,073	0.00000
2008	14,679	0	0	$ 4,842,752	0.00000
2009	0	0	0	$ 4,842,752	0.00000
TOTAL	$ 4,915,886	$ 118,571	$ 45,438	$ 139,071,134	0.00085

Interim Retirement Life Table

Year Placed	Age at 12/31/2009	Annual Retirement Rate	Annual Survival Ratio	Life Table	Unrealized Life of Original Plant [1]
A	B	C	D = (1- C)	E	F
2009	0.5	0.00085	0.99915	0.99957	20.79530
2008	1.5	0.00085	0.99915	0.99872	20.77757
2007	2.5	0.00085	0.99915	0.99787	20.75985
2006	3.5	0.00085	0.99915	0.99702	20.74215
2005	4.5	0.00085	0.99915	0.99617	20.72447
2004	5.5	0.00085	0.99915	0.99532	20.70680
2003	6.5	0.00085	0.99915	0.99447	20.68914
2002	7.5	0.00085	0.99915	0.99362	20.67150
2001	8.5	0.00085	0.99915	0.99278	20.65388
2000	9.5	0.00085	0.99915	0.99193	20.63627
1999	10.5	0.00085	0.99915	0.99108	20.61868
1998	11.5	0.00085	0.99915	0.99024	20.60110
1997	12.5	0.00085	0.99915	0.98939	20.58353
1996	13.5	0.00085	0.99915	0.98855	20.56598
1995	14.5	0.00085	0.99915	0.98771	20.54845
1994	15.5	0.00085	0.99915	0.98687	20.53093
1993	16.5	0.00085	0.99915	0.98602	20.51342
1992	17.5	0.00085	0.99915	0.98518	20.49593
1991	18.5	0.00085	0.99915	0.98434	20.47846
1990	19.5	0.00085	0.99915	0.98350	20.46100
1989	20.5	0.00085	0.99915	0.98267	20.44356
1988	21.5	0.00085	0.99915	0.98183	20.42613
1987	22.5	0.00085	0.99915	0.98099	20.40871
1986	23.5	0.00085	0.99915	0.98016	20.39131
1985	24.5	0.00085	0.99915	0.97932	20.37392
1984	25.5	0.00085	0.99915	0.97848	20.35655
1983	26.5	0.00085	0.99915	0.97765	20.33920
1982	27.5	0.00085	0.99915	0.97682	20.32186
1981	28.5	0.00085	0.99915	0.97598	20.30453
1980	29.5	0.00085	0.99915	0.97515	20.28722
1979	30.5	0.00085	0.99915	0.97432	20.26992
1978	31.5	0.00085	0.99915	0.97349	20.25264
1977	32.5	0.00085	0.99915	0.97266	20.23537
1976	33.5	0.00085	0.99915	0.97183	20.21812
1975	34.5	0.00085	0.99915	0.97100	20.20088
1974	35.5	0.00085	0.99915	0.97017	20.18366
1973	36.5	0.00085	0.99915	0.96935	20.16645
1972	37.5	0.00085	0.99915	0.96852	20.14926
1971	38.5	0.00085	0.99915	0.96769	20.13208
1970	39.5	0.00085	0.99915	0.96687	19.16521
1969	40.5	0.00085	0.99915	0.96605	18.19916
1968	41.5	0.00085	0.99915	0.96522	17.23394
1967	42.5	0.00085	0.99915	0.96440	16.26954
1966	43.5	0.00085	0.99915	0.96358	15.30597
1965	44.5	0.00085	0.99915	0.96275	14.34321
1964	45.5	0.00085	0.99915	0.96193	13.38128
1963	46.5	0.00085	0.99915	0.96111	12.42016
1962	47.5	0.00085	0.99915	0.96029	11.45987
1961	48.5	0.00085	0.99915	0.95948	10.50039
1960	49.5	0.00085	0.99915	0.95866	9.54174
1959	50.5	0.00085	0.99915	0.95784	8.58390
1958	51.5	0.00085	0.99915	0.95702	7.62687
1957	52.5	0.00085	0.99915	0.95621	6.67067
1956	53.5	0.00085	0.99915	0.95539	5.71527
1955	54.5	0.00085	0.99915	0.95458	4.76069
1954	55.5	0.00085	0.99915	0.95376	3.80693
1953	56.5	0.00085	0.99915	0.95295	2.85398
1952	57.5	0.00085	0.99915	0.95214	1.90184
1951	58.5	0.00085	0.99915	0.95133	0.95052
1950	59.5	0.00085	0.99915	0.95052	-

[1] Unrealized Life = Sum Life Table from (n-1) for (Future Life - .5) values

Big Rivers Electric Corporation
2010 Depreciation Rate Study - Interim Retirement Rate Analysis

Burns & McDonnell SINCE 1898

Production	CT - Generators	Account:	344
Date of Retirement (Mid Year):			2030
Interim Retirement Rate:			0.00000
Study Date, Year-End:			2009
Future Life from Study Date:			21.0
Remaining Life (F/E + .5) =			22.5

Development of Interim Retirement Rate

Activity Year	Additions	Retirements	Adjustments and Transfers	Yr-End Plant Balance	Interim Retirement Rate
A	B	C	D	E	F = C / E
1950				$ -	0.00000
1951				$ -	0.00000
1952				$ -	0.00000
1953	0	0	0	$ -	0.00000
1954	0	0	0	$ -	0.00000
1955	0	0	0	$ -	0.00000
1956	0	0	0	$ -	0.00000
1957	0	0	0	$ -	0.00000
1958	0	0	0	$ -	0.00000
1959	0	0	0	$ -	0.00000
1960	0	0	0	$ -	0.00000
1961	0	0	0	$ -	0.00000
1962	0	0	0	$ -	0.00000
1963	0	0	0	$ -	0.00000
1964	0	0	0	$ -	0.00000
1965	0	0	0	$ -	0.00000
1966	0	0	0	$ -	0.00000
1967	0	0	0	$ -	0.00000
1968	0	0	0	$ -	0.00000
1969	0	0	0	$ -	0.00000
1970	0	0	0	$ -	0.00000
1971	0	0	0	$ -	0.00000
1972	0	0	0	$ -	0.00000
1973	0	0	0	$ -	0.00000
1974	0	0	0	$ -	0.00000
1975	0	0	0	$ -	0.00000
1976	1,102,964	0	0	$ 1,102,964	0.00000
1977	0	0	0	$ 1,102,964	0.00000
1978	0	0	0	$ 1,102,964	0.00000
1979	0	0	0	$ 1,102,964	0.00000
1980	0	0	0	$ 1,102,964	0.00000
1981	0	0	0	$ 1,102,964	0.00000
1982	0	0	0	$ 1,102,964	0.00000
1983	0	0	0	$ 1,102,964	0.00000
1984	0	0	0	$ 1,102,964	0.00000
1985	0	0	0	$ 1,102,964	0.00000
1986	0	0	0	$ 1,102,964	0.00000
1987	0	0	0	$ 1,102,964	0.00000
1988	0	0	0	$ 1,102,964	0.00000
1989	0	0	0	$ 1,102,964	0.00000
1990	0	0	0	$ 1,102,964	0.00000
1991	0	0	0	$ 1,102,964	0.00000
1992	0	0	0	$ 1,102,964	0.00000
1993	0	0	0	$ 1,102,964	0.00000
1994	0	0	0	$ 1,102,964	0.00000
1995	0	0	0	$ 1,102,964	0.00000
1996	0	0	0	$ 1,102,964	0.00000
1997	0	0	0	$ 1,102,964	0.00000
1998	0	0	0	$ 1,102,964	0.00000
1999	0	0	0	$ 1,102,964	0.00000
2000	0	0	0	$ 1,102,964	0.00000
2001	0	0	0	$ 1,102,964	0.00000
2002	0	0	0	$ 1,102,964	0.00000
2003	0	0	0	$ 1,102,964	0.00000
2004	0	0	0	$ 1,102,964	0.00000
2005	0	0	0	$ 1,102,964	0.00000
2006	0	0	0	$ 1,102,964	0.00000
2007	0	0	0	$ 1,102,964	0.00000
2008	0	0	0	$ 1,102,964	0.00000
2009	0	0	0	$ 1,102,964	0.00000
TOTAL	$ 1,102,964	$ -	$ -	$ 37,500,765	0.00000

Interim Retirement Life Table

Year Placed	Age at 12/31/2009	Annual Retirement Rate	Annual Survival Ratio	Life Table	Unrealized Life of Original Plant [1]
A	B	C	D = (1- C)	E	F
2009	0.5	-	1.00000	1.00000	22.00000
2008	1.5	-	1.00000	1.00000	22.00000
2007	2.5	-	1.00000	1.00000	22.00000
2006	3.5	-	1.00000	1.00000	22.00000
2005	4.5	-	1.00000	1.00000	22.00000
2004	5.5	-	1.00000	1.00000	22.00000
2003	6.5	-	1.00000	1.00000	22.00000
2002	7.5	-	1.00000	1.00000	22.00000
2001	8.5	-	1.00000	1.00000	22.00000
2000	9.5	-	1.00000	1.00000	22.00000
1999	10.5	-	1.00000	1.00000	22.00000
1998	11.5	-	1.00000	1.00000	22.00000
1997	12.5	-	1.00000	1.00000	22.00000
1996	13.5	-	1.00000	1.00000	22.00000
1995	14.5	-	1.00000	1.00000	22.00000
1994	15.5	-	1.00000	1.00000	22.00000
1993	16.5	-	1.00000	1.00000	22.00000
1992	17.5	-	1.00000	1.00000	22.00000
1991	18.5	-	1.00000	1.00000	22.00000
1990	19.5	-	1.00000	1.00000	22.00000
1989	20.5	-	1.00000	1.00000	22.00000
1988	21.5	-	1.00000	1.00000	22.00000
1987	22.5	-	1.00000	1.00000	22.00000
1986	23.5	-	1.00000	1.00000	22.00000
1985	24.5	-	1.00000	1.00000	22.00000
1984	25.5	-	1.00000	1.00000	22.00000
1983	26.5	-	1.00000	1.00000	22.00000
1982	27.5	-	1.00000	1.00000	22.00000
1981	28.5	-	1.00000	1.00000	22.00000
1980	29.5	-	1.00000	1.00000	22.00000
1979	30.5	-	1.00000	1.00000	22.00000
1978	31.5	-	1.00000	1.00000	22.00000
1977	32.5	-	1.00000	1.00000	22.00000
1976	33.5	-	1.00000	1.00000	22.00000
1975	34.5	-	1.00000	1.00000	22.00000
1974	35.5	-	1.00000	1.00000	22.00000
1973	36.5	-	1.00000	1.00000	22.00000
1972	37.5	-	1.00000	1.00000	22.00000
1971	38.5	-	1.00000	1.00000	21.00000
1970	39.5	-	1.00000	1.00000	20.00000
1969	40.5	-	1.00000	1.00000	19.00000
1968	41.5	-	1.00000	1.00000	18.00000
1967	42.5	-	1.00000	1.00000	17.00000
1966	43.5	-	1.00000	1.00000	16.00000
1965	44.5	-	1.00000	1.00000	15.00000
1964	45.5	-	1.00000	1.00000	14.00000
1963	46.5	-	1.00000	1.00000	13.00000
1962	47.5	-	1.00000	1.00000	12.00000
1961	48.5	-	1.00000	1.00000	11.00000
1960	49.5	-	1.00000	1.00000	10.00000
1959	50.5	-	1.00000	1.00000	9.00000
1958	51.5	-	1.00000	1.00000	8.00000
1957	52.5	-	1.00000	1.00000	7.00000
1956	53.5	-	1.00000	1.00000	6.00000
1955	54.5	-	1.00000	1.00000	5.00000
1954	55.5	-	1.00000	1.00000	4.00000
1953	56.5	-	1.00000	1.00000	3.00000
1952	57.5	-	1.00000	1.00000	2.00000
1951	58.5	-	1.00000	1.00000	1.00000
1950	59.5	-	1.00000	1.00000	-

[1] Unrealized Life = Sum Life Table from (n-1) for (Future Life - .5) values

Big Rivers Electric Corporation
2010 Depreciation Rate Study - Interim Retirement Rate Analysis

Production CT - Access. Elec. Eqpt. Account: 345

Date of Retirement (Mid Year):	2030
Interim Retirement Rate:	0.00112
Study Date, Year-End:	2009
Future Life from Study Date:	21.0
Remaining Life (F/E + .5) =	22.2

Development of Interim Retirement Rate

Activity Year	Additions	Retirements	Removal Costs	Yr-End Plant Balance	Interim Retirement Rate
A	B	C	D	E	F = C / E
1950				$ -	0.00000
1951				$ -	0.00000
1952				$ -	0.00000
1953	0	0	0	$ -	0.00000
1954	0	0	0	$ -	0.00000
1955	0	0	0	$ -	0.00000
1956	0	0	0	$ -	0.00000
1957	0	0	0	$ -	0.00000
1958	0	0	0	$ -	0.00000
1959	0	0	0	$ -	0.00000
1960	0	0	0	$ -	0.00000
1961	0	0	0	$ -	0.00000
1962	0	0	0	$ -	0.00000
1963	0	0	0	$ -	0.00000
1964	0	0	0	$ -	0.00000
1965	0	0	0	$ -	0.00000
1966	0	0	0	$ -	0.00000
1967	0	0	0	$ -	0.00000
1968	0	0	0	$ -	0.00000
1969	0	0	0	$ -	0.00000
1970	0	0	0	$ -	0.00000
1971	0	0	0	$ -	0.00000
1972	0	0	0	$ -	0.00000
1973	0	0	0	$ -	0.00000
1974	0	0	0	$ -	0.00000
1975	0	0	0	$ -	0.00000
1976	190,437	0	0	$ 190,437	0.00000
1977	0	0	0	$ 190,437	0.00000
1978	0	0	0	$ 190,437	0.00000
1979	0	0	0	$ 190,437	0.00000
1980	0	0	0	$ 190,437	0.00000
1981	0	0	0	$ 190,437	0.00000
1982	0	0	0	$ 190,437	0.00000
1983	0	0	0	$ 190,437	0.00000
1984	0	0	0	$ 190,437	0.00000
1985	0	0	0	$ 190,437	0.00000
1986	0	0	0	$ 190,437	0.00000
1987	0	0	0	$ 190,437	0.00000
1988	0	0	0	$ 190,437	0.00000
1989	0	0	0	$ 190,437	0.00000
1990	0	0	0	$ 190,437	0.00000
1991	0	0	0	$ 190,437	0.00000
1992	0	0	0	$ 190,437	0.00000
1993	0	0	0	$ 190,437	0.00000
1994	0	542	0	$ 189,894	0.00286
1995	0	0	0	$ 189,894	0.00000
1996	0	0	0	$ 189,894	0.00000
1997	0	0	0	$ 189,894	0.00000
1998	0	0	0	$ 189,894	0.00000
1999	0	0	0	$ 189,894	0.00000
2000	0	0	0	$ 189,894	0.00000
2001	0	1,274	0	$ 188,621	0.00675
2002	0	0	0	$ 188,621	0.00000
2003	16,445	0	0	$ 205,066	0.00000
2004	0	0	0	$ 205,066	0.00000
2005	58,789	6,020	0	$ 257,835	0.02335
2006	0	0	0	$ 257,835	0.00000
2007	52,055	0	0	$ 309,890	0.00000
2008	0	0	0	$ 309,890	0.00000
2009	0	0	0	$ 309,890	0.00000
TOTAL	$ 317,726	$ 7,836	$ -	$ 6,989,833	0.00112

Interim Retirement Life Table

Year Placed	Age at 12/31/2009	Annual Retirement Rate	Annual Survival Ratio	Life Table	Unrealized Life of Original Plant [1]
A	B	C	D = (1- C)	E	F
2009	0.5	0.00112	0.99888	0.99944	21.70641
2008	1.5	0.00112	0.99888	0.99832	21.68207
2007	2.5	0.00112	0.99888	0.99720	21.65777
2006	3.5	0.00112	0.99888	0.99608	21.63349
2005	4.5	0.00112	0.99888	0.99497	21.60923
2004	5.5	0.00112	0.99888	0.99385	21.58501
2003	6.5	0.00112	0.99888	0.99274	21.56081
2002	7.5	0.00112	0.99888	0.99162	21.53664
2001	8.5	0.00112	0.99888	0.99051	21.51249
2000	9.5	0.00112	0.99888	0.98940	21.48838
1999	10.5	0.00112	0.99888	0.98829	21.46429
1998	11.5	0.00112	0.99888	0.98718	21.44022
1997	12.5	0.00112	0.99888	0.98608	21.41619
1996	13.5	0.00112	0.99888	0.98497	21.39218
1995	14.5	0.00112	0.99888	0.98387	21.36820
1994	15.5	0.00112	0.99888	0.98276	21.34424
1993	16.5	0.00112	0.99888	0.98166	21.32031
1992	17.5	0.00112	0.99888	0.98056	21.29641
1991	18.5	0.00112	0.99888	0.97946	21.27253
1990	19.5	0.00112	0.99888	0.97836	21.24869
1989	20.5	0.00112	0.99888	0.97727	21.22487
1988	21.5	0.00112	0.99888	0.97617	21.20107
1987	22.5	0.00112	0.99888	0.97508	21.17730
1986	23.5	0.00112	0.99888	0.97398	21.15356
1985	24.5	0.00112	0.99888	0.97289	21.12985
1984	25.5	0.00112	0.99888	0.97180	21.10616
1983	26.5	0.00112	0.99888	0.97071	21.08250
1982	27.5	0.00112	0.99888	0.96962	21.05886
1981	28.5	0.00112	0.99888	0.96854	21.03525
1980	29.5	0.00112	0.99888	0.96745	21.01167
1979	30.5	0.00112	0.99888	0.96637	20.98812
1978	31.5	0.00112	0.99888	0.96528	20.96459
1977	32.5	0.00112	0.99888	0.96420	20.94108
1976	33.5	0.00112	0.99888	0.96312	20.91761
1975	34.5	0.00112	0.99888	0.96204	20.89416
1974	35.5	0.00112	0.99888	0.96096	20.87073
1973	36.5	0.00112	0.99888	0.95988	20.84734
1972	37.5	0.00112	0.99888	0.95881	20.82396
1971	38.5	0.00112	0.99888	0.95773	19.86623
1970	39.5	0.00112	0.99888	0.95666	18.90957
1969	40.5	0.00112	0.99888	0.95559	17.95398
1968	41.5	0.00112	0.99888	0.95452	16.99947
1967	42.5	0.00112	0.99888	0.95345	16.04602
1966	43.5	0.00112	0.99888	0.95238	15.09364
1965	44.5	0.00112	0.99888	0.95131	14.14233
1964	45.5	0.00112	0.99888	0.95024	13.19209
1963	46.5	0.00112	0.99888	0.94918	12.24291
1962	47.5	0.00112	0.99888	0.94811	11.29480
1961	48.5	0.00112	0.99888	0.94705	10.34775
1960	49.5	0.00112	0.99888	0.94599	9.40176
1959	50.5	0.00112	0.99888	0.94493	8.45683
1958	51.5	0.00112	0.99888	0.94387	7.51296
1957	52.5	0.00112	0.99888	0.94281	6.57015
1956	53.5	0.00112	0.99888	0.94175	5.62839
1955	54.5	0.00112	0.99888	0.94070	4.68770
1954	55.5	0.00112	0.99888	0.93964	3.74805
1953	56.5	0.00112	0.99888	0.93859	2.80946
1952	57.5	0.00112	0.99888	0.93754	1.87192
1951	58.5	0.00112	0.99888	0.93649	0.93544
1950	59.5	0.00112	0.99888	0.93544	-

[1] Unrealized Life = Sum Life Table from (n-1) for (Future Life - .5) values

Big Rivers Electric Corporation
2010 Depreciation Rate Study - Interim Retirement Rate Analysis

Burns & McDonnell SINCE 1898

Production CT - Misc Equipment   Account: 346

Date of Retirement (Mid Year):	2030
Interim Retirement Rate:	0.00000
Study Date, Year-End:	2009
Future Life from Study Date:	21.0
Remaining Life (F/E + .5) =	22.5

Development of Interim Retirement Rate

Activity Year	Additions	Retirements	Removal Costs	Yr-End Plant Balance	Interim Retirement Rate
A	B	C	D	E	F = C / E
1950				$ -	0.00000
1951				$ -	0.00000
1952				$ -	0.00000
1953	0	0	0	$ -	0.00000
1954	0	0	0	$ -	0.00000
1955	0	0	0	$ -	0.00000
1956	0	0	0	$ -	0.00000
1957	0	0	0	$ -	0.00000
1958	0	0	0	$ -	0.00000
1959	0	0	0	$ -	0.00000
1960	0	0	0	$ -	0.00000
1961	0	0	0	$ -	0.00000
1962	0	0	0	$ -	0.00000
1963	0	0	0	$ -	0.00000
1964	0	0	0	$ -	0.00000
1965	0	0	0	$ -	0.00000
1966	0	0	0	$ -	0.00000
1967	0	0	0	$ -	0.00000
1968	0	0	0	$ -	0.00000
1969	0	0	0	$ -	0.00000
1970	0	0	0	$ -	0.00000
1971	0	0	0	$ -	0.00000
1972	0	0	0	$ -	0.00000
1973	0	0	0	$ -	0.00000
1974	0	0	0	$ -	0.00000
1975	0	0	0	$ -	0.00000
1976	0	0	0	$ -	0.00000
1977	0	0	0	$ -	0.00000
1978	0	0	0	$ -	0.00000
1979	0	0	0	$ -	0.00000
1980	0	0	0	$ -	0.00000
1981	0	0	0	$ -	0.00000
1982	0	0	0	$ -	0.00000
1983	0	0	0	$ -	0.00000
1984	0	0	0	$ -	0.00000
1985	0	0	0	$ -	0.00000
1986	0	0	0	$ -	0.00000
1987	0	0	0	$ -	0.00000
1988	0	0	0	$ -	0.00000
1989	0	0	0	$ -	0.00000
1990	0	0	0	$ -	0.00000
1991	0	0	0	$ -	0.00000
1992	0	0	0	$ -	0.00000
1993	0	0	0	$ -	0.00000
1994	0	460	0	$ -	0.00000
1995	0	0	0	$ -	0.00000
1996	0	0	0	$ -	0.00000
1997	0	0	0	$ -	0.00000
1998	0	45,634	0	$ -	0.00000
1999	0	0	0	$ -	0.00000
2000	0	0	0	$ -	0.00000
2001	0	0	0	$ -	0.00000
2002	0	0	0	$ -	0.00000
2003	0	0	0	$ -	0.00000
2004	0	0	0	$ -	0.00000
2005	0	0	0	$ -	0.00000
2006	0	0	0	$ -	0.00000
2007	0	0	0	$ -	0.00000
2008	0	0	0	$ -	0.00000
2009	0	0	0	$ -	0.00000
TOTAL	$ -	$ 46,094	$ -	$ -	0.00000

Interim Retirement Life Table

Year Placed	Age at 12/31/2009	Annual Retirement Rate	Annual Survival Ratio	Life Table	Unrealized Life of Original Plant [1]
A	B	C	D = (1- C)	E	F
2009	0.5	-	1.00000	1.00000	22.00000
2008	1.5	-	1.00000	1.00000	22.00000
2007	2.5	-	1.00000	1.00000	22.00000
2006	3.5	-	1.00000	1.00000	22.00000
2005	4.5	-	1.00000	1.00000	22.00000
2004	5.5	-	1.00000	1.00000	22.00000
2003	6.5	-	1.00000	1.00000	22.00000
2002	7.5	-	1.00000	1.00000	22.00000
2001	8.5	-	1.00000	1.00000	22.00000
2000	9.5	-	1.00000	1.00000	22.00000
1999	10.5	-	1.00000	1.00000	22.00000
1998	11.5	-	1.00000	1.00000	22.00000
1997	12.5	-	1.00000	1.00000	22.00000
1996	13.5	-	1.00000	1.00000	22.00000
1995	14.5	-	1.00000	1.00000	22.00000
1994	15.5	-	1.00000	1.00000	22.00000
1993	16.5	-	1.00000	1.00000	22.00000
1992	17.5	-	1.00000	1.00000	22.00000
1991	18.5	-	1.00000	1.00000	22.00000
1990	19.5	-	1.00000	1.00000	22.00000
1989	20.5	-	1.00000	1.00000	22.00000
1988	21.5	-	1.00000	1.00000	22.00000
1987	22.5	-	1.00000	1.00000	22.00000
1986	23.5	-	1.00000	1.00000	22.00000
1985	24.5	-	1.00000	1.00000	22.00000
1984	25.5	-	1.00000	1.00000	22.00000
1983	26.5	-	1.00000	1.00000	22.00000
1982	27.5	-	1.00000	1.00000	22.00000
1981	28.5	-	1.00000	1.00000	22.00000
1980	29.5	-	1.00000	1.00000	22.00000
1979	30.5	-	1.00000	1.00000	22.00000
1978	31.5	-	1.00000	1.00000	22.00000
1977	32.5	-	1.00000	1.00000	22.00000
1976	33.5	-	1.00000	1.00000	22.00000
1975	34.5	-	1.00000	1.00000	22.00000
1974	35.5	-	1.00000	1.00000	22.00000
1973	36.5	-	1.00000	1.00000	22.00000
1972	37.5	-	1.00000	1.00000	22.00000
1971	38.5	-	1.00000	1.00000	21.00000
1970	39.5	-	1.00000	1.00000	20.00000
1969	40.5	-	1.00000	1.00000	19.00000
1968	41.5	-	1.00000	1.00000	18.00000
1967	42.5	-	1.00000	1.00000	17.00000
1966	43.5	-	1.00000	1.00000	16.00000
1965	44.5	-	1.00000	1.00000	15.00000
1964	45.5	-	1.00000	1.00000	14.00000
1963	46.5	-	1.00000	1.00000	13.00000
1962	47.5	-	1.00000	1.00000	12.00000
1961	48.5	-	1.00000	1.00000	11.00000
1960	49.5	-	1.00000	1.00000	10.00000
1959	50.5	-	1.00000	1.00000	9.00000
1958	51.5	-	1.00000	1.00000	8.00000
1957	52.5	-	1.00000	1.00000	7.00000
1956	53.5	-	1.00000	1.00000	6.00000
1955	54.5	-	1.00000	1.00000	5.00000
1954	55.5	-	1.00000	1.00000	4.00000
1953	56.5	-	1.00000	1.00000	3.00000
1952	57.5	-	1.00000	1.00000	2.00000
1951	58.5	-	1.00000	1.00000	1.00000
1950	59.5	-	1.00000	1.00000	-

[1] Unrealized Life = Sum Life Table from (n-1) for (Future Life - .5) values

Big Rivers Electric Corporation
2010 Depreciation Rate Study - Interim Retirement Rate Analysis

Transmission Structures — Account: 352

Date of Retirement (Mid Year):	2035
Interim Retirement Rate:	0.00093
Study Date, Year-End:	2009
Future Life from Study Date:	25.5
Remaining Life (F/E + .5) =	26.2

Development of Interim Retirement Rate

Activity Year	Additions	Retirements	Removal Costs	Yr-End Plant Balance	Interim Retirement Rate
A	B	C	D	E	F = C / E
1950				$ -	0.00000
1951				$ -	0.00000
1952				$ -	0.00000
1953	0	0	0	$ -	0.00000
1954	0	0	0	$ -	0.00000
1955	0	0	0	$ -	0.00000
1956	0	0	0	$ -	0.00000
1957	0	0	0	$ -	0.00000
1958	0	0	0	$ -	0.00000
1959	0	0	0	$ -	0.00000
1960	0	0	0	$ -	0.00000
1961	0	0	0	$ -	0.00000
1962	0	0	0	$ -	0.00000
1963	0	0	0	$ -	0.00000
1964	0	0	0	$ -	0.00000
1965	20,160	0	27	$ 20,187	0.00000
1966	40,763	0	27	$ 60,977	0.00000
1967	0	0	121	$ 61,098	0.00000
1968	43,613	0	16	$ 104,727	0.00000
1969	259,615	0	1,139	$ 365,482	0.00000
1970	58,666	0	0	$ 424,148	0.00000
1971	4,943	651	63	$ 428,502	0.00152
1972	14,525	0	0	$ 443,028	0.00000
1973	610	294	1,194	$ 444,537	0.00066
1974	5,647	3,692	111	$ 446,602	0.00827
1975	235,954	1,395	934	$ 682,094	0.00205
1976	18,559	491	105	$ 700,268	0.00070
1977	209	667	33	$ 699,843	0.00095
1978	102,849	329	0	$ 802,362	0.00041
1979	405,482	1,485	0	$ 1,206,360	0.00123
1980	599,906	443	1	$ 1,805,824	0.00025
1981	79,726	870	83	$ 1,884,762	0.00046
1982	438,495	0	156	$ 2,323,413	0.00000
1983	18,555	462	0	$ 2,341,507	0.00020
1984	978,796	35,682	0	$ 3,284,620	0.01086
1985	222,378	0	0	$ 3,506,998	0.00000
1986	2,256,609	0	0	$ 5,763,608	0.00000
1987	0	1,876	0	$ 5,761,732	0.00033
1988	3,577	468	0	$ 5,764,841	0.00008
1989	787	746	0	$ 5,764,882	0.00013
1990	16,452	37,975	0	$ 5,743,360	0.00661
1991	605	0	0	$ 5,743,965	0.00000
1992	35,886	6,671	0	$ 5,773,179	0.00116
1993	2,244	3,465	0	$ 5,771,958	0.00060
1994	75,274	987	0	$ 5,846,246	0.00017
1995	0	14,474	0	$ 5,831,771	0.00248
1996	0	4,625	0	$ 5,827,146	0.00079
1997	77,151	0	0	$ 5,904,298	0.00000
1998	36,801	10,364	0	$ 5,930,734	0.00175
1999	671	5,379	0	$ 5,926,026	0.00091
2000	0	107	0	$ 5,925,920	0.00002
2001	8,031	10,118	0	$ 5,923,832	0.00171
2002	97,730	0	0	$ 6,021,562	0.00000
2003	49,786	6,545	0	$ 6,064,803	0.00108
2004	9,861	0	0	$ 6,074,664	0.00000
2005	0	0	0	$ 6,074,664	0.00000
2006	273,626	1,834	0	$ 6,346,456	0.00029
2007	0	0	0	$ 6,346,456	0.00000
2008	225,774	0	0	$ 6,572,231	0.00000
2009	5,029	1,432	0	$ 6,575,828	0.00022
TOTAL	$ 6,725,346	$ 153,527	$ 4,009	$ 165,317,502	0.00093

Interim Retirement Life Table

Year Placed	Age at 12/31/2009	Annual Retirement Rate	Annual Survival Ratio	Life Table	Unrealized Life of Original Plant [1]
A	B	C	D = (1- C)	E	F
2009	0.5	0.00093	0.99907	0.99954	25.66462
2008	1.5	0.00093	0.99907	0.99861	25.64078
2007	2.5	0.00093	0.99907	0.99768	25.61697
2006	3.5	0.00093	0.99907	0.99675	25.59318
2005	4.5	0.00093	0.99907	0.99583	25.56941
2004	5.5	0.00093	0.99907	0.99490	25.54567
2003	6.5	0.00093	0.99907	0.99398	25.52195
2002	7.5	0.00093	0.99907	0.99306	25.49824
2001	8.5	0.00093	0.99907	0.99213	25.47456
2000	9.5	0.00093	0.99907	0.99121	25.45091
1999	10.5	0.00093	0.99907	0.99029	25.42727
1998	11.5	0.00093	0.99907	0.98937	25.40366
1997	12.5	0.00093	0.99907	0.98845	25.38006
1996	13.5	0.00093	0.99907	0.98754	25.35649
1995	14.5	0.00093	0.99907	0.98662	25.33295
1994	15.5	0.00093	0.99907	0.98570	25.30942
1993	16.5	0.00093	0.99907	0.98479	25.28592
1992	17.5	0.00093	0.99907	0.98387	25.26243
1991	18.5	0.00093	0.99907	0.98296	25.23897
1990	19.5	0.00093	0.99907	0.98205	25.21553
1989	20.5	0.00093	0.99907	0.98113	25.19212
1988	21.5	0.00093	0.99907	0.98022	25.16872
1987	22.5	0.00093	0.99907	0.97931	25.14535
1986	23.5	0.00093	0.99907	0.97840	25.12200
1985	24.5	0.00093	0.99907	0.97749	25.09866
1984	25.5	0.00093	0.99907	0.97659	25.07536
1983	26.5	0.00093	0.99907	0.97568	25.05207
1982	27.5	0.00093	0.99907	0.97477	25.02880
1981	28.5	0.00093	0.99907	0.97387	25.00556
1980	29.5	0.00093	0.99907	0.97296	24.98234
1979	30.5	0.00093	0.99907	0.97206	24.95914
1978	31.5	0.00093	0.99907	0.97116	24.93596
1977	32.5	0.00093	0.99907	0.97026	24.91280
1976	33.5	0.00093	0.99907	0.96935	24.88966
1975	34.5	0.00093	0.99907	0.96845	23.92121
1974	35.5	0.00093	0.99907	0.96755	22.95366
1973	36.5	0.00093	0.99907	0.96666	21.98700
1972	37.5	0.00093	0.99907	0.96576	21.02124
1971	38.5	0.00093	0.99907	0.96486	20.05638
1970	39.5	0.00093	0.99907	0.96397	19.09241
1969	40.5	0.00093	0.99907	0.96307	18.12934
1968	41.5	0.00093	0.99907	0.96218	17.16717
1967	42.5	0.00093	0.99907	0.96128	16.20589
1966	43.5	0.00093	0.99907	0.96039	15.24550
1965	44.5	0.00093	0.99907	0.95950	14.28600
1964	45.5	0.00093	0.99907	0.95861	13.32739
1963	46.5	0.00093	0.99907	0.95772	12.36968
1962	47.5	0.00093	0.99907	0.95683	11.41285
1961	48.5	0.00093	0.99907	0.95594	10.45691
1960	49.5	0.00093	0.99907	0.95505	9.50186
1959	50.5	0.00093	0.99907	0.95416	8.54770
1958	51.5	0.00093	0.99907	0.95328	7.59442
1957	52.5	0.00093	0.99907	0.95239	6.64203
1956	53.5	0.00093	0.99907	0.95151	5.69052
1955	54.5	0.00093	0.99907	0.95062	4.73989
1954	55.5	0.00093	0.99907	0.94974	3.79015
1953	56.5	0.00093	0.99907	0.94886	2.84129
1952	57.5	0.00093	0.99907	0.94798	1.89332
1951	58.5	0.00093	0.99907	0.94710	0.94622
1950	59.5	0.00093	0.99907	0.94622	-

[1] Unrealized Life = Sum Life Table from (n-1) for (Future Life - .5) values

Big Rivers Electric Corporation
2010 Depreciation Rate Study - Interim Retirement Rate Analysis

Transmission Station Eqpt   Account: 353

Date of Retirement (Mid Year):	2035
Interim Retirement Rate:	0.00736
Study Date, Year-End:	2009
Future Life from Study Date:	25.5
Remaining Life (F/E + .5) =	24.1

Development of Interim Retirement Rate

Activity Year	Additions	Retirements	Removal Costs	Yr-End Plant Balance	Interim Retirement Rate
A	B	C	D	E	F = C / E
1950				$ -	0.00000
1951				$ -	0.00000
1952				$ -	0.00000
1953	0	0	0	$ -	0.00000
1954	0	0	0	$ -	0.00000
1955	0	0	152	$ 152	0.00000
1956	0	0	105	$ 256	0.00000
1957	0	0	0	$ 256	0.00000
1958	0	0	122	$ 379	0.00000
1959	0	0	422	$ 800	0.00000
1960	0	0	0	$ 800	0.00000
1961	0	0	161	$ 961	0.00000
1962	0	0	234	$ 1,195	0.00000
1963	0	0	0	$ 1,195	0.00000
1964	0	0	0	$ 1,195	0.00000
1965	419,714	5,035	4,825	$ 420,699	0.01197
1966	1,221,762	0	1,641	$ 1,644,102	0.00000
1967	1,474	0	5,421	$ 1,650,997	0.00000
1968	945,361	0	7,024	$ 2,603,381	0.00000
1969	3,144,331	3,574	21,755	$ 5,765,893	0.00062
1970	934,369	1,556	4,020	$ 6,702,726	0.00023
1971	376,657	4,337	2,938	$ 7,077,984	0.00061
1972	271,870	6,243	1,011	$ 7,344,622	0.00085
1973	1,593,104	251,447	5,865	$ 8,692,144	0.02893
1974	199,178	24,004	1,244	$ 8,868,562	0.00271
1975	1,954,922	72,258	10,640	$ 10,761,865	0.00671
1976	666,720	13,284	610	$ 11,415,911	0.00116
1977	1,840,851	3,445	2,715	$ 13,256,032	0.00026
1978	2,073,381	9,421	1,194	$ 15,321,186	0.00061
1979	3,301,427	70,870	1,430	$ 18,553,174	0.00382
1980	984,231	23,149	1,678	$ 19,515,933	0.00119
1981	2,755,462	63,090	3,278	$ 22,211,583	0.00284
1982	3,757,786	328,828	1,369	$ 25,641,911	0.01282
1983	940,709	8,084	11,828	$ 26,586,364	0.00030
1984	9,650,017	780,185	4,514	$ 35,460,710	0.02200
1985	1,709,016	19,519	4,901	$ 37,155,108	0.00053
1986	42,240,181	253,465	6,594	$ 79,148,418	0.00320
1987	1,070,692	24,687	1,306	$ 80,195,728	0.00031
1988	160,672	41,780	252	$ 80,314,871	0.00052
1989	393,258	34,043	1,544	$ 80,675,631	0.00042
1990	2,389,256	410,741	1,820	$ 82,655,965	0.00497
1991	49,569	37,817	285	$ 82,668,002	0.00046
1992	732,313	129,609	655	$ 83,271,361	0.00156
1993	1,239,184	1,259,780	867	$ 83,251,632	0.01513
1994	881,759	239,686	80	$ 83,893,784	0.00286
1995	74,232	242,935	393	$ 83,725,474	0.00290
1996	508,704	34,148	1,456	$ 84,201,486	0.00041
1997	1,085,676	19,620	551	$ 85,268,093	0.00023
1998	123,115	182,053	839	$ 85,209,993	0.00214
1999	3,199,950	192,792	670	$ 88,217,822	0.00219
2000	2,487,663	339,531	58	$ 90,366,011	0.00376
2001	975,817	461,633	436	$ 90,880,630	0.00508
2002	1,028,798	124,490	84	$ 91,785,023	0.00136
2003	1,481,578	269,518	0	$ 92,997,083	0.00290
2004	2,792,932	7,785,162	19	$ 88,004,872	0.08846
2005	232,344	65,400	3	$ 88,171,820	0.00074
2006	5,571,841	1,165,164	275	$ 92,578,772	0.01259
2007	245,661	2,399,085	0	$ 90,425,347	0.02653
2008	7,444,270	43,008	0	$ 97,826,610	0.00044
2009	120,432	2,438	0	$ 97,944,604	0.00002
TOTAL	$ 115,272,236	$ 17,446,914	$ 119,282	$ 2,370,337,102	0.00736

Interim Retirement Life Table

Year Placed	Age at 12/31/2009	Annual Retirement Rate	Annual Survival Ratio	Life Table	Unrealized Life of Original Plant [1]
A	B	C	D = (1- C)	E	F
2009	0.5	0.00736	0.99264	0.99632	23.48142
2008	1.5	0.00736	0.99264	0.98899	23.30859
2007	2.5	0.00736	0.99264	0.98171	23.13702
2006	3.5	0.00736	0.99264	0.97448	22.96672
2005	4.5	0.00736	0.99264	0.96731	22.79767
2004	5.5	0.00736	0.99264	0.96019	22.62987
2003	6.5	0.00736	0.99264	0.95312	22.46330
2002	7.5	0.00736	0.99264	0.94611	22.29796
2001	8.5	0.00736	0.99264	0.93914	22.13384
2000	9.5	0.00736	0.99264	0.93223	21.97092
1999	10.5	0.00736	0.99264	0.92537	21.80920
1998	11.5	0.00736	0.99264	0.91856	21.64868
1997	12.5	0.00736	0.99264	0.91180	21.48933
1996	13.5	0.00736	0.99264	0.90508	21.33116
1995	14.5	0.00736	0.99264	0.89842	21.17415
1994	15.5	0.00736	0.99264	0.89181	21.01830
1993	16.5	0.00736	0.99264	0.88524	20.86359
1992	17.5	0.00736	0.99264	0.87873	20.71003
1991	18.5	0.00736	0.99264	0.87226	20.55759
1990	19.5	0.00736	0.99264	0.86584	20.40627
1989	20.5	0.00736	0.99264	0.85947	20.25607
1988	21.5	0.00736	0.99264	0.85314	20.10698
1987	22.5	0.00736	0.99264	0.84686	19.95898
1986	23.5	0.00736	0.99264	0.84063	19.81207
1985	24.5	0.00736	0.99264	0.83444	19.66624
1984	25.5	0.00736	0.99264	0.82830	19.52149
1983	26.5	0.00736	0.99264	0.82220	19.37780
1982	27.5	0.00736	0.99264	0.81615	19.23517
1981	28.5	0.00736	0.99264	0.81014	19.09359
1980	29.5	0.00736	0.99264	0.80418	18.95305
1979	30.5	0.00736	0.99264	0.79826	18.81355
1978	31.5	0.00736	0.99264	0.79239	18.67507
1977	32.5	0.00736	0.99264	0.78655	18.53761
1976	33.5	0.00736	0.99264	0.78076	18.40117
1975	34.5	0.00736	0.99264	0.77502	17.62615
1974	35.5	0.00736	0.99264	0.76931	16.85684
1973	36.5	0.00736	0.99264	0.76365	16.09319
1972	37.5	0.00736	0.99264	0.75803	15.33516
1971	38.5	0.00736	0.99264	0.75245	14.58271
1970	39.5	0.00736	0.99264	0.74691	13.83580
1969	40.5	0.00736	0.99264	0.74141	13.09438
1968	41.5	0.00736	0.99264	0.73596	12.35843
1967	42.5	0.00736	0.99264	0.73054	11.62789
1966	43.5	0.00736	0.99264	0.72516	10.90273
1965	44.5	0.00736	0.99264	0.71982	10.18290
1964	45.5	0.00736	0.99264	0.71453	9.46837
1963	46.5	0.00736	0.99264	0.70927	8.75911
1962	47.5	0.00736	0.99264	0.70405	8.05506
1961	48.5	0.00736	0.99264	0.69886	7.35620
1960	49.5	0.00736	0.99264	0.69372	6.66248
1959	50.5	0.00736	0.99264	0.68861	5.97386
1958	51.5	0.00736	0.99264	0.68355	5.29032
1957	52.5	0.00736	0.99264	0.67851	4.61180
1956	53.5	0.00736	0.99264	0.67352	3.93828
1955	54.5	0.00736	0.99264	0.66856	3.26972
1954	55.5	0.00736	0.99264	0.66364	2.60608
1953	56.5	0.00736	0.99264	0.65876	1.94732
1952	57.5	0.00736	0.99264	0.65391	1.29341
1951	58.5	0.00736	0.99264	0.64910	0.64432
1950	59.5	0.00736	0.99264	0.64432	-

[1] Unrealized Life = Sum Life Table from (n-1) for (Future Life - .5) values

Big Rivers Electric Corporation
2010 Depreciation Rate Study - Interim Retirement Rate Analysis

Burns & McDonnell SINCE 1898

Transmission Towers | Account: 354

Date of Retirement (Mid Year): 2040
Interim Retirement Rate: 0.00002
Study Date, Year-End: 2009
Future Life from Study Date: 30.5
Remaining Life (F/E + .5) = 31.5

Development of Interim Retirement Rate

Activity Year	Additions	Retirements	Removal Costs	Yr-End Plant Balance	Interim Retirement Rate
A	B	C	D	E	F = C / E
1950				$ -	0.00000
1951				$ -	0.00000
1952				$ -	0.00000
1953	0	0	0	$ -	0.00000
1954	0	0	0	$ -	0.00000
1955	0	0	0	$ -	0.00000
1956	0	0	0	$ -	0.00000
1957	0	0	0	$ -	0.00000
1958	0	0	0	$ -	0.00000
1959	0	0	0	$ -	0.00000
1960	0	0	0	$ -	0.00000
1961	0	0	0	$ -	0.00000
1962	0	0	0	$ -	0.00000
1963	0	0	0	$ -	0.00000
1964	0	0	0	$ -	0.00000
1965	0	0	0	$ -	0.00000
1966	0	0	0	$ -	0.00000
1967	309,097	0	0	$ 309,097	0.00000
1968	139,879	0	0	$ 448,976	0.00000
1969	157,055	0	0	$ 606,032	0.00000
1970	0	0	0	$ 606,032	0.00000
1971	0	0	0	$ 606,032	0.00000
1972	0	0	0	$ 606,032	0.00000
1973	0	0	0	$ 606,032	0.00000
1974	0	0	0	$ 606,032	0.00000
1975	0	0	0	$ 606,032	0.00000
1976	380,892	0	0	$ 986,924	0.00000
1977	4,019	0	145	$ 991,089	0.00000
1978	3,721	0	0	$ 994,809	0.00000
1979	78,240	0	0	$ 1,073,049	0.00000
1980	80,487	0	0	$ 1,153,536	0.00000
1981	4,893	0	0	$ 1,158,429	0.00000
1982	88,103	0	0	$ 1,246,532	0.00000
1983	14,694	0	0	$ 1,261,226	0.00000
1984	460,143	0	0	$ 1,721,370	0.00000
1985	0	0	0	$ 1,721,370	0.00000
1986	5,595,769	0	0	$ 7,317,138	0.00000
1987	0	0	0	$ 7,317,138	0.00000
1988	0	0	0	$ 7,317,138	0.00000
1989	0	0	0	$ 7,317,138	0.00000
1990	10,759	0	0	$ 7,327,897	0.00000
1991	0	3,667	0	$ 7,324,231	0.00050
1992	0	0	0	$ 7,324,231	0.00000
1993	0	0	0	$ 7,324,231	0.00000
1994	0	0	0	$ 7,324,231	0.00000
1995	0	0	0	$ 7,324,231	0.00000
1996	0	0	0	$ 7,324,231	0.00000
1997	0	0	0	$ 7,324,231	0.00000
1998	0	0	0	$ 7,324,231	0.00000
1999	0	0	0	$ 7,324,231	0.00000
2000	0	0	0	$ 7,324,231	0.00000
2001	0	445	0	$ 7,323,786	0.00006
2002	0	0	0	$ 7,323,786	0.00000
2003	6,688	0	0	$ 7,330,474	0.00000
2004	0	0	0	$ 7,330,474	0.00000
2005	0	0	0	$ 7,330,474	0.00000
2006	0	0	0	$ 7,330,474	0.00000
2007	0	0	0	$ 7,330,474	0.00000
2008	1,259,104	0	0	$ 8,589,578	0.00000
2009	0	0	0	$ 8,589,578	0.00000
TOTAL	$ 8,593,544	$ 4,112	$ 145	$ 195,626,481	0.00002

Interim Retirement Life Table

Year Placed	Age at 12/31/2009	Annual Retirement Rate	Annual Survival Ratio	Life Table	Unrealized Life of Original Plant [1]
A	B	C	D = (1- C)	E	F
2009	0.5	0.00002	0.99998	0.99999	30.98925
2008	1.5	0.00002	0.99998	0.99997	30.98860
2007	2.5	0.00002	0.99998	0.99995	30.98795
2006	3.5	0.00002	0.99998	0.99993	30.98730
2005	4.5	0.00002	0.99998	0.99991	30.98665
2004	5.5	0.00002	0.99998	0.99988	30.98599
2003	6.5	0.00002	0.99998	0.99986	30.98534
2002	7.5	0.00002	0.99998	0.99984	30.98469
2001	8.5	0.00002	0.99998	0.99982	30.98404
2000	9.5	0.00002	0.99998	0.99980	30.98339
1999	10.5	0.00002	0.99998	0.99978	30.98274
1998	11.5	0.00002	0.99998	0.99976	30.98209
1997	12.5	0.00002	0.99998	0.99974	30.98144
1996	13.5	0.00002	0.99998	0.99972	30.98079
1995	14.5	0.00002	0.99998	0.99970	30.98013
1994	15.5	0.00002	0.99998	0.99967	30.97948
1993	16.5	0.00002	0.99998	0.99965	30.97883
1992	17.5	0.00002	0.99998	0.99963	30.97818
1991	18.5	0.00002	0.99998	0.99961	30.97753
1990	19.5	0.00002	0.99998	0.99959	30.97688
1989	20.5	0.00002	0.99998	0.99957	30.97623
1988	21.5	0.00002	0.99998	0.99955	30.97558
1987	22.5	0.00002	0.99998	0.99953	30.97493
1986	23.5	0.00002	0.99998	0.99951	30.97427
1985	24.5	0.00002	0.99998	0.99949	30.97362
1984	25.5	0.00002	0.99998	0.99946	30.97297
1983	26.5	0.00002	0.99998	0.99944	30.97232
1982	27.5	0.00002	0.99998	0.99942	30.97167
1981	28.5	0.00002	0.99998	0.99940	30.97102
1980	29.5	0.00002	0.99998	0.99938	29.97164
1979	30.5	0.00002	0.99998	0.99936	28.97228
1978	31.5	0.00002	0.99998	0.99934	27.97294
1977	32.5	0.00002	0.99998	0.99932	26.97362
1976	33.5	0.00002	0.99998	0.99930	25.97433
1975	34.5	0.00002	0.99998	0.99928	24.97505
1974	35.5	0.00002	0.99998	0.99925	23.97580
1973	36.5	0.00002	0.99998	0.99923	22.97657
1972	37.5	0.00002	0.99998	0.99921	21.97735
1971	38.5	0.00002	0.99998	0.99919	20.97816
1970	39.5	0.00002	0.99998	0.99917	19.97899
1969	40.5	0.00002	0.99998	0.99915	18.97984
1968	41.5	0.00002	0.99998	0.99913	17.98072
1967	42.5	0.00002	0.99998	0.99911	16.98161
1966	43.5	0.00002	0.99998	0.99909	15.98252
1965	44.5	0.00002	0.99998	0.99907	14.98346
1964	45.5	0.00002	0.99998	0.99904	13.98441
1963	46.5	0.00002	0.99998	0.99902	12.98539
1962	47.5	0.00002	0.99998	0.99900	11.98639
1961	48.5	0.00002	0.99998	0.99898	10.98741
1960	49.5	0.00002	0.99998	0.99896	9.98845
1959	50.5	0.00002	0.99998	0.99894	8.98951
1958	51.5	0.00002	0.99998	0.99892	7.99059
1957	52.5	0.00002	0.99998	0.99890	6.99169
1956	53.5	0.00002	0.99998	0.99888	5.99282
1955	54.5	0.00002	0.99998	0.99886	4.99396
1954	55.5	0.00002	0.99998	0.99883	3.99513
1953	56.5	0.00002	0.99998	0.99881	2.99631
1952	57.5	0.00002	0.99998	0.99879	1.99752
1951	58.5	0.00002	0.99998	0.99877	0.99875
1950	59.5	0.00002	0.99998	0.99875	-

[1] Unrealized Life = Sum Life Table from (n-1) for (Future Life - .5) values

Big Rivers Electric Corporation
2010 Depreciation Rate Study - Interim Retirement Rate Analysis

Burns & McDonnell SINCE 1898

Transmission Poles Account: 355

Date of Retirement (Mid Year): 2032
Interim Retirement Rate: 0.00000
Study Date, Year-End: 2009
Future Life from Study Date: 22.5
Remaining Life (F/E + .5) = 23.5

Development of Interim Retirement Rate

Activity Year	Additions	Retirements	Adjustments and Transfers	Yr-End Plant Balance	Interim Retirement Rate
A	B	C	D	E	F = C / E
1950				$ -	0.00000
1951				$ -	0.00000
1952				$ -	0.00000
1953	0			$ -	0.00000
1954	0			$ -	0.00000
1955	0			$ -	0.00000
1956	0			$ -	0.00000
1957	0			$ -	0.00000
1958	0			$ -	0.00000
1959	0			$ -	0.00000
1960	0			$ -	0.00000
1961	0			$ -	0.00000
1962	0			$ -	0.00000
1963	0			$ -	0.00000
1964	0			$ -	0.00000
1965	0			$ -	0.00000
1966	0			$ -	0.00000
1967	57,283			$ 57,283	0.00000
1968	0			$ 57,283	0.00000
1969	24,190			$ 81,473	0.00000
1970	0			$ 81,473	0.00000
1971	0			$ 81,473	0.00000
1972	0			$ 81,473	0.00000
1973	0			$ 81,473	0.00000
1974	0			$ 81,473	0.00000
1975	0			$ 81,473	0.00000
1976	152,841			$ 234,314	0.00000
1977	0			$ 234,314	0.00000
1978	0			$ 234,314	0.00000
1979	0			$ 234,314	0.00000
1980	0			$ 234,314	0.00000
1981	5,416,170			$ 5,650,484	0.00000
1982	919,337			$ 6,569,821	0.00000
1983	111,826			$ 6,681,647	0.00000
1984	5,956,521			$ 12,638,168	0.00000
1985	143,911			$ 12,782,079	0.00000
1986	8,658,249			$ 21,440,328	0.00000
1987	262,186			$ 21,702,514	0.00000
1988	597,659			$ 22,300,172	0.00000
1989	221,888			$ 22,522,061	0.00000
1990	450,004			$ 22,972,065	0.00000
1991	260,558			$ 23,232,623	0.00000
1992	165,089			$ 23,397,712	0.00000
1993	176,065			$ 23,573,777	0.00000
1994	1,361,027			$ 24,934,804	0.00000
1995	267,549			$ 25,202,353	0.00000
1996	334,502			$ 25,536,854	0.00000
1997	1,101,156			$ 26,638,011	0.00000
1998	313,063			$ 26,951,074	0.00000
1999	1,030,146			$ 27,981,220	0.00000
2000	391,243			$ 28,372,463	0.00000
2001	2,574,546			$ 30,947,009	0.00000
2002	907,983			$ 31,854,992	0.00000
2003	1,100,969			$ 32,955,962	0.00000
2004	764,747			$ 33,720,708	0.00000
2005	534,671			$ 34,255,379	0.00000
2006	1,532,011			$ 35,787,390	0.00000
2007	561,555			$ 36,348,946	0.00000
2008	4,122,427			$ 40,471,372	0.00000
2009	78,350			$ 40,549,722	0.00000
TOTAL	$ 40,549,722	$ -	$ -	$ 729,828,158	0.00000

Interim Retirement Life Table

Year Placed	Age at 12/31/2009	Annual Retirement Rate	Annual Survival Ratio	Life Table	Unrealized Life of Original Plant [1]
A	B	C	D = (1- C)	E	F
2009	0.5	-	1.00000	1.00000	23.00000
2008	1.5	-	1.00000	1.00000	23.00000
2007	2.5	-	1.00000	1.00000	23.00000
2006	3.5	-	1.00000	1.00000	23.00000
2005	4.5	-	1.00000	1.00000	23.00000
2004	5.5	-	1.00000	1.00000	23.00000
2003	6.5	-	1.00000	1.00000	23.00000
2002	7.5	-	1.00000	1.00000	23.00000
2001	8.5	-	1.00000	1.00000	23.00000
2000	9.5	-	1.00000	1.00000	23.00000
1999	10.5	-	1.00000	1.00000	23.00000
1998	11.5	-	1.00000	1.00000	23.00000
1997	12.5	-	1.00000	1.00000	23.00000
1996	13.5	-	1.00000	1.00000	23.00000
1995	14.5	-	1.00000	1.00000	23.00000
1994	15.5	-	1.00000	1.00000	23.00000
1993	16.5	-	1.00000	1.00000	23.00000
1992	17.5	-	1.00000	1.00000	23.00000
1991	18.5	-	1.00000	1.00000	23.00000
1990	19.5	-	1.00000	1.00000	23.00000
1989	20.5	-	1.00000	1.00000	23.00000
1988	21.5	-	1.00000	1.00000	23.00000
1987	22.5	-	1.00000	1.00000	23.00000
1986	23.5	-	1.00000	1.00000	23.00000
1985	24.5	-	1.00000	1.00000	23.00000
1984	25.5	-	1.00000	1.00000	23.00000
1983	26.5	-	1.00000	1.00000	23.00000
1982	27.5	-	1.00000	1.00000	23.00000
1981	28.5	-	1.00000	1.00000	23.00000
1980	29.5	-	1.00000	1.00000	23.00000
1979	30.5	-	1.00000	1.00000	23.00000
1978	31.5	-	1.00000	1.00000	23.00000
1977	32.5	-	1.00000	1.00000	23.00000
1976	33.5	-	1.00000	1.00000	23.00000
1975	34.5	-	1.00000	1.00000	23.00000
1974	35.5	-	1.00000	1.00000	23.00000
1973	36.5	-	1.00000	1.00000	23.00000
1972	37.5	-	1.00000	1.00000	22.00000
1971	38.5	-	1.00000	1.00000	21.00000
1970	39.5	-	1.00000	1.00000	20.00000
1969	40.5	-	1.00000	1.00000	19.00000
1968	41.5	-	1.00000	1.00000	18.00000
1967	42.5	-	1.00000	1.00000	17.00000
1966	43.5	-	1.00000	1.00000	16.00000
1965	44.5	-	1.00000	1.00000	15.00000
1964	45.5	-	1.00000	1.00000	14.00000
1963	46.5	-	1.00000	1.00000	13.00000
1962	47.5	-	1.00000	1.00000	12.00000
1961	48.5	-	1.00000	1.00000	11.00000
1960	49.5	-	1.00000	1.00000	10.00000
1959	50.5	-	1.00000	1.00000	9.00000
1958	51.5	-	1.00000	1.00000	8.00000
1957	52.5	-	1.00000	1.00000	7.00000
1956	53.5	-	1.00000	1.00000	6.00000
1955	54.5	-	1.00000	1.00000	5.00000
1954	55.5	-	1.00000	1.00000	4.00000
1953	56.5	-	1.00000	1.00000	3.00000
1952	57.5	-	1.00000	1.00000	2.00000
1951	58.5	-	1.00000	1.00000	1.00000
1950	59.5	-	1.00000	1.00000	-

[1] Unrealized Life = Sum Life Table from (n-1) for (Future Life - .5) values

Big Rivers Electric Corporation
2010 Depreciation Rate Study - Interim Retirement Rate Analysis

Transmission Lines Account: 356

Date of Retirement (Mid Year):	2035
Interim Retirement Rate:	0.00000
Study Date, Year-End:	2009
Future Life from Study Date:	25.5
Remaining Life (F/E + .5) =	26.5

Development of Interim Retirement Rate

Activity Year	Additions	Retirements	Adjustments and Transfers	Yr-End Plant Balance	Interim Retirement Rate
A	B	C	D	E	F = C / E
1950				$ -	0.00000
1951				$ -	0.00000
1952				$ -	0.00000
1953	0			$ -	0.00000
1954	0			$ -	0.00000
1955	0			$ -	0.00000
1956	0			$ -	0.00000
1957	0			$ -	0.00000
1958	0			$ -	0.00000
1959	0			$ -	0.00000
1960	0			$ -	0.00000
1961	0			$ -	0.00000
1962	0			$ -	0.00000
1963	0			$ -	0.00000
1964	0			$ -	0.00000
1965	0			$ -	0.00000
1966	0			$ -	0.00000
1967	39,131			$ 39,131	0.00000
1968	0			$ 39,131	0.00000
1969	23,026			$ 62,157	0.00000
1970	0			$ 62,157	0.00000
1971	0			$ 62,157	0.00000
1972	0			$ 62,157	0.00000
1973	0			$ 62,157	0.00000
1974	0			$ 62,157	0.00000
1975	0			$ 62,157	0.00000
1976	24,744			$ 86,901	0.00000
1977	0			$ 86,901	0.00000
1978	0			$ 86,901	0.00000
1979	0			$ 86,901	0.00000
1980	0			$ 86,901	0.00000
1981	5,676,547			$ 5,763,448	0.00000
1982	937,496			$ 6,700,944	0.00000
1983	210,765			$ 6,911,708	0.00000
1984	2,812,421			$ 9,724,129	0.00000
1985	45,223			$ 9,769,352	0.00000
1986	19,197,453			$ 28,966,805	0.00000
1987	180,019			$ 29,146,824	0.00000
1988	431,211			$ 29,578,035	0.00000
1989	255,513			$ 29,833,548	0.00000
1990	396,302			$ 30,229,849	0.00000
1991	68,804			$ 30,298,653	0.00000
1992	20,895			$ 30,319,549	0.00000
1993	77,924			$ 30,397,473	0.00000
1994	817,484			$ 31,214,957	0.00000
1995	74,339			$ 31,289,296	0.00000
1996	89,079			$ 31,378,375	0.00000
1997	1,179,392			$ 32,557,768	0.00000
1998	111,806			$ 32,669,574	0.00000
1999	672,219			$ 33,341,792	0.00000
2000	184,561			$ 33,526,354	0.00000
2001	699,346			$ 34,225,700	0.00000
2002	816,626			$ 35,042,326	0.00000
2003	432,410			$ 35,474,735	0.00000
2004	602,337			$ 36,077,073	0.00000
2005	242,723			$ 36,319,795	0.00000
2006	684,660			$ 37,004,455	0.00000
2007	137,405			$ 37,141,860	0.00000
2008	2,892,857			$ 40,034,717	0.00000
2009	0			$ 40,034,717	0.00000
TOTAL	$ 40,034,717	$ -	$ -	$ 835,921,679	0.00000

Interim Retirement Life Table

Year Placed	Age at 12/31/2009	Annual Retirement Rate	Annual Survival Ratio	Life Table	Unrealized Life of Original Plant [1]
A	B	C	D = (1- C)	E	F
2009	0.5	-	1.00000	1.00000	26.00000
2008	1.5	-	1.00000	1.00000	26.00000
2007	2.5	-	1.00000	1.00000	26.00000
2006	3.5	-	1.00000	1.00000	26.00000
2005	4.5	-	1.00000	1.00000	26.00000
2004	5.5	-	1.00000	1.00000	26.00000
2003	6.5	-	1.00000	1.00000	26.00000
2002	7.5	-	1.00000	1.00000	26.00000
2001	8.5	-	1.00000	1.00000	26.00000
2000	9.5	-	1.00000	1.00000	26.00000
1999	10.5	-	1.00000	1.00000	26.00000
1998	11.5	-	1.00000	1.00000	26.00000
1997	12.5	-	1.00000	1.00000	26.00000
1996	13.5	-	1.00000	1.00000	26.00000
1995	14.5	-	1.00000	1.00000	26.00000
1994	15.5	-	1.00000	1.00000	26.00000
1993	16.5	-	1.00000	1.00000	26.00000
1992	17.5	-	1.00000	1.00000	26.00000
1991	18.5	-	1.00000	1.00000	26.00000
1990	19.5	-	1.00000	1.00000	26.00000
1989	20.5	-	1.00000	1.00000	26.00000
1988	21.5	-	1.00000	1.00000	26.00000
1987	22.5	-	1.00000	1.00000	26.00000
1986	23.5	-	1.00000	1.00000	26.00000
1985	24.5	-	1.00000	1.00000	26.00000
1984	25.5	-	1.00000	1.00000	26.00000
1983	26.5	-	1.00000	1.00000	26.00000
1982	27.5	-	1.00000	1.00000	26.00000
1981	28.5	-	1.00000	1.00000	26.00000
1980	29.5	-	1.00000	1.00000	26.00000
1979	30.5	-	1.00000	1.00000	26.00000
1978	31.5	-	1.00000	1.00000	26.00000
1977	32.5	-	1.00000	1.00000	26.00000
1976	33.5	-	1.00000	1.00000	26.00000
1975	34.5	-	1.00000	1.00000	25.00000
1974	35.5	-	1.00000	1.00000	24.00000
1973	36.5	-	1.00000	1.00000	23.00000
1972	37.5	-	1.00000	1.00000	22.00000
1971	38.5	-	1.00000	1.00000	21.00000
1970	39.5	-	1.00000	1.00000	20.00000
1969	40.5	-	1.00000	1.00000	19.00000
1968	41.5	-	1.00000	1.00000	18.00000
1967	42.5	-	1.00000	1.00000	17.00000
1966	43.5	-	1.00000	1.00000	16.00000
1965	44.5	-	1.00000	1.00000	15.00000
1964	45.5	-	1.00000	1.00000	14.00000
1963	46.5	-	1.00000	1.00000	13.00000
1962	47.5	-	1.00000	1.00000	12.00000
1961	48.5	-	1.00000	1.00000	11.00000
1960	49.5	-	1.00000	1.00000	10.00000
1959	50.5	-	1.00000	1.00000	9.00000
1958	51.5	-	1.00000	1.00000	8.00000
1957	52.5	-	1.00000	1.00000	7.00000
1956	53.5	-	1.00000	1.00000	6.00000
1955	54.5	-	1.00000	1.00000	5.00000
1954	55.5	-	1.00000	1.00000	4.00000
1953	56.5	-	1.00000	1.00000	3.00000
1952	57.5	-	1.00000	1.00000	2.00000
1951	58.5	-	1.00000	1.00000	1.00000
1950	59.5	-	1.00000	1.00000	-

[1] Unrealized Life = Sum Life Table from (n-1) for (Future Life - .5) values

Big Rivers Electric Corporation
2010 Depreciation Rate Study - Interim Retirement Rate Analysis

Burns & McDonnell SINCE 1898

General Plant Structures Account: 390

Date of Retirement (Mid Year):	2015
Interim Retirement Rate:	0.01214
Study Date, Year-End:	2009
Future Life from Study Date:	6.0
Remaining Life (F/E + .5) =	11.6

Development of Interim Retirement Rate

Activity Year	Additions	Retirements	Removal Costs	Yr-End Plant Balance	Interim Retirement Rate
A	B	C	D	E	F = C / E
1950				$ -	0.00000
1951				$ -	0.00000
1952				$ -	0.00000
1953	0	0	0	$ -	0.00000
1954	0	0	0	$ -	0.00000
1955	0	0	0	$ -	0.00000
1956	0	0	0	$ -	0.00000
1957	0	0	0	$ -	0.00000
1958	0	0	0	$ -	0.00000
1959	0	0	0	$ -	0.00000
1960	0	0	0	$ -	0.00000
1961	0	0	0	$ -	0.00000
1962	0	0	0	$ -	0.00000
1963	0	0	0	$ -	0.00000
1964	0	0	0	$ -	0.00000
1965	0	0	0	$ -	0.00000
1966	213,961	0	0	$ 213,961	0.00000
1967	0	0	0	$ 213,961	0.00000
1968	2,483	0	0	$ 216,444	0.00000
1969	0	0	0	$ 216,444	0.00000
1970	267,258	0	0	$ 483,702	0.00000
1971	43,988	0	269	$ 527,959	0.00000
1972	0	4,598	0	$ 523,362	0.00878
1973	21,835	0	0	$ 545,197	0.00000
1974	37,731	2,500	0	$ 580,428	0.00431
1975	592	0	0	$ 581,020	0.00000
1976	1,704	0	208	$ 582,932	0.00000
1977	3,783	0	0	$ 586,715	0.00000
1978	4,808	0	0	$ 591,523	0.00000
1979	29,345	3,716	0	$ 617,153	0.00602
1980	1,269	0	0	$ 618,422	0.00000
1981	2,270,658	0	15,658	$ 2,904,737	0.00000
1982	190,816	0	0	$ 3,095,553	0.00000
1983	0	61,332	0	$ 3,034,221	0.02021
1984	0	0	0	$ 3,034,221	0.00000
1985	148,462	0	0	$ 3,182,684	0.00000
1986	0	0	0	$ 3,182,684	0.00000
1987	0	0	0	$ 3,182,684	0.00000
1988	24,337	0	0	$ 3,207,020	0.00000
1989	0	0	0	$ 3,207,020	0.00000
1990	1,995	0	0	$ 3,209,015	0.00000
1991	10,168	0	0	$ 3,219,183	0.00000
1992	0	0	0	$ 3,219,183	0.00000
1993	0	0	0	$ 3,219,183	0.00000
1994	126,550	5,086	0	$ 3,340,646	0.00152
1995	0	0	0	$ 3,340,646	0.00000
1996	0	0	0	$ 3,340,646	0.00000
1997	0	0	0	$ 3,340,646	0.00000
1998	10,867	18,258	0	$ 3,333,255	0.00548
1999	4,389	0	0	$ 3,337,644	0.00000
2000	0	984,851	0	$ 2,352,793	0.41859
2001	3,972	1,737	0	$ 2,355,027	0.00074
2002	31,276	1,099	0	$ 2,385,204	0.00046
2003	0	0	0	$ 2,385,204	0.00000
2004	3,785	3,761	0	$ 2,385,228	0.00158
2005	199,739	36,488	0	$ 2,548,479	0.01432
2006	10,205	2,514	0	$ 2,556,170	0.00098
2007	10,972	2,873	0	$ 2,564,269	0.00112
2008	4,742	-120	0	$ 2,569,131	-0.00005
2009	263,205	0	0	$ 2,832,336	0.00000
TOTAL	$ 3,944,895	$ 1,128,693	$ 16,134	$ 92,963,936	0.01214

Interim Retirement Life Table

Year Placed	Age at 12/31/2009	Annual Retirement Rate	Annual Survival Ratio	Life Table	Unrealized Life of Original Plant [1]
A	B	C	D = (1- C)	E	F
2009	0.5	0.01214	0.98786	0.99393	11.02655
2008	1.5	0.01214	0.98786	0.98186	10.89267
2007	2.5	0.01214	0.98786	0.96994	10.76042
2006	3.5	0.01214	0.98786	0.95816	10.62978
2005	4.5	0.01214	0.98786	0.94653	10.50072
2004	5.5	0.01214	0.98786	0.93504	10.37323
2003	6.5	0.01214	0.98786	0.92369	10.24728
2002	7.5	0.01214	0.98786	0.91247	10.12287
2001	8.5	0.01214	0.98786	0.90139	9.99997
2000	9.5	0.01214	0.98786	0.89045	9.87856
1999	10.5	0.01214	0.98786	0.87964	9.75862
1998	11.5	0.01214	0.98786	0.86896	9.64014
1997	12.5	0.01214	0.98786	0.85841	9.52309
1996	13.5	0.01214	0.98786	0.84799	9.40747
1995	14.5	0.01214	0.98786	0.83769	9.29325
1994	15.5	0.01214	0.98786	0.82752	9.18042
1993	16.5	0.01214	0.98786	0.81747	9.06896
1992	17.5	0.01214	0.98786	0.80755	8.95885
1991	18.5	0.01214	0.98786	0.79774	8.85008
1990	19.5	0.01214	0.98786	0.78806	8.74263
1989	20.5	0.01214	0.98786	0.77849	8.63649
1988	21.5	0.01214	0.98786	0.76904	8.53163
1987	22.5	0.01214	0.98786	0.75970	8.42804
1986	23.5	0.01214	0.98786	0.75048	8.32572
1985	24.5	0.01214	0.98786	0.74137	8.22463
1984	25.5	0.01214	0.98786	0.73236	8.12478
1983	26.5	0.01214	0.98786	0.72347	8.02613
1982	27.5	0.01214	0.98786	0.71469	7.92869
1981	28.5	0.01214	0.98786	0.70601	7.83242
1980	29.5	0.01214	0.98786	0.69744	7.73733
1979	30.5	0.01214	0.98786	0.68897	7.64339
1978	31.5	0.01214	0.98786	0.68061	7.55059
1977	32.5	0.01214	0.98786	0.67234	7.45891
1976	33.5	0.01214	0.98786	0.66418	7.36835
1975	34.5	0.01214	0.98786	0.65612	7.27889
1974	35.5	0.01214	0.98786	0.64815	7.19052
1973	36.5	0.01214	0.98786	0.64028	7.10322
1972	37.5	0.01214	0.98786	0.63251	7.01698
1971	38.5	0.01214	0.98786	0.62483	6.93178
1970	39.5	0.01214	0.98786	0.61724	6.84762
1969	40.5	0.01214	0.98786	0.60975	6.76448
1968	41.5	0.01214	0.98786	0.60235	6.68235
1967	42.5	0.01214	0.98786	0.59503	6.60122
1966	43.5	0.01214	0.98786	0.58781	6.52108
1965	44.5	0.01214	0.98786	0.58067	6.44190
1964	45.5	0.01214	0.98786	0.57362	6.36369
1963	46.5	0.01214	0.98786	0.56666	6.28643
1962	47.5	0.01214	0.98786	0.55978	6.21010
1961	48.5	0.01214	0.98786	0.55298	5.65712
1960	49.5	0.01214	0.98786	0.54627	5.11086
1959	50.5	0.01214	0.98786	0.53963	4.57122
1958	51.5	0.01214	0.98786	0.53308	4.03814
1957	52.5	0.01214	0.98786	0.52661	3.51153
1956	53.5	0.01214	0.98786	0.52022	2.99131
1955	54.5	0.01214	0.98786	0.51390	2.47741
1954	55.5	0.01214	0.98786	0.50766	1.96975
1953	56.5	0.01214	0.98786	0.50150	1.46825
1952	57.5	0.01214	0.98786	0.49541	0.97285
1951	58.5	0.01214	0.98786	0.48939	0.48345
1950	59.5	0.01214	0.98786	0.48345	-

[1] Unrealized Life = Sum Life Table from (n-1) for (Future Life - .5) values

Big Rivers Electric Corporation
2010 Depreciation Rate Study - Interim Retirement Rate Analysis

General Plant   Office Furniture & Equipment   Account: 391.0, 391.6, 391.7

Date of Retirement (Mid Year):	2017
Interim Retirement Rate:	3.67231
Study Date, Year-End:	2009
Future Life from Study Date:	8.0
Remaining Life (F/E + .5) =	-5057.57

Development of Interim Retirement Rate

Activity Year	Additions	Retirements	Removal Costs	Yr-End Plant Balance	Interim Retirement Rate
A	B	C	D	E	F = C / E
1950				$ -	0.00000
1951				$ -	0.00000
1952				$ -	0.00000
1953	0	0	0	$ -	0.00000
1954	0	0	0	$ -	0.00000
1955	0	0	0	$ -	0.00000
1956	0	0	0	$ -	0.00000
1957	0	0	0	$ -	0.00000
1958	0	0	0	$ -	0.00000
1959	0	0	0	$ -	0.00000
1960	0	0	0	$ -	0.00000
1961	0	0	0	$ -	0.00000
1962	0	0	0	$ -	0.00000
1963	0	0	0	$ -	0.00000
1964	0	0	0	$ -	0.00000
1965	0	0	0	$ -	0.00000
1966	0	0	0	$ -	0.00000
1967	0	0	0	$ -	0.00000
1968	0	0	0	$ -	0.00000
1969	0	0	0	$ -	0.00000
1970	0	0	0	$ -	0.00000
1971	1,873	0	0	$ 1,873	0.00000
1972	0	0	0	$ 1,873	0.00000
1973	0	0	0	$ 1,873	0.00000
1974	3,825	0	0	$ 5,699	0.00000
1975	0	0	0	$ 5,699	0.00000
1976	0	0	0	$ 5,699	0.00000
1977	502	0	80	$ 6,281	0.00000
1978	10,533	1,444	664	$ 16,034	0.09004
1979	3,276	6,879	0	$ 12,431	0.55343
1980	4,635	3,291	0	$ 13,775	0.23892
1981	18,913	2,175	0	$ 30,512	0.07128
1982	32,904	11,112	0	$ 52,305	0.21244
1983	14,814	12,216	0	$ 54,902	0.22251
1984	52,080	12,836	63	$ 94,208	0.13626
1985	617	9,631	0	$ 85,193	0.11305
1986	5,651	38,293	0	$ 52,551	0.72868
1987	44,954	18,352	0	$ 79,153	0.23186
1988	15,044	58,299	0	$ 35,898	1.62403
1989	7,003	48,703	0	$ -	0.00000
1990	41,091	74,156	0	$ -	0.00000
1991	43,689	86,235	0	$ -	0.00000
1992	18,617	79,202	0	$ -	0.00000
1993	23,789	9,177	0	$ 14,612	0.62804
1994	1,685	84,556	0	$ -	0.00000
1995	15,609	7,290	0	$ 8,318	0.87639
1996	1,380	32,731	0	$ -	0.00000
1997	5,099	5,122	0	$ -	0.00000
1998	5,434	823,912	0	$ -	0.00000
1999	1,662	610,952	0	$ -	0.00000
2000	5,735	253,451	0	$ -	0.00000
2001	970	164,948	0	$ -	0.00000
2002	7,514	98,450	0	$ -	0.00000
2003	5,377	22,360	0	$ -	0.00000
2004	38,804	59,698	0	$ -	0.00000
2005	5,183	60,703	0	$ -	0.00000
2006	9,433	5,129	0	$ 4,304	1.19158
2007	36,882	22,689	0	$ 18,498	1.22657
2008	35,410	25,457	0	$ 28,450	0.89482
2009	96,149	4,748	0	$ 119,851	0.03961
TOTAL	$ 616,135	$ 2,754,200	$ 806	$ 749,992	3.67231

Interim Retirement Life Table

Year Placed	Age at 12/31/2009	Annual Retirement Rate	Annual Survival Ratio	Life Table	Unrealized Life of Original Plant [1]
A	B	C	D = (1- C)	E	F
2009	0.5	3.67231	(2.67231)	(1)	4,229
2008	1.5	3.67231	(2.67231)	2	(11,302)
2007	2.5	3.67231	(2.67231)	(6)	30,202
2006	3.5	3.67231	(2.67231)	16	(80,710)
2005	4.5	3.67231	(2.67231)	(43)	215,683
2004	5.5	3.67231	(2.67231)	114	(576,370)
2003	6.5	3.67231	(2.67231)	(305)	1,540,236
2002	7.5	3.67231	(2.67231)	814	(4,115,982)
2001	8.5	3.67231	(2.67231)	(2,175)	10,999,163
2000	9.5	3.67231	(2.67231)	5,811	(29,393,125)
1999	10.5	3.67231	(2.67231)	(15,529)	78,547,413
1998	11.5	3.67231	(2.67231)	41,499	(209,902,694)
1997	12.5	3.67231	(2.67231)	(110,897)	560,924,152
1996	13.5	3.67231	(2.67231)	296,350	(1,498,960,775)
1995	14.5	3.67231	(2.67231)	(791,938)	4,005,681,331
1994	15.5	3.67231	(2.67231)	2,116,302	(10,704,404,807)
1993	16.5	3.67231	(2.67231)	(5,655,405)	28,605,441,321
1992	17.5	3.67231	(2.67231)	15,112,970	(76,442,482,130)
1991	18.5	3.67231	(2.67231)	(40,386,476)	204,277,676,008
1990	19.5	3.67231	(2.67231)	107,925,008	(545,892,385,390)
1989	20.5	3.67231	(2.67231)	(288,408,608)	1,458,791,299,424
1988	21.5	3.67231	(2.67231)	770,715,949	(3,898,336,214,668)
1987	22.5	3.67231	(2.67231)	(2,059,588,577)	10,417,545,846,751
1986	23.5	3.67231	(2.67231)	5.50E+09	-2.78E+13
1985	24.5	3.67231	(2.67231)	-1.47E+10	7.44E+13
1984	25.5	3.67231	(2.67231)	3.93E+10	-1.99E+14
1983	26.5	3.67231	(2.67231)	-1.05E+11	5.31E+14
1982	27.5	3.67231	(2.67231)	2.81E+11	-1.42E+15
1981	28.5	3.67231	(2.67231)	-7.50E+11	3.79E+15
1980	29.5	3.67231	(2.67231)	2.00E+12	-1.01E+16
1979	30.5	3.67231	(2.67231)	-5.36E+12	2.71E+16
1978	31.5	3.67231	(2.67231)	1.43E+13	-7.24E+16
1977	32.5	3.67231	(2.67231)	-3.83E+13	1.93E+17
1976	33.5	3.67231	(2.67231)	1.02E+14	-5.17E+17
1975	34.5	3.67231	(2.67231)	-2.73E+14	1.38E+18
1974	35.5	3.67231	(2.67231)	7.30E+14	-3.69E+18
1973	36.5	3.67231	(2.67231)	-1.95E+15	9.87E+18
1972	37.5	3.67231	(2.67231)	5.21E+15	-2.64E+19
1971	38.5	3.67231	(2.67231)	-1.39E+16	7.05E+19
1970	39.5	3.67231	(2.67231)	3.72E+16	-1.88E+20
1969	40.5	3.67231	(2.67231)	-9.95E+16	5.03E+20
1968	41.5	3.67231	(2.67231)	2.66E+17	-1.34E+21
1967	42.5	3.67231	(2.67231)	-7.10E+17	3.59E+21
1966	43.5	3.67231	(2.67231)	1.90E+18	-9.60E+21
1965	44.5	3.67231	(2.67231)	-5.07E+18	2.57E+22
1964	45.5	3.67231	(2.67231)	1.36E+19	-6.86E+22
1963	46.5	3.67231	(2.67231)	-3.62E+19	1.83E+23
1962	47.5	3.67231	(2.67231)	9.68E+19	-4.90E+23
1961	48.5	3.67231	(2.67231)	-2.59E+20	1.31E+24
1960	49.5	3.67231	(2.67231)	6.91E+20	-3.50E+24
1959	50.5	3.67231	(2.67231)	-1.85E+21	9.34E+24
1958	51.5	3.67231	(2.67231)	4.94E+21	9.34E+24
1957	52.5	3.67231	(2.67231)	-1.32E+22	9.35E+24
1956	53.5	3.67231	(2.67231)	3.53E+22	9.32E+24
1955	54.5	3.67231	(2.67231)	-9.42E+22	9.41E+24
1954	55.5	3.67231	(2.67231)	2.52E+23	9.16E+24
1953	56.5	3.67231	(2.67231)	-6.73E+23	9.83E+24
1952	57.5	3.67231	(2.67231)	1.80E+24	8.04E+24
1951	58.5	3.67231	(2.67231)	-4.80E+24	1.28E+25
1950	59.5	3.67231	(2.67231)	1.28E+25	0.00E+00

[1] Unrealized Life = Sum Life Table from (n-1) for (Future Life - .5) values

Big Rivers Electric Corporation
2010 Depreciation Rate Study - Interim Retirement Rate Analysis

Burns & McDonnell SINCE 1898

General Plant Computer System 34 Account: 391.2

Date of Retirement (Mid Year):	2018
Interim Retirement Rate:	0.31640
Study Date, Year-End:	2009
Future Life from Study Date:	9.0
Remaining Life (F/E + .5) =	2.6

Development of Interim Retirement Rate

Activity Year	Additions	Retirements	Removal Costs	Yr-End Plant Balance	Interim Retirement Rate
A	B	C	D	E	F = C / E
1950				$ -	0.00000
1951				$ -	0.00000
1952				$ -	0.00000
1953	0	0	0	$ -	0.00000
1954	0	0	0	$ -	0.00000
1955	0	0	0	$ -	0.00000
1956	0	0	0	$ -	0.00000
1957	0	0	0	$ -	0.00000
1958	0	0	0	$ -	0.00000
1959	0	0	0	$ -	0.00000
1960	0	0	0	$ -	0.00000
1961	0	0	0	$ -	0.00000
1962	0	0	0	$ -	0.00000
1963	0	0	0	$ -	0.00000
1964	0	0	0	$ -	0.00000
1965	0	0	0	$ -	0.00000
1966	0	0	0	$ -	0.00000
1967	0	0	0	$ -	0.00000
1968	0	0	0	$ -	0.00000
1969	0	0	0	$ -	0.00000
1970	0	0	0	$ -	0.00000
1971	0	0	0	$ -	0.00000
1972	0	0	0	$ -	0.00000
1973	0	0	0	$ -	0.00000
1974	0	0	0	$ -	0.00000
1975	0	0	0	$ -	0.00000
1976	0	0	0	$ -	0.00000
1977	0	0	0	$ -	0.00000
1978	0	0	0	$ -	0.00000
1979	0	0	0	$ -	0.00000
1980	0	0	0	$ -	0.00000
1981	0	0	0	$ -	0.00000
1982	0	0	0	$ -	0.00000
1983	20,178	0	0	$ 20,178	0.00000
1984	11,301	0	0	$ 31,478	0.00000
1985	566	0	0	$ 32,045	0.00000
1986	10,031	6,339	0	$ 35,736	0.17740
1987	10,070	102,442	0	$ -	0.00000
1988	2,044	348,449	0	$ -	0.00000
1989	68,513	96,391	0	$ -	0.00000
1990	10,095	584,760	0	$ -	0.00000
1991	152,299	26,119	0	$ 126,180	0.20700
1992	29,619	185,213	0	$ -	0.00000
1993	35,184	192,662	0	$ -	0.00000
1994	38,603	124,760	0	$ -	0.00000
1995	12,868	36,495	0	$ -	0.00000
1996	24,760	50,601	0	$ -	0.00000
1997	69,444	0	0	$ 69,444	0.00000
1998	104,612	826,943	0	$ -	0.00000
1999	6,579	921,279	0	$ -	0.00000
2000	161,462	239,043	0	$ -	0.00000
2001	171,377	632,084	0	$ -	0.00000
2002	280,680	35,782	0	$ 244,899	0.14611
2003	195,951	17,817	0	$ 423,032	0.04212
2004	1,866,261	503,286	0	$ 1,786,007	0.28179
2005	1,235,236	542,314	0	$ 2,478,929	0.21877
2006	709,512	80,829	0	$ 3,107,613	0.02601
2007	417,952	333,455	0	$ 3,192,110	0.10446
2008	943,959	205,735	0	$ 3,930,334	0.05235
2009	371,495	125,711	0	$ 4,176,118	0.03010
TOTAL	$ 6,960,650	$ 6,218,507	$ -	$ 19,654,103	0.31640

Interim Retirement Life Table

Year Placed	Age at 12/31/2009	Annual Retirement Rate	Annual Survival Ratio	Life Table	Unrealized Life of Original Plant [1]
A	B	C	D = (1- C)	E	F
2009	0.5	0.31640	0.68360	0.84180	1.75949
2008	1.5	0.31640	0.68360	0.57546	1.20279
2007	2.5	0.31640	0.68360	0.39338	0.82223
2006	3.5	0.31640	0.68360	0.26892	0.56208
2005	4.5	0.31640	0.68360	0.18383	0.38424
2004	5.5	0.31640	0.68360	0.12567	0.26267
2003	6.5	0.31640	0.68360	0.08591	0.17956
2002	7.5	0.31640	0.68360	0.05873	0.12275
2001	8.5	0.31640	0.68360	0.04015	0.08391
2000	9.5	0.31640	0.68360	0.02744	0.05736
1999	10.5	0.31640	0.68360	0.01876	0.03921
1998	11.5	0.31640	0.68360	0.01282	0.02681
1997	12.5	0.31640	0.68360	0.00877	0.01832
1996	13.5	0.31640	0.68360	0.00599	0.01253
1995	14.5	0.31640	0.68360	0.00410	0.00856
1994	15.5	0.31640	0.68360	0.00280	0.00585
1993	16.5	0.31640	0.68360	0.00191	0.00400
1992	17.5	0.31640	0.68360	0.00131	0.00274
1991	18.5	0.31640	0.68360	0.00089	0.00187
1990	19.5	0.31640	0.68360	0.00061	0.00128
1989	20.5	0.31640	0.68360	0.00042	0.00087
1988	21.5	0.31640	0.68360	0.00029	0.00060
1987	22.5	0.31640	0.68360	0.00020	0.00041
1986	23.5	0.31640	0.68360	0.00013	0.00028
1985	24.5	0.31640	0.68360	0.00009	0.00019
1984	25.5	0.31640	0.68360	0.00006	0.00013
1983	26.5	0.31640	0.68360	0.00004	0.00009
1982	27.5	0.31640	0.68360	0.00003	0.00006
1981	28.5	0.31640	0.68360	0.00002	0.00004
1980	29.5	0.31640	0.68360	0.00001	0.00003
1979	30.5	0.31640	0.68360	0.00001	0.00002
1978	31.5	0.31640	0.68360	0.00001	0.00001
1977	32.5	0.31640	0.68360	0.00000	0.00001
1976	33.5	0.31640	0.68360	0.00000	0.00001
1975	34.5	0.31640	0.68360	0.00000	0.00000
1974	35.5	0.31640	0.68360	0.00000	0.00000
1973	36.5	0.31640	0.68360	0.00000	0.00000
1972	37.5	0.31640	0.68360	0.00000	0.00000
1971	38.5	0.31640	0.68360	0.00000	0.00000
1970	39.5	0.31640	0.68360	0.00000	0.00000
1969	40.5	0.31640	0.68360	0.00000	0.00000
1968	41.5	0.31640	0.68360	0.00000	0.00000
1967	42.5	0.31640	0.68360	0.00000	0.00000
1966	43.5	0.31640	0.68360	0.00000	0.00000
1965	44.5	0.31640	0.68360	0.00000	0.00000
1964	45.5	0.31640	0.68360	0.00000	0.00000
1963	46.5	0.31640	0.68360	0.00000	0.00000
1962	47.5	0.31640	0.68360	0.00000	0.00000
1961	48.5	0.31640	0.68360	0.00000	0.00000
1960	49.5	0.31640	0.68360	0.00000	0.00000
1959	50.5	0.31640	0.68360	0.00000	0.00000
1958	51.5	0.31640	0.68360	0.00000	0.00000
1957	52.5	0.31640	0.68360	0.00000	0.00000
1956	53.5	0.31640	0.68360	0.00000	0.00000
1955	54.5	0.31640	0.68360	0.00000	0.00000
1954	55.5	0.31640	0.68360	0.00000	0.00000
1953	56.5	0.31640	0.68360	0.00000	0.00000
1952	57.5	0.31640	0.68360	0.00000	0.00000
1951	58.5	0.31640	0.68360	0.00000	0.00000
1950	59.5	0.31640	0.68360	0.00000	-

[1] Unrealized Life = Sum Life Table from (n-1) for (Future Life - .5) values

Big Rivers Electric Corporation
2010 Depreciation Rate Study - Interim Retirement Rate Analysis

General Plant Vehicles General — Account: 392.2

Date of Retirement (Mid Year): 2014
Interim Retirement Rate: 2.27328
Study Date, Year-End: 2009
Future Life from Study Date: 5.0
Remaining Life (F/E + .5) = 6.2

Development of Interim Retirement Rate

Activity Year	Additions	Retirements	Adjustments and Transfers	Yr-End Plant Balance	Interim Retirement Rate
A	B	C	D	E	F = C / E
1950				$ -	0.00000
1951				$ -	0.00000
1952				$ -	0.00000
1953	0	0	0	$ -	0.00000
1954	0	0	0	$ -	0.00000
1955	0	0	0	$ -	0.00000
1956	0	0	0	$ -	0.00000
1957	0	0	0	$ -	0.00000
1958	0	0	0	$ -	0.00000
1959	0	0	0	$ -	0.00000
1960	0	0	0	$ -	0.00000
1961	0	0	0	$ -	0.00000
1962	0	0	0	$ -	0.00000
1963	0	0	0	$ -	0.00000
1964	0	0	0	$ -	0.00000
1965	0	0	0	$ -	0.00000
1966	0	0	0	$ -	0.00000
1967	0	0	0	$ -	0.00000
1968	0	0	0	$ -	0.00000
1969	0	0	0	$ -	0.00000
1970	0	0	0	$ -	0.00000
1971	0	0	0	$ -	0.00000
1972	0	0	0	$ -	0.00000
1973	5,547	0	0	$ 5,547	0.00000
1974	0	0	0	$ 5,547	0.00000
1975	0	0	0	$ 5,547	0.00000
1976	0	3,816	0	$ 1,731	2.20427
1977	0	20,858	0	$ -	0.00000
1978	5,200	25,542	0	$ -	0.00000
1979	4,459	50,625	0	$ -	0.00000
1980	0	67,299	0	$ -	0.00000
1981	6,870	29,321	0	$ -	0.00000
1982	3,075	50,194	0	$ -	0.00000
1983	3,716	67,323	0	$ -	0.00000
1984	0	69,038	0	$ -	0.00000
1985	0	156,989	0	$ -	0.00000
1986	0	166,898	0	$ -	0.00000
1987	1,727	31,901	0	$ -	0.00000
1988	0	103,137	0	$ -	0.00000
1989	0	107,488	0	$ -	0.00000
1990	0	197,186	0	$ -	0.00000
1991	11,036	265,309	0	$ -	0.00000
1992	0	204,469	0	$ -	0.00000
1993	6,201	59,955	0	$ -	0.00000
1994	2,953	130,235	0	$ -	0.00000
1995	0	85,465	0	$ -	0.00000
1996	32,532	50,415	0	$ -	0.00000
1997	0	77,751	0	$ -	0.00000
1998	148,830	1,361,164	0	$ -	0.00000
1999	3,065	32,959	0	$ -	0.00000
2000	83,659	66,492	0	$ 17,167	3.87322
2001	92,501	66,715	0	$ 42,953	1.55321
2002	174,304	196,182	0	$ 21,076	9.30847
2003	96,439	86,515	0	$ 31,000	2.79085
2004	120,127	17,128	0	$ 133,998	0.12782
2005	114,895	46,658	0	$ 202,235	0.23071
2006	86,265	67,321	0	$ 221,179	0.30437
2007	102,370	125,647	0	$ 197,902	0.63489
2008	213,902	72,235	0	$ 339,569	0.21272
2009	317,874	36,696	0	$ 620,746	0.05912
TOTAL	$ 1,637,546	$ 4,196,925	$ -	$ 1,846,197	2.27328

Interim Retirement Life Table

Year Placed	Age at 12/31/2009	Annual Retirement Rate	Annual Survival Ratio	Life Table	Unrealized Life of Original Plant [1]
A	B	C	D = (1- C)	E	F
2009	0.5	2.27328	(1.27328)	(0.13664)	(0.78069)
2008	1.5	2.27328	(1.27328)	0.17398	0.99404
2007	2.5	2.27328	(1.27328)	(0.22153)	(1.26569)
2006	3.5	2.27328	(1.27328)	0.28207	1.61158
2005	4.5	2.27328	(1.27328)	(0.35915)	(2.05199)
2004	5.5	2.27328	(1.27328)	0.45730	2.61276
2003	6.5	2.27328	(1.27328)	(0.58227)	(3.32677)
2002	7.5	2.27328	(1.27328)	0.74139	4.23592
2001	8.5	2.27328	(1.27328)	(0.94400)	(5.39352)
2000	9.5	2.27328	(1.27328)	1.20198	6.86746
1999	10.5	2.27328	(1.27328)	(1.53046)	(8.74421)
1998	11.5	2.27328	(1.27328)	1.94871	11.13383
1997	12.5	2.27328	(1.27328)	(2.48125)	(14.17650)
1996	13.5	2.27328	(1.27328)	3.15933	18.05067
1995	14.5	2.27328	(1.27328)	(4.02271)	(22.98357)
1994	15.5	2.27328	(1.27328)	5.12205	29.26454
1993	16.5	2.27328	(1.27328)	(6.52180)	(37.26199)
1992	17.5	2.27328	(1.27328)	8.30409	47.44498
1991	18.5	2.27328	(1.27328)	(10.57344)	(60.41079)
1990	19.5	2.27328	(1.27328)	13.46296	76.91991
1989	20.5	2.27328	(1.27328)	(17.14213)	(97.94067)
1988	21.5	2.27328	(1.27328)	21.82675	124.70599
1987	22.5	2.27328	(1.27328)	(27.79158)	(158.78577)
1986	23.5	2.27328	(1.27328)	35.38649	202.17891
1985	24.5	2.27328	(1.27328)	(45.05695)	(257.43057)
1984	25.5	2.27328	(1.27328)	57.37016	327.78145
1983	26.5	2.27328	(1.27328)	(73.04833)	(417.35790)
1982	27.5	2.27328	(1.27328)	93.01105	531.41389
1981	28.5	2.27328	(1.27328)	(118.42921)	(676.63921)
1980	29.5	2.27328	(1.27328)	150.79366	861.55187
1979	30.5	2.27328	(1.27328)	(192.00271)	(1,096.99763)
1978	31.5	2.27328	(1.27328)	244.47341	1,396.78626
1977	32.5	2.27328	(1.27328)	(311.28335)	(1,778.50142)
1976	33.5	2.27328	(1.27328)	396.35117	2,264.53209
1975	34.5	2.27328	(1.27328)	(504.67)	(2,883.39)
1974	35.5	2.27328	(1.27328)	642.58	3,671.36
1973	36.5	2.27328	(1.27328)	(818.19)	(4,674.67)
1972	37.5	2.27328	(1.27328)	1,041.78	5,952.17
1971	38.5	2.27328	(1.27328)	(1,326.48)	(7,578.79)
1970	39.5	2.27328	(1.27328)	1,688.98	9,649.93
1969	40.5	2.27328	(1.27328)	(2,150.55)	(12,287.07)
1968	41.5	2.27328	(1.27328)	2,738.26	15,644.89
1967	42.5	2.27328	(1.27328)	(3,486.57)	(19,920.34)
1966	43.5	2.27328	(1.27328)	4,439.38	25,364.20
1965	44.5	2.27328	(1.27328)	(5,652.58)	(32,295.75)
1964	45.5	2.27328	(1.27328)	7,197.33	41,121.57
1963	46.5	2.27328	(1.27328)	(9,164.22)	(52,359.31)
1962	47.5	2.27328	(1.27328)	11,668.63	66,668.11
1961	48.5	2.27328	(1.27328)	(14,857.44)	(84,887.24)
1960	49.5	2.27328	(1.27328)	18,917.70	108,085.31
1959	50.5	2.27328	(1.27328)	(24,087.55)	132,172.86
1958	51.5	2.27328	(1.27328)	30,670.22	101,502.64
1957	52.5	2.27328	(1.27328)	(39,052)	140,554
1956	53.5	2.27328	(1.27328)	49,724	90,831
1955	54.5	2.27328	(1.27328)	(63,313)	154,143
1954	55.5	2.27328	(1.27328)	80,615	73,528
1953	56.5	2.27328	(1.27328)	(102,645)	176,174
1952	57.5	2.27328	(1.27328)	130,696	45,477
1951	58.5	2.27328	(1.27328)	(166,413)	211,890
1950	59.5	2.27328	(1.27328)	211,890	-

[1] Unrealized Life = Sum Life Table from (n-1) for (Future Life - .5) values

Big Rivers Electric Corporation
2010 Depreciation Rate Study - Interim Retirement Rate Analysis

General Plant Vehicles Transmission Account: 392.3

Date of Retirement (Mid Year):	2014
Interim Retirement Rate:	0.12351
Study Date, Year-End:	2009
Future Life from Study Date:	5.0
Remaining Life (F/E + .5) =	5.7

Development of Interim Retirement Rate

Activity Year	Additions	Retirements	Adjustments and Transfers	Yr-End Plant Balance	Interim Retirement Rate
A	B	C	D	E	F = C / E
1950				$ -	0.00000
1951				$ -	0.00000
1952				$ -	0.00000
1953	0	0	0	$ -	0.00000
1954	0	0	0	$ -	0.00000
1955	0	0	0	$ -	0.00000
1956	0	0	0	$ -	0.00000
1957	0	0	0	$ -	0.00000
1958	0	0	0	$ -	0.00000
1959	0	0	0	$ -	0.00000
1960	0	0	0	$ -	0.00000
1961	0	0	0	$ -	0.00000
1962	0	0	0	$ -	0.00000
1963	0	0	0	$ -	0.00000
1964	0	0	0	$ -	0.00000
1965	0	0	0	$ -	0.00000
1966	0	0	0	$ -	0.00000
1967	0	0	0	$ -	0.00000
1968	0	0	0	$ -	0.00000
1969	0	0	0	$ -	0.00000
1970	0	0	0	$ -	0.00000
1971	0	0	0	$ -	0.00000
1972	0	0	0	$ -	0.00000
1973	13,937	0	0	$ 13,937	0.00000
1974	0	0	0	$ 13,937	0.00000
1975	0	0	0	$ 13,937	0.00000
1976	0	0	0	$ 13,937	0.00000
1977	0	0	0	$ 13,937	0.00000
1978	0	0	0	$ 13,937	0.00000
1979	0	0	0	$ 13,937	0.00000
1980	0	0	0	$ 13,937	0.00000
1981	3,000	0	0	$ 16,937	0.00000
1982	0	0	0	$ 16,937	0.00000
1983	0	49,639	0	$ -	0.00000
1984	0	0	0	$ -	0.00000
1985	0	0	0	$ -	0.00000
1986	0	0	0	$ -	0.00000
1987	0	0	0	$ -	0.00000
1988	0	0	0	$ -	0.00000
1989	105,435	0	0	$ 105,435	0.00000
1990	124,090	67,679	0	$ 161,846	0.41817
1991	30,236	6,228	0	$ 185,854	0.03351
1992	0	121,703	0	$ 64,151	1.89712
1993	29,592	5,000	0	$ 88,743	0.05634
1994	41,086	23,388	0	$ 106,442	0.21972
1995	0	12,865	0	$ 93,576	0.13749
1996	72,462	34,768	0	$ 131,270	0.26486
1997	0	0	0	$ 131,270	0.00000
1998	275,403	186,258	0	$ 220,415	0.84503
1999	0	0	0	$ 220,415	0.00000
2000	0	0	0	$ 220,415	0.00000
2001	32,404	0	0	$ 252,818	0.00000
2002	251,699	21,313	0	$ 483,204	0.04411
2003	0	150,672	0	$ 332,532	0.45311
2004	0	0	0	$ 332,532	0.00000
2005	2,268	0	0	$ 334,800	0.00000
2006	0	0	0	$ 334,800	0.00000
2007	0	0	0	$ 334,800	0.00000
2008	275,629	0	0	$ 610,430	0.00000
2009	0	0	0	$ 610,430	0.00000
TOTAL	$ 1,257,240	$ 679,512	$ -	$ 5,501,544	0.12351

Interim Retirement Life Table

Year Placed	Age at 12/31/2009	Annual Retirement Rate	Annual Survival Ratio	Life Table	Unrealized Life of Original Plant [1]
A	B	C	D = (1- C)	E	F
2009	0.5	0.12351	0.87649	0.93824	4.87650
2008	1.5	0.12351	0.87649	0.82236	4.27419
2007	2.5	0.12351	0.87649	0.72079	3.74627
2006	3.5	0.12351	0.87649	0.63176	3.28356
2005	4.5	0.12351	0.87649	0.55373	2.87800
2004	5.5	0.12351	0.87649	0.48534	2.52253
2003	6.5	0.12351	0.87649	0.42539	2.21096
2002	7.5	0.12351	0.87649	0.37285	1.93788
2001	8.5	0.12351	0.87649	0.32680	1.69853
2000	9.5	0.12351	0.87649	0.28643	1.48874
1999	10.5	0.12351	0.87649	0.25106	1.30486
1998	11.5	0.12351	0.87649	0.22005	1.14369
1997	12.5	0.12351	0.87649	0.19287	1.00243
1996	13.5	0.12351	0.87649	0.16905	0.87862
1995	14.5	0.12351	0.87649	0.14817	0.77010
1994	15.5	0.12351	0.87649	0.12987	0.67498
1993	16.5	0.12351	0.87649	0.11383	0.59161
1992	17.5	0.12351	0.87649	0.09977	0.51854
1991	18.5	0.12351	0.87649	0.08744	0.45449
1990	19.5	0.12351	0.87649	0.07664	0.39836
1989	20.5	0.12351	0.87649	0.06718	0.34916
1988	21.5	0.12351	0.87649	0.05888	0.30603
1987	22.5	0.12351	0.87649	0.05161	0.26823
1986	23.5	0.12351	0.87649	0.04523	0.23510
1985	24.5	0.12351	0.87649	0.03965	0.20606
1984	25.5	0.12351	0.87649	0.03475	0.18061
1983	26.5	0.12351	0.87649	0.03046	0.15830
1982	27.5	0.12351	0.87649	0.02670	0.13875
1981	28.5	0.12351	0.87649	0.02340	0.12161
1980	29.5	0.12351	0.87649	0.02051	0.10659
1979	30.5	0.12351	0.87649	0.01798	0.09343
1978	31.5	0.12351	0.87649	0.01576	0.08189
1977	32.5	0.12351	0.87649	0.01381	0.07177
1976	33.5	0.12351	0.87649	0.01210	0.06291
1975	34.5	0.12351	0.87649	0.01061	0.05514
1974	35.5	0.12351	0.87649	0.00930	0.04833
1973	36.5	0.12351	0.87649	0.00815	0.04236
1972	37.5	0.12351	0.87649	0.00714	0.03713
1971	38.5	0.12351	0.87649	0.00626	0.03254
1970	39.5	0.12351	0.87649	0.00549	0.02852
1969	40.5	0.12351	0.87649	0.00481	0.02500
1968	41.5	0.12351	0.87649	0.00422	0.02191
1967	42.5	0.12351	0.87649	0.00370	0.01921
1966	43.5	0.12351	0.87649	0.00324	0.01683
1965	44.5	0.12351	0.87649	0.00284	0.01475
1964	45.5	0.12351	0.87649	0.00249	0.01293
1963	46.5	0.12351	0.87649	0.00218	0.01133
1962	47.5	0.12351	0.87649	0.00191	0.00993
1961	48.5	0.12351	0.87649	0.00168	0.00871
1960	49.5	0.12351	0.87649	0.00147	0.00763
1959	50.5	0.12351	0.87649	0.00129	0.00634
1958	51.5	0.12351	0.87649	0.00113	0.00522
1957	52.5	0.12351	0.87649	0.00099	0.00423
1956	53.5	0.12351	0.87649	0.00087	0.00336
1955	54.5	0.12351	0.87649	0.00076	0.00260
1954	55.5	0.12351	0.87649	0.00067	0.00194
1953	56.5	0.12351	0.87649	0.00058	0.00135
1952	57.5	0.12351	0.87649	0.00051	0.00084
1951	58.5	0.12351	0.87649	0.00045	0.00039
1950	59.5	0.12351	0.87649	0.00039	-

[1] Unrealized Life = Sum Life Table from (n-1) for (Future Life - .5) values

Big Rivers Electric Corporation
2010 Depreciation Rate Study - Interim Retirement Rate Analysis

General Plant Stores Equipment Account: 393

Date of Retirement (Mid Year):	2020
Interim Retirement Rate:	0.13672
Study Date, Year-End:	2009
Future Life from Study Date:	11.0
Remaining Life (F/E + .5) =	5.7

Development of Interim Retirement Rate

Activity Year	Additions	Retirements	Removal Costs	Yr-End Plant Balance	Interim Retirement Rate
A	B	C	D	E	F = C / E
1950				$ -	0.00000
1951				$ -	0.00000
1952				$ -	0.00000
1953	0	0	0	$ -	0.00000
1954	0	0	0	$ -	0.00000
1955	0	0	0	$ -	0.00000
1956	0	0	0	$ -	0.00000
1957	0	0	0	$ -	0.00000
1958	0	0	0	$ -	0.00000
1959	0	0	0	$ -	0.00000
1960	0	0	0	$ -	0.00000
1961	0	0	0	$ -	0.00000
1962	0	0	0	$ -	0.00000
1963	0	0	0	$ -	0.00000
1964	0	0	0	$ -	0.00000
1965	0	0	0	$ -	0.00000
1966	0	0	0	$ -	0.00000
1967	0	0	0	$ -	0.00000
1968	0	0	0	$ -	0.00000
1969	0	0	0	$ -	0.00000
1970	0	0	0	$ -	0.00000
1971	0	0	0	$ -	0.00000
1972	0	0	0	$ -	0.00000
1973	0	0	0	$ -	0.00000
1974	0	0	0	$ -	0.00000
1975	0	0	0	$ -	0.00000
1976	0	0	0	$ -	0.00000
1977	0	0	0	$ -	0.00000
1978	0	0	0	$ -	0.00000
1979	15,170	0	0	$ 15,170	0.00000
1980	2,649	0	0	$ 17,818	0.00000
1981	1,481	0	0	$ 19,299	0.00000
1982	0	0	0	$ 19,299	0.00000
1983	1,449	0	0	$ 20,748	0.00000
1984	1,345	0	0	$ 22,093	0.00000
1985	15,937	0	0	$ 38,030	0.00000
1986	1,941	0	0	$ 39,970	0.00000
1987	509	0	0	$ 40,480	0.00000
1988	0	0	0	$ 40,480	0.00000
1989	0	0	0	$ 40,480	0.00000
1990	6,710	0	0	$ 47,190	0.00000
1991	5,603	0	0	$ 52,793	0.00000
1992	1,879	621	0	$ 54,052	0.01148
1993	0	0	0	$ 54,052	0.00000
1994	0	491	0	$ 53,561	0.00916
1995	0	0	0	$ 53,561	0.00000
1996	0	0	0	$ 53,561	0.00000
1997	3,677	0	0	$ 57,239	0.00000
1998	0	92,770	0	$ -	0.00000
1999	1,831	0	0	$ 1,831	0.00000
2000	36,692	24,692	0	$ 13,831	1.78532
2001	0	1,245	0	$ 12,586	0.09890
2002	0	0	0	$ 12,586	0.00000
2003	0	0	0	$ 12,586	0.00000
2004	0	0	0	$ 12,586	0.00000
2005	0	0	0	$ 12,586	0.00000
2006	1,893	0	0	$ 14,479	0.00000
2007	0	0	0	$ 14,479	0.00000
2008	0	0	0	$ 14,479	0.00000
2009	0	0	0	$ 14,479	0.00000
TOTAL	$ 98,766	$ 119,819	$ -	$ 876,384	0.13672

Interim Retirement Life Table

Year Placed	Age at 12/31/2009	Annual Retirement Rate	Annual Survival Ratio	Life Table	Unrealized Life of Original Plant [1]
A	B	C	D = (1- C)	E	F
2009	0.5	0.13672	0.86328	0.93164	4.87476
2008	1.5	0.13672	0.86328	0.80427	4.20828
2007	2.5	0.13672	0.86328	0.69431	3.63293
2006	3.5	0.13672	0.86328	0.59938	3.13624
2005	4.5	0.13672	0.86328	0.51743	2.70745
2004	5.5	0.13672	0.86328	0.44669	2.33729
2003	6.5	0.13672	0.86328	0.38562	2.01774
2002	7.5	0.13672	0.86328	0.33290	1.74187
2001	8.5	0.13672	0.86328	0.28738	1.50372
2000	9.5	0.13672	0.86328	0.24809	1.29814
1999	10.5	0.13672	0.86328	0.21417	1.12066
1998	11.5	0.13672	0.86328	0.18489	0.96744
1997	12.5	0.13672	0.86328	0.15961	0.83517
1996	13.5	0.13672	0.86328	0.13779	0.72099
1995	14.5	0.13672	0.86328	0.11895	0.62241
1994	15.5	0.13672	0.86328	0.10269	0.53732
1993	16.5	0.13672	0.86328	0.08865	0.46386
1992	17.5	0.13672	0.86328	0.07653	0.40044
1991	18.5	0.13672	0.86328	0.06607	0.34569
1990	19.5	0.13672	0.86328	0.05703	0.29843
1989	20.5	0.13672	0.86328	0.04924	0.25763
1988	21.5	0.13672	0.86328	0.04250	0.22240
1987	22.5	0.13672	0.86328	0.03669	0.19200
1986	23.5	0.13672	0.86328	0.03168	0.16575
1985	24.5	0.13672	0.86328	0.02735	0.14309
1984	25.5	0.13672	0.86328	0.02361	0.12352
1983	26.5	0.13672	0.86328	0.02038	0.10664
1982	27.5	0.13672	0.86328	0.01759	0.09206
1981	28.5	0.13672	0.86328	0.01519	0.07947
1980	29.5	0.13672	0.86328	0.01311	0.06861
1979	30.5	0.13672	0.86328	0.01132	0.05923
1978	31.5	0.13672	0.86328	0.00977	0.05113
1977	32.5	0.13672	0.86328	0.00844	0.04414
1976	33.5	0.13672	0.86328	0.00728	0.03810
1975	34.5	0.13672	0.86328	0.00629	0.03289
1974	35.5	0.13672	0.86328	0.00543	0.02840
1973	36.5	0.13672	0.86328	0.00469	0.02451
1972	37.5	0.13672	0.86328	0.00404	0.02116
1971	38.5	0.13672	0.86328	0.00349	0.01827
1970	39.5	0.13672	0.86328	0.00301	0.01577
1969	40.5	0.13672	0.86328	0.00260	0.01362
1968	41.5	0.13672	0.86328	0.00225	0.01175
1967	42.5	0.13672	0.86328	0.00194	0.01015
1966	43.5	0.13672	0.86328	0.00167	0.00876
1965	44.5	0.13672	0.86328	0.00145	0.00756
1964	45.5	0.13672	0.86328	0.00125	0.00653
1963	46.5	0.13672	0.86328	0.00108	0.00564
1962	47.5	0.13672	0.86328	0.00093	0.00487
1961	48.5	0.13672	0.86328	0.00080	0.00406
1960	49.5	0.13672	0.86328	0.00069	0.00337
1959	50.5	0.13672	0.86328	0.00060	0.00277
1958	51.5	0.13672	0.86328	0.00052	0.00225
1957	52.5	0.13672	0.86328	0.00045	0.00181
1956	53.5	0.13672	0.86328	0.00038	0.00142
1955	54.5	0.13672	0.86328	0.00033	0.00109
1954	55.5	0.13672	0.86328	0.00029	0.00081
1953	56.5	0.13672	0.86328	0.00025	0.00056
1952	57.5	0.13672	0.86328	0.00021	0.00034
1951	58.5	0.13672	0.86328	0.00018	0.00016
1950	59.5	0.13672	0.86328	0.00016	-

[1] Unrealized Life = Sum Life Table from (n-1) for (Future Life - .5) values

Big Rivers Electric Corporation
2010 Depreciation Rate Study - Interim Retirement Rate Analysis

General Plant Tools	Account:	394
Date of Retirement (Mid Year):		2020
Interim Retirement Rate:		0.03543
Study Date, Year-End:		2009
Future Life from Study Date:		11.0
Remaining Life (F/E + .5) =		9.4

Development of Interim Retirement Rate

Activity Year	Additions	Retirements	Removal Costs	Yr-End Plant Balance	Interim Retirement Rate
A	B	C	D	E	F = C / E
1950				$ -	0.00000
1951				$ -	0.00000
1952				$ -	0.00000
1953	0	0	0	$ -	0.00000
1954	0	0	0	$ -	0.00000
1955	0	0	0	$ -	0.00000
1956	0	0	0	$ -	0.00000
1957	0	0	0	$ -	0.00000
1958	0	0	0	$ -	0.00000
1959	0	0	0	$ -	0.00000
1960	0	0	0	$ -	0.00000
1961	0	0	0	$ -	0.00000
1962	0	0	0	$ -	0.00000
1963	0	0	0	$ -	0.00000
1964	0	0	0	$ -	0.00000
1965	0	0	0	$ -	0.00000
1966	0	0	0	$ -	0.00000
1967	2,350	0	0	$ 2,350	0.00000
1968	555	0	0	$ 2,905	0.00000
1969	0	0	0	$ 2,905	0.00000
1970	4,742	0	0	$ 7,647	0.00000
1971	3,825	475	0	$ 10,996	0.04323
1972	0	0	0	$ 10,996	0.00000
1973	601	0	0	$ 11,598	0.00000
1974	1,347	0	0	$ 12,945	0.00000
1975	0	0	0	$ 12,945	0.00000
1976	0	0	0	$ 12,945	0.00000
1977	3,148	0	0	$ 16,093	0.00000
1978	82,823	0	0	$ 98,916	0.00000
1979	6,795	232	0	$ 105,479	0.00220
1980	35,977	0	0	$ 141,456	0.00000
1981	16,713	425	0	$ 157,744	0.00269
1982	11,694	0	0	$ 169,437	0.00000
1983	2,687	3,735	0	$ 168,390	0.02218
1984	29,870	1,809	0	$ 196,451	0.00921
1985	5,993	2,334	0	$ 200,110	0.01166
1986	5,411	239	0	$ 205,282	0.00117
1987	0	568	0	$ 204,714	0.00277
1988	27,022	3,788	0	$ 227,948	0.01662
1989	6,594	577	0	$ 233,965	0.00247
1990	10,719	446	0	$ 244,238	0.00183
1991	4,753	29,508	0	$ 219,484	0.13444
1992	19,516	18,406	0	$ 220,594	0.08344
1993	6,322	6,085	0	$ 220,831	0.02755
1994	7,847	27,018	0	$ 201,660	0.13398
1995	5,453	3,774	0	$ 203,340	0.01856
1996	14,754	1,224	0	$ 216,869	0.00564
1997	30,127	513	0	$ 246,484	0.00208
1998	9,111	80,060	0	$ 175,534	0.45609
1999	4,843	4,340	0	$ 176,037	0.02466
2000	13,183	8,063	0	$ 181,158	0.04451
2001	12,247	31,571	0	$ 161,833	0.19508
2002	8,375	0	0	$ 170,208	0.00000
2003	6,007	537	0	$ 175,679	0.00305
2004	9,238	0	0	$ 184,917	0.00000
2005	5,911	1,299	0	$ 189,529	0.00685
2006	2,300	3,357	0	$ 188,473	0.01781
2007	14,993	7,646	0	$ 195,819	0.03905
2008	275,416	625	0	$ 470,610	0.00133
2009	7,349	0	0	$ 477,959	0.00000
TOTAL	$ 716,614	$ 238,654	$ -	$ 6,735,473	0.03543

Interim Retirement Life Table

Year Placed	Age at 12/31/2009	Annual Retirement Rate	Annual Survival Ratio	Life Table	Unrealized Life of Original Plant [1]
A	B	C	D = (1- C)	E	F
2009	0.5	0.03543	0.96457	0.98228	8.75886
2008	1.5	0.03543	0.96457	0.94748	8.44852
2007	2.5	0.03543	0.96457	0.91391	8.14916
2006	3.5	0.03543	0.96457	0.88153	7.86042
2005	4.5	0.03543	0.96457	0.85029	7.58191
2004	5.5	0.03543	0.96457	0.82016	7.31326
2003	6.5	0.03543	0.96457	0.79110	7.05413
2002	7.5	0.03543	0.96457	0.76307	6.80419
2001	8.5	0.03543	0.96457	0.73603	6.56310
2000	9.5	0.03543	0.96457	0.70995	6.33055
1999	10.5	0.03543	0.96457	0.68480	6.10624
1998	11.5	0.03543	0.96457	0.66054	5.88988
1997	12.5	0.03543	0.96457	0.63713	5.68119
1996	13.5	0.03543	0.96457	0.61456	5.47989
1995	14.5	0.03543	0.96457	0.59278	5.28573
1994	15.5	0.03543	0.96457	0.57178	5.09844
1993	16.5	0.03543	0.96457	0.55152	4.91779
1992	17.5	0.03543	0.96457	0.53198	4.74354
1991	18.5	0.03543	0.96457	0.51313	4.57547
1990	19.5	0.03543	0.96457	0.49495	4.41335
1989	20.5	0.03543	0.96457	0.47741	4.25697
1988	21.5	0.03543	0.96457	0.46049	4.10613
1987	22.5	0.03543	0.96457	0.44418	3.96064
1986	23.5	0.03543	0.96457	0.42844	3.82031
1985	24.5	0.03543	0.96457	0.41326	3.68495
1984	25.5	0.03543	0.96457	0.39861	3.55438
1983	26.5	0.03543	0.96457	0.38449	3.42844
1982	27.5	0.03543	0.96457	0.37087	3.30696
1981	28.5	0.03543	0.96457	0.35773	3.18979
1980	29.5	0.03543	0.96457	0.34505	3.07676
1979	30.5	0.03543	0.96457	0.33283	2.96775
1978	31.5	0.03543	0.96457	0.32103	2.86259
1977	32.5	0.03543	0.96457	0.30966	2.76116
1976	33.5	0.03543	0.96457	0.29869	2.66333
1975	34.5	0.03543	0.96457	0.28810	2.56896
1974	35.5	0.03543	0.96457	0.27789	2.47794
1973	36.5	0.03543	0.96457	0.26805	2.39014
1972	37.5	0.03543	0.96457	0.25855	2.30545
1971	38.5	0.03543	0.96457	0.24939	2.22376
1970	39.5	0.03543	0.96457	0.24055	2.14497
1969	40.5	0.03543	0.96457	0.23203	2.06897
1968	41.5	0.03543	0.96457	0.22381	1.99566
1967	42.5	0.03543	0.96457	0.21588	1.92495
1966	43.5	0.03543	0.96457	0.20823	1.85674
1965	44.5	0.03543	0.96457	0.20085	1.79095
1964	45.5	0.03543	0.96457	0.19373	1.72749
1963	46.5	0.03543	0.96457	0.18687	1.66628
1962	47.5	0.03543	0.96457	0.18025	1.60724
1961	48.5	0.03543	0.96457	0.17386	1.55030
1960	49.5	0.03543	0.96457	0.16770	1.38259
1959	50.5	0.03543	0.96457	0.16176	1.22083
1958	51.5	0.03543	0.96457	0.15603	1.06481
1957	52.5	0.03543	0.96457	0.15050	0.91431
1956	53.5	0.03543	0.96457	0.14517	0.76914
1955	54.5	0.03543	0.96457	0.14002	0.62912
1954	55.5	0.03543	0.96457	0.13506	0.49406
1953	56.5	0.03543	0.96457	0.13028	0.36378
1952	57.5	0.03543	0.96457	0.12566	0.23812
1951	58.5	0.03543	0.96457	0.12121	0.11691
1950	59.5	0.03543	0.96457	0.11691	-

[1] Unrealized Life = Sum Life Table from (n-1) for (Future Life - .5) values

Big Rivers Electric Corporation
2010 Depreciation Rate Study - Interim Retirement Rate Analysis

Burns & McDonnell SINCE 1898

General Plant Lab Equipment	Account:	395
Date of Retirement (Mid Year):		2020
Interim Retirement Rate:		0.12877
Study Date, Year-End:		2009
Future Life from Study Date:		11.0
Remaining Life (F/E + .5) =		5.8

Development of Interim Retirement Rate

Activity Year	Additions	Retirements	Removal Costs	Yr-End Plant Balance	Interim Retirement Rate
A	B	C	D	E	F = C / E
1950				$ -	0.00000
1951				$ -	0.00000
1952				$ -	0.00000
1953	0	0	0	$ -	0.00000
1954	0	0	0	$ -	0.00000
1955	0	0	0	$ -	0.00000
1956	0	0	0	$ -	0.00000
1957	0	0	0	$ -	0.00000
1958	0	0	0	$ -	0.00000
1959	0	0	0	$ -	0.00000
1960	0	0	0	$ -	0.00000
1961	0	0	0	$ -	0.00000
1962	0	0	0	$ -	0.00000
1963	0	0	0	$ -	0.00000
1964	0	0	0	$ -	0.00000
1965	0	0	0	$ -	0.00000
1966	762	0	0	$ 762	0.00000
1967	9,649	0	0	$ 10,411	0.00000
1968	4,998	0	0	$ 15,409	0.00000
1969	0	0	0	$ 15,409	0.00000
1970	4,382	0	0	$ 19,791	0.00000
1971	2,381	0	0	$ 22,172	0.00000
1972	1,822	0	0	$ 23,994	0.00000
1973	921	0	0	$ 24,915	0.00000
1974	7,646	252	0	$ 32,308	0.00781
1975	6,189	0	0	$ 38,497	0.00000
1976	0	0	0	$ 38,497	0.00000
1977	977	0	0	$ 39,474	0.00000
1978	1,304	0	0	$ 40,778	0.00000
1979	13,537	0	0	$ 54,314	0.00000
1980	593	0	0	$ 54,908	0.00000
1981	5,084	0	0	$ 59,991	0.00000
1982	13,273	675	0	$ 72,590	0.00930
1983	7,025	0	0	$ 79,614	0.00000
1984	0	0	0	$ 79,614	0.00000
1985	0	0	0	$ 79,614	0.00000
1986	0	0	0	$ 79,614	0.00000
1987	0	0	0	$ 79,614	0.00000
1988	0	694	0	$ 78,920	0.00879
1989	14,936	0	0	$ 93,856	0.00000
1990	5,191	0	0	$ 99,047	0.00000
1991	35,538	0	0	$ 134,585	0.00000
1992	5,548	0	0	$ 140,134	0.00000
1993	4,918	14,116	0	$ 130,936	0.10781
1994	0	17,089	0	$ 113,847	0.15011
1995	0	0	0	$ 113,847	0.00000
1996	3,517	646	0	$ 116,718	0.00553
1997	4,915	2,817	0	$ 118,816	0.02371
1998	0	138,121	0	$ -	0.00000
1999	0	132,253	0	$ -	0.00000
2000	0	0	0	$ -	0.00000
2001	0	20,237	0	$ -	0.00000
2002	32,841	1,015	0	$ 31,826	0.03189
2003	0	-7,912	0	$ 39,738	-0.19910
2004	0	0	0	$ 39,738	0.00000
2005	0	0	0	$ 39,738	0.00000
2006	33,333	5,205	0	$ 67,865	0.07670
2007	0	0	0	$ 67,865	0.00000
2008	0	0	0	$ 67,865	0.00000
2009	0	0	0	$ 67,865	0.00000
TOTAL	$ 221,279	$ 325,207	$ -	$ 2,525,498	0.12877

Interim Retirement Life Table

Year Placed	Age at 12/31/2009	Annual Retirement Rate	Annual Survival Ratio	Life Table	Unrealized Life of Original Plant [1]
A	B	C	D = (1- C)	E	F
2009	0.5	0.12877	0.87123	0.93562	4.94063
2008	1.5	0.12877	0.87123	0.81514	4.30443
2007	2.5	0.12877	0.87123	0.71017	3.75015
2006	3.5	0.12877	0.87123	0.61872	3.26724
2005	4.5	0.12877	0.87123	0.53905	2.84652
2004	5.5	0.12877	0.87123	0.46964	2.47998
2003	6.5	0.12877	0.87123	0.40916	2.16063
2002	7.5	0.12877	0.87123	0.35647	1.88241
2001	8.5	0.12877	0.87123	0.31057	1.64001
2000	9.5	0.12877	0.87123	0.27058	1.42883
1999	10.5	0.12877	0.87123	0.23574	1.24484
1998	11.5	0.12877	0.87123	0.20538	1.08454
1997	12.5	0.12877	0.87123	0.17893	0.94489
1996	13.5	0.12877	0.87123	0.15589	0.82321
1995	14.5	0.12877	0.87123	0.13582	0.71721
1994	15.5	0.12877	0.87123	0.11833	0.62485
1993	16.5	0.12877	0.87123	0.10309	0.54439
1992	17.5	0.12877	0.87123	0.08982	0.47429
1991	18.5	0.12877	0.87123	0.07825	0.41322
1990	19.5	0.12877	0.87123	0.06818	0.36001
1989	20.5	0.12877	0.87123	0.05940	0.31365
1988	21.5	0.12877	0.87123	0.05175	0.27326
1987	22.5	0.12877	0.87123	0.04508	0.23807
1986	23.5	0.12877	0.87123	0.03928	0.20742
1985	24.5	0.12877	0.87123	0.03422	0.18071
1984	25.5	0.12877	0.87123	0.02981	0.15744
1983	26.5	0.12877	0.87123	0.02598	0.13716
1982	27.5	0.12877	0.87123	0.02263	0.11950
1981	28.5	0.12877	0.87123	0.01972	0.10411
1980	29.5	0.12877	0.87123	0.01718	0.09071
1979	30.5	0.12877	0.87123	0.01497	0.07903
1978	31.5	0.12877	0.87123	0.01304	0.06885
1977	32.5	0.12877	0.87123	0.01136	0.05998
1976	33.5	0.12877	0.87123	0.00990	0.05226
1975	34.5	0.12877	0.87123	0.00862	0.04553
1974	35.5	0.12877	0.87123	0.00751	0.03967
1973	36.5	0.12877	0.87123	0.00654	0.03456
1972	37.5	0.12877	0.87123	0.00570	0.03011
1971	38.5	0.12877	0.87123	0.00497	0.02623
1970	39.5	0.12877	0.87123	0.00433	0.02285
1969	40.5	0.12877	0.87123	0.00377	0.01991
1968	41.5	0.12877	0.87123	0.00329	0.01735
1967	42.5	0.12877	0.87123	0.00286	0.01511
1966	43.5	0.12877	0.87123	0.00249	0.01317
1965	44.5	0.12877	0.87123	0.00217	0.01147
1964	45.5	0.12877	0.87123	0.00189	0.00999
1963	46.5	0.12877	0.87123	0.00165	0.00871
1962	47.5	0.12877	0.87123	0.00144	0.00759
1961	48.5	0.12877	0.87123	0.00125	0.00661
1960	49.5	0.12877	0.87123	0.00109	0.00552
1959	50.5	0.12877	0.87123	0.00095	0.00457
1958	51.5	0.12877	0.87123	0.00083	0.00374
1957	52.5	0.12877	0.87123	0.00072	0.00302
1956	53.5	0.12877	0.87123	0.00063	0.00239
1955	54.5	0.12877	0.87123	0.00055	0.00184
1954	55.5	0.12877	0.87123	0.00048	0.00137
1953	56.5	0.12877	0.87123	0.00042	0.00095
1952	57.5	0.12877	0.87123	0.00036	0.00059
1951	58.5	0.12877	0.87123	0.00032	0.00027
1950	59.5	0.12877	0.87123	0.00027	-

[1] Unrealized Life = Sum Life Table from (n-1) for (Future Life - .5) values

Big Rivers Electric Corporation
2010 Depreciation Rate Study - Interim Retirement Rate Analysis

General Plant Power Operated Eqpt Account: 396

Date of Retirement (Mid Year):	2020
Interim Retirement Rate:	0.14909
Study Date, Year-End:	2009
Future Life from Study Date:	11.0
Remaining Life (F/E + .5) =	5.2

Development of Interim Retirement Rate

Activity Year	Additions	Retirements	Removal Costs	Yr-End Plant Balance	Interim Retirement Rate
A	B	C	D	E	F = C / E
1950				$ -	0.00000
1951				$ -	0.00000
1952				$ -	0.00000
1953	0	0	0	$ -	0.00000
1954	0	0	0	$ -	0.00000
1955	0	0	0	$ -	0.00000
1956	0	0	0	$ -	0.00000
1957	0	0	0	$ -	0.00000
1958	0	0	0	$ -	0.00000
1959	0	0	0	$ -	0.00000
1960	0	0	0	$ -	0.00000
1961	0	0	0	$ -	0.00000
1962	0	0	0	$ -	0.00000
1963	0	0	0	$ -	0.00000
1964	0	0	0	$ -	0.00000
1965	0	0	0	$ -	0.00000
1966	0	0	0	$ -	0.00000
1967	0	0	0	$ -	0.00000
1968	0	0	0	$ -	0.00000
1969	0	0	0	$ -	0.00000
1970	0	0	0	$ -	0.00000
1971	0	0	0	$ -	0.00000
1972	0	0	0	$ -	0.00000
1973	0	0	0	$ -	0.00000
1974	0	0	0	$ -	0.00000
1975	0	0	0	$ -	0.00000
1976	0	0	0	$ -	0.00000
1977	0	0	0	$ -	0.00000
1978	0	0	0	$ -	0.00000
1979	561	0	0	$ 561	0.00000
1980	0	37,557	0	$ -	0.00000
1981	117,498	0	0	$ 117,498	0.00000
1982	14,401	0	0	$ 131,899	0.00000
1983	0	0	0	$ 131,899	0.00000
1984	0	0	0	$ 131,899	0.00000
1985	0	0	0	$ 131,899	0.00000
1986	0	0	0	$ 131,899	0.00000
1987	85,838	29,478	0	$ 188,259	0.15658
1988	0	38,931	0	$ 149,328	0.26071
1989	2,063	6,017	0	$ 145,374	0.04139
1990	0	0	0	$ 145,374	0.00000
1991	0	44,939	0	$ 100,435	0.44744
1992	17,923	12,896	0	$ 105,462	0.12228
1993	0	0	0	$ 105,462	0.00000
1994	57,527	25,413	0	$ 137,577	0.18472
1995	0	0	0	$ 137,577	0.00000
1996	7,036	5,314	0	$ 139,298	0.03815
1997	19,536	124,795	0	$ 34,040	3.66616
1998	64,553	62,951	0	$ 35,641	1.76625
1999	4,277	0	0	$ 39,919	0.00000
2000	0	530	0	$ 39,389	0.01346
2001	7,192	388	0	$ 46,192	0.00841
2002	0	0	0	$ 46,192	0.00000
2003	19,528	7,084	0	$ 58,636	0.12082
2004	44,979	32,447	0	$ 71,168	0.45592
2005	19,804	11,613	0	$ 79,359	0.14633
2006	0	0	0	$ 79,359	0.00000
2007	9,909	0	0	$ 89,268	0.00000
2008	12,114	0	0	$ 101,383	0.00000
2009	0	0	0	$ 101,383	0.00000
TOTAL	$ 504,739	$ 440,353	$ -	$ 2,953,627	0.14909

Interim Retirement Life Table

Year Placed	Age at 12/31/2009	Annual Retirement Rate	Annual Survival Ratio	Life Table	Unrealized Life of Original Plant [1]
A	B	C	D = (1- C)	E	F
2009	0.5	0.14909	0.85091	0.92546	4.38758
2008	1.5	0.14909	0.85091	0.78748	3.73344
2007	2.5	0.14909	0.85091	0.67008	3.17682
2006	3.5	0.14909	0.85091	0.57018	2.70319
2005	4.5	0.14909	0.85091	0.48517	2.30018
2004	5.5	0.14909	0.85091	0.41284	1.95725
2003	6.5	0.14909	0.85091	0.35129	1.66544
2002	7.5	0.14909	0.85091	0.29891	1.41714
2001	8.5	0.14909	0.85091	0.25435	1.20586
2000	9.5	0.14909	0.85091	0.21643	1.02608
1999	10.5	0.14909	0.85091	0.18416	0.87311
1998	11.5	0.14909	0.85091	0.15670	0.74294
1997	12.5	0.14909	0.85091	0.13334	0.63217
1996	13.5	0.14909	0.85091	0.11346	0.53792
1995	14.5	0.14909	0.85091	0.09655	0.45772
1994	15.5	0.14909	0.85091	0.08215	0.38948
1993	16.5	0.14909	0.85091	0.06990	0.33141
1992	17.5	0.14909	0.85091	0.05948	0.28200
1991	18.5	0.14909	0.85091	0.05061	0.23996
1990	19.5	0.14909	0.85091	0.04307	0.20419
1989	20.5	0.14909	0.85091	0.03665	0.17374
1988	21.5	0.14909	0.85091	0.03118	0.14784
1987	22.5	0.14909	0.85091	0.02653	0.12580
1986	23.5	0.14909	0.85091	0.02258	0.10704
1985	24.5	0.14909	0.85091	0.01921	0.09108
1984	25.5	0.14909	0.85091	0.01635	0.07751
1983	26.5	0.14909	0.85091	0.01391	0.06595
1982	27.5	0.14909	0.85091	0.01184	0.05612
1981	28.5	0.14909	0.85091	0.01007	0.04775
1980	29.5	0.14909	0.85091	0.00857	0.04063
1979	30.5	0.14909	0.85091	0.00729	0.03457
1978	31.5	0.14909	0.85091	0.00621	0.02942
1977	32.5	0.14909	0.85091	0.00528	0.02503
1976	33.5	0.14909	0.85091	0.00449	0.02130
1975	34.5	0.14909	0.85091	0.00382	0.01813
1974	35.5	0.14909	0.85091	0.00325	0.01542
1973	36.5	0.14909	0.85091	0.00277	0.01312
1972	37.5	0.14909	0.85091	0.00236	0.01117
1971	38.5	0.14909	0.85091	0.00200	0.00950
1970	39.5	0.14909	0.85091	0.00171	0.00809
1969	40.5	0.14909	0.85091	0.00145	0.00688
1968	41.5	0.14909	0.85091	0.00123	0.00585
1967	42.5	0.14909	0.85091	0.00105	0.00498
1966	43.5	0.14909	0.85091	0.00089	0.00424
1965	44.5	0.14909	0.85091	0.00076	0.00361
1964	45.5	0.14909	0.85091	0.00065	0.00307
1963	46.5	0.14909	0.85091	0.00055	0.00261
1962	47.5	0.14909	0.85091	0.00047	0.00222
1961	48.5	0.14909	0.85091	0.00040	0.00189
1960	49.5	0.14909	0.85091	0.00034	0.00155
1959	50.5	0.14909	0.85091	0.00029	0.00126
1958	51.5	0.14909	0.85091	0.00025	0.00102
1957	52.5	0.14909	0.85091	0.00021	0.00081
1956	53.5	0.14909	0.85091	0.00018	0.00063
1955	54.5	0.14909	0.85091	0.00015	0.00048
1954	55.5	0.14909	0.85091	0.00013	0.00035
1953	56.5	0.14909	0.85091	0.00011	0.00024
1952	57.5	0.14909	0.85091	0.00009	0.00015
1951	58.5	0.14909	0.85091	0.00008	0.00007
1950	59.5	0.14909	0.85091	0.00007	-

[1] Unrealized Life = Sum Life Table from (n-1) for (Future Life - .5) values

Big Rivers Electric Corporation
2010 Depreciation Rate Study - Interim Retirement Rate Analysis

General Plant Communication Eqpt — Account: 397

Date of Retirement (Mid Year):	2010
Interim Retirement Rate:	0.08550
Study Date, Year-End:	2009
Future Life from Study Date:	1.0
Remaining Life (F/E + .5) =	7.2

Development of Interim Retirement Rate

Activity Year	Additions	Retirements	Removal Costs	Yr-End Plant Balance	Interim Retirement Rate
A	B	C	D	E	F = C / E
1950				$ -	0.00000
1951				$ -	0.00000
1952				$ -	0.00000
1953	0	0	0	$ -	0.00000
1954	0	0	0	$ -	0.00000
1955	0	0	0	$ -	0.00000
1956	0	0	0	$ -	0.00000
1957	0	0	0	$ -	0.00000
1958	0	0	0	$ -	0.00000
1959	0	0	0	$ -	0.00000
1960	0	0	0	$ -	0.00000
1961	0	0	0	$ -	0.00000
1962	0	0	0	$ -	0.00000
1963	0	0	0	$ -	0.00000
1964	0	0	0	$ -	0.00000
1965	0	0	0	$ -	0.00000
1966	0	0	0	$ -	0.00000
1967	0	0	0	$ -	0.00000
1968	0	0	2,048	$ 2,048	0.00000
1969	3,371	0	0	$ 5,419	0.00000
1970	1,877	0	0	$ 7,297	0.00000
1971	0	0	0	$ 7,297	0.00000
1972	0	0	0	$ 7,297	0.00000
1973	4,032	0	0	$ 11,328	0.00000
1974	0	0	0	$ 11,328	0.00000
1975	0	71	0	$ 11,258	0.00628
1976	2,894	0	0	$ 14,151	0.00000
1977	0	0	0	$ 14,151	0.00000
1978	0	0	0	$ 14,151	0.00000
1979	912	0	224	$ 15,287	0.00000
1980	0	0	664	$ 15,952	0.00000
1981	849	0	0	$ 16,800	0.00000
1982	2,691	0	38	$ 19,529	0.00000
1983	50,210	14,240	0	$ 55,499	0.25659
1984	4,045	3,170	0	$ 56,374	0.05624
1985	1,015,588	56,760	10,300	$ 1,025,501	0.05535
1986	26,172	4,629	0	$ 1,047,045	0.00442
1987	10,746	0	0	$ 1,057,790	0.00000
1988	27,796	2,626	0	$ 1,082,960	0.00242
1989	22,530	7,684	0	$ 1,097,806	0.00700
1990	12,921	11,575	0	$ 1,099,152	0.01053
1991	27,050	0	0	$ 1,126,202	0.00000
1992	23,027	1,313	0	$ 1,147,916	0.00114
1993	3,264	5,719	0	$ 1,145,461	0.00499
1994	167,081	227,774	0	$ 1,084,768	0.20997
1995	1,694	0	0	$ 1,086,462	0.00000
1996	7,030	3,443	0	$ 1,090,048	0.00316
1997	387	0	0	$ 1,090,435	0.00000
1998	23,421	784,830	0	$ 329,026	2.38531
1999	0	1,129	0	$ 327,897	0.00344
2000	0	56,972	0	$ 69,365	0.82134
2001	0	32,765	0	$ 36,600	0.89523
2002	0	2,933	0	$ 33,667	0.08711
2003	3,864	0	0	$ 37,531	0.00000
2004	3,888	0	0	$ 41,419	0.00000
2005	30,946	26,936	0	$ 45,430	0.59291
2006	157,096	57,985	0	$ 144,541	0.40116
2007	2,950	50,509	0	$ 96,982	0.52081
2008	1,106	0	0	$ 98,088	0.00000
2009	0	0	0	$ 98,088	0.00000
TOTAL	$ 1,639,437	$ 1,353,064	$ 13,274	$ 15,825,348	0.08550

Interim Retirement Life Table

Year Placed	Age at 12/31/2009	Annual Retirement Rate	Annual Survival Ratio	Life Table	Unrealized Life of Original Plant [1]
A	B	C	D = (1- C)	E	F
2009	0.5	0.08550	0.91450	0.95725	6.40809
2008	1.5	0.08550	0.91450	0.87541	5.86020
2007	2.5	0.08550	0.91450	0.80056	5.35916
2006	3.5	0.08550	0.91450	0.73211	4.90095
2005	4.5	0.08550	0.91450	0.66952	4.48192
2004	5.5	0.08550	0.91450	0.61227	4.09872
2003	6.5	0.08550	0.91450	0.55992	3.74828
2002	7.5	0.08550	0.91450	0.51205	3.42780
2001	8.5	0.08550	0.91450	0.46827	3.13472
2000	9.5	0.08550	0.91450	0.42823	2.86671
1999	10.5	0.08550	0.91450	0.39162	2.62160
1998	11.5	0.08550	0.91450	0.35814	2.39746
1997	12.5	0.08550	0.91450	0.32752	2.19247
1996	13.5	0.08550	0.91450	0.29951	2.00502
1995	14.5	0.08550	0.91450	0.27390	1.83359
1994	15.5	0.08550	0.91450	0.25049	1.67682
1993	16.5	0.08550	0.91450	0.22907	1.53345
1992	17.5	0.08550	0.91450	0.20948	1.40234
1991	18.5	0.08550	0.91450	0.19157	1.28244
1990	19.5	0.08550	0.91450	0.17519	1.17279
1989	20.5	0.08550	0.91450	0.16021	1.07252
1988	21.5	0.08550	0.91450	0.14652	0.98082
1987	22.5	0.08550	0.91450	0.13399	0.89696
1986	23.5	0.08550	0.91450	0.12253	0.82027
1985	24.5	0.08550	0.91450	0.11206	0.75014
1984	25.5	0.08550	0.91450	0.10248	0.68600
1983	26.5	0.08550	0.91450	0.09371	0.62735
1982	27.5	0.08550	0.91450	0.08570	0.57371
1981	28.5	0.08550	0.91450	0.07837	0.52466
1980	29.5	0.08550	0.91450	0.07167	0.47980
1979	30.5	0.08550	0.91450	0.06555	0.43878
1978	31.5	0.08550	0.91450	0.05994	0.40126
1977	32.5	0.08550	0.91450	0.05482	0.36695
1976	33.5	0.08550	0.91450	0.05013	0.33558
1975	34.5	0.08550	0.91450	0.04584	0.30689
1974	35.5	0.08550	0.91450	0.04192	0.28065
1973	36.5	0.08550	0.91450	0.03834	0.25665
1972	37.5	0.08550	0.91450	0.03506	0.23471
1971	38.5	0.08550	0.91450	0.03206	0.21464
1970	39.5	0.08550	0.91450	0.02932	0.19629
1969	40.5	0.08550	0.91450	0.02682	0.17951
1968	41.5	0.08550	0.91450	0.02452	0.16416
1967	42.5	0.08550	0.91450	0.02243	0.15012
1966	43.5	0.08550	0.91450	0.02051	0.13729
1965	44.5	0.08550	0.91450	0.01875	0.12555
1964	45.5	0.08550	0.91450	0.01715	0.11482
1963	46.5	0.08550	0.91450	0.01568	0.10500
1962	47.5	0.08550	0.91450	0.01434	0.09602
1961	48.5	0.08550	0.91450	0.01312	0.08781
1960	49.5	0.08550	0.91450	0.01200	0.07582
1959	50.5	0.08550	0.91450	0.01097	0.06485
1958	51.5	0.08550	0.91450	0.01003	0.05481
1957	52.5	0.08550	0.91450	0.00917	0.04564
1956	53.5	0.08550	0.91450	0.00839	0.03725
1955	54.5	0.08550	0.91450	0.00767	0.02958
1954	55.5	0.08550	0.91450	0.00702	0.02256
1953	56.5	0.08550	0.91450	0.00642	0.01614
1952	57.5	0.08550	0.91450	0.00587	0.01027
1951	58.5	0.08550	0.91450	0.00537	0.00491
1950	59.5	0.08550	0.91450	0.00491	-

[1] Unrealized Life = Sum Life Table from (n-1) for (Future Life - .5) values

Big Rivers Electric Corporation
2010 Depreciation Rate Study - Interim Retirement Rate Analysis

General Plant   Miscellaneous Eqpt   Account: 398

Date of Retirement (Mid Year):	2017
Interim Retirement Rate:	0.47318
Study Date, Year-End:	2009
Future Life from Study Date:	8.0
Remaining Life (F/E + .5) =	1.6

Development of Interim Retirement Rate

Activity Year	Additions	Retirements	Removal Costs	Yr-End Plant Balance	Interim Retirement Rate
A	B	C	D	E	F = C / E
1950				$ -	0.00000
1951				$ -	0.00000
1952				$ -	0.00000
1953	0	0	0	$ -	0.00000
1954	0	0	0	$ -	0.00000
1955	0	0	0	$ -	0.00000
1956	0	0	0	$ -	0.00000
1957	0	0	0	$ -	0.00000
1958	0	0	0	$ -	0.00000
1959	0	0	0	$ -	0.00000
1960	0	0	0	$ -	0.00000
1961	0	0	0	$ -	0.00000
1962	0	0	0	$ -	0.00000
1963	0	0	0	$ -	0.00000
1964	0	0	0	$ -	0.00000
1965	0	0	0	$ -	0.00000
1966	0	0	0	$ -	0.00000
1967	0	0	0	$ -	0.00000
1968	0	0	0	$ -	0.00000
1969	0	0	0	$ -	0.00000
1970	0	0	0	$ -	0.00000
1971	0	0	0	$ -	0.00000
1972	0	0	0	$ -	0.00000
1973	0	0	0	$ -	0.00000
1974	0	2,056	0	$ -	0.00000
1975	0	0	0	$ -	0.00000
1976	0	232	0	$ -	0.00000
1977	0	0	0	$ -	0.00000
1978	0	0	0	$ -	0.00000
1979	6,745	1,619	0	$ 5,127	0.31571
1980	0	0	0	$ 5,127	0.00000
1981	3,777	3,120	171	$ 5,955	0.52381
1982	0	358	0	$ 5,597	0.06394
1983	629	10,640	0	$ -	0.00000
1984	0	0	0	$ -	0.00000
1985	0	27,811	0	$ -	0.00000
1986	0	10,942	0	$ -	0.00000
1987	0	7,871	0	$ -	0.00000
1988	0	6,016	0	$ -	0.00000
1989	0	9,363	0	$ -	0.00000
1990	2,568	936	0	$ 1,632	0.57334
1991	2,763	365	0	$ 4,031	0.09059
1992	0	210	0	$ 3,821	0.05495
1993	0	7,490	0	$ -	0.00000
1994	0	7,987	0	$ -	0.00000
1995	1,902	1,267	0	$ 635	1.99413
1996	583	2,505	0	$ -	0.00000
1997	1,134	702	0	$ 432	1.62280
1998	3,116	126,675	0	$ -	0.00000
1999	4,917	8,320	0	$ -	0.00000
2000	4,242	11,097	0	$ -	0.00000
2001	2,768	6,176	0	$ -	0.00000
2002	27,460	0	0	$ 27,460	0.00000
2003	3,454	1,951	0	$ 28,963	0.06737
2004	1,632	641	0	$ 29,954	0.02141
2005	12,233	633	0	$ 41,555	0.01522
2006	48,299	3,136	0	$ 86,717	0.03617
2007	1,824	1,195	0	$ 87,347	0.01368
2008	18,103	1,577	0	$ 103,873	0.01518
2009	13,475	0	0	$ 117,348	0.00000
TOTAL	$ 161,626	$ 262,889	$ 171	$ 555,573	0.47318

Interim Retirement Life Table

Year Placed	Age at 12/31/2009	Annual Retirement Rate	Annual Survival Ratio	Life Table	Unrealized Life of Original Plant [1]
A	B	C	D = (1- C)	E	F
2009	0.5	0.47318	0.52682	0.76341	0.84990
2008	1.5	0.47318	0.52682	0.40217	0.44774
2007	2.5	0.47318	0.52682	0.21187	0.23588
2006	3.5	0.47318	0.52682	0.11162	0.12426
2005	4.5	0.47318	0.52682	0.05880	0.06546
2004	5.5	0.47318	0.52682	0.03098	0.03449
2003	6.5	0.47318	0.52682	0.01632	0.01817
2002	7.5	0.47318	0.52682	0.00860	0.00957
2001	8.5	0.47318	0.52682	0.00453	0.00504
2000	9.5	0.47318	0.52682	0.00239	0.00266
1999	10.5	0.47318	0.52682	0.00126	0.00140
1998	11.5	0.47318	0.52682	0.00066	0.00074
1997	12.5	0.47318	0.52682	0.00035	0.00039
1996	13.5	0.47318	0.52682	0.00018	0.00020
1995	14.5	0.47318	0.52682	0.00010	0.00011
1994	15.5	0.47318	0.52682	0.00005	0.00006
1993	16.5	0.47318	0.52682	0.00003	0.00003
1992	17.5	0.47318	0.52682	0.00001	0.00002
1991	18.5	0.47318	0.52682	0.00001	0.00001
1990	19.5	0.47318	0.52682	0.00000	0.00000
1989	20.5	0.47318	0.52682	0.00000	0.00000
1988	21.5	0.47318	0.52682	0.00000	0.00000
1987	22.5	0.47318	0.52682	0.00000	0.00000
1986	23.5	0.47318	0.52682	0.00000	0.00000
1985	24.5	0.47318	0.52682	0.00000	0.00000
1984	25.5	0.47318	0.52682	0.00000	0.00000
1983	26.5	0.47318	0.52682	0.00000	0.00000
1982	27.5	0.47318	0.52682	0.00000	0.00000
1981	28.5	0.47318	0.52682	0.00000	0.00000
1980	29.5	0.47318	0.52682	0.00000	0.00000
1979	30.5	0.47318	0.52682	0.00000	0.00000
1978	31.5	0.47318	0.52682	0.00000	0.00000
1977	32.5	0.47318	0.52682	0.00000	0.00000
1976	33.5	0.47318	0.52682	0.00000	0.00000
1975	34.5	0.47318	0.52682	0.00000	0.00000
1974	35.5	0.47318	0.52682	0.00000	0.00000
1973	36.5	0.47318	0.52682	0.00000	0.00000
1972	37.5	0.47318	0.52682	0.00000	0.00000
1971	38.5	0.47318	0.52682	0.00000	0.00000
1970	39.5	0.47318	0.52682	0.00000	0.00000
1969	40.5	0.47318	0.52682	0.00000	0.00000
1968	41.5	0.47318	0.52682	0.00000	0.00000
1967	42.5	0.47318	0.52682	0.00000	0.00000
1966	43.5	0.47318	0.52682	0.00000	0.00000
1965	44.5	0.47318	0.52682	0.00000	0.00000
1964	45.5	0.47318	0.52682	0.00000	0.00000
1963	46.5	0.47318	0.52682	0.00000	0.00000
1962	47.5	0.47318	0.52682	0.00000	0.00000
1961	48.5	0.47318	0.52682	0.00000	0.00000
1960	49.5	0.47318	0.52682	0.00000	0.00000
1959	50.5	0.47318	0.52682	0.00000	0.00000
1958	51.5	0.47318	0.52682	0.00000	0.00000
1957	52.5	0.47318	0.52682	0.00000	0.00000
1956	53.5	0.47318	0.52682	0.00000	0.00000
1955	54.5	0.47318	0.52682	0.00000	0.00000
1954	55.5	0.47318	0.52682	0.00000	0.00000
1953	56.5	0.47318	0.52682	0.00000	0.00000
1952	57.5	0.47318	0.52682	0.00000	0.00000
1951	58.5	0.47318	0.52682	0.00000	0.00000
1950	59.5	0.47318	0.52682	0.00000	-

[1] Unrealized Life = Sum Life Table from (n-1) for (Future Life - .5) values