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**BLACK HILLS POWER, INC.**

**Report on  
Depreciation Accrual Rates**

**Electric Utility Property  
Through December 31, 2008**

**September 18, 2009**

September 18, 2009

Ms. Marne Miller  
Director - Central Services  
Black Hills Corporation  
P.O. Box 1400  
625 Ninth Street  
Rapid City, SD 57709

Dear Ms. Miller:

We are enclosing our Report on Depreciation Accrual Rates for the electric utility property of Black Hills Power, Inc. (BHP). The findings, conclusions, and recommendations that we present in the report are representative of plant activity through December 31, 2008. In the report, we have provided discussions relative to depreciation accounting, the processes utilized and historical information relied upon, the determination of appropriate depreciation expense rates, as well as a review of the adequacy of current depreciation reserves. The Executive Summary of the report summarizes our major findings and recommendations.

We appreciate the opportunity to be of service in this matter and wish to thank BHP and their staff for their cooperation and assistance provided in the completion of the report.

Very Truly Yours,

BLACK & VEATCH CORPORATION



L. W. Loos

Director, Enterprise Management Solutions

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BLACK HILLS POWER  
DEPRECIATION STUDY

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## DISCLAIMER

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Subject to the limitations set forth herein, this report was prepared for BHP by Black & Veatch Corporation (“B&V”) and is based on information not within the control of B&V. B&V has not been requested to make an independent analysis, to verify the information provided to us, or to render an independent judgment of the validity of the information provided by others. As such, B&V cannot, and does not, guarantee the accuracy thereof to the extent that such information, data, or opinions are based on information provided by others.

## 1.0 EXECUTIVE SUMMARY

This report describes the analyses conducted and the results obtained for the depreciation expense rates and accumulated provision for depreciation of the electric utility property of Black Hills Power, Inc. (BHP). This report is based on plant activity through December 31, 2008, with recognition given to known or planned changes since that date. We consider the rates developed and recommended herein to be reasonable and appropriate for prospective use. We recommend, however, that depreciation rates be reviewed at a minimum of once every five years. We previously analyzed the depreciation rates of the company in 2006. Current BHP depreciation rates are based on the remaining life rates we recommended in that 2006 report.

Plant in service and accumulated depreciation as of December 31, 2008 for the classes of plant are summarized below:

**Table 1-1  
Plant in Service and Accumulated Reserve  
As of December 31, 2008**

Line No.	[A] Description	[B] Plant in Service	[C] Accumulated Reserve
		\$	\$
1	Production Plant	333,751,374	168,424,399
2	Transmission Plant	70,469,637	25,333,132
3	Distribution Plant	249,651,598	81,960,628
4	General Plant	40,949,064	19,013,751
5	Total Plant in Service at 12/31/08	694,821,673	294,731,910
6	Pro Forma Adjustment to Plant in Service		
7	Wygen III <sup>(1)</sup>	128,440,000	-
8	Pro Forma Plant in Service	823,261,673	294,731,910

Notes:

(1) BHP's 52% share of Wygen III will be in service in 2010.

We base our recommended depreciation accrual rates on application of the remaining life depreciation method. This method is premised on recovery of plant investment in generally equal amounts over the remaining service life of plant facilities. This method recognizes changes that have occurred or are occurring, with respect to changes in investment level and life characteristics of individual property units.

For unit property, specifically production plant, we develop remaining life depreciation expense rates based on the prospective life span (retirement date) of each generating unit. The prospective retirement dates we use in this report were provided by BHP. Consistent with the remaining life concept and the prospective retirement date used, we include allowance for interim additions and retirements of individual pieces of property, as well as an adjustment for net salvage (gross salvage less cost of removal). The remaining life rates and the resulting change in depreciation expense for unit property accounts are shown in Table 5-1 and summarized in Table 1-2.

For mass property, specifically transmission, distribution, and general plant, the basis for our recommended accrual rates begins with the development of appropriate average service lives (ASL) and Iowa curves for each plant account using the actuarial analysis method. After developing our recommended ASL and Iowa

## EXECUTIVE SUMMARY

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curve, we adjust for net salvage to develop a whole life depreciation rate. As a final step, we consider depreciation reserve deficiency or excess and adjust the whole life rates to remaining life rates. Recommended depreciation rates for unit and mass property are summarized by function in Table 1-2 below and presented in detail in Table 1-3 at the end of this Executive Summary.

**Table 1-2**  
**Recommended Changes in Depreciation Rates and Expense**

Line No.	[A] Description	[B]	[C]	[D]
		Current Composite Accrual Rate	Composite Recommended Accrual Rate	Change in Depreciation Expense
		%	%	\$
1	Production Plant	2.84%	2.66%	(608,995)
2	Transmission Plant	2.40%	2.12%	(185,801)
3	Distribution Plant	3.04%	2.72%	(786,829)
4	General Plant	6.53%	4.61%	(774,197)
5	Total Plant in Service at 12/31/08	3.11%	2.76%	(2,355,821)
6	Pro Forma Adjustments			
7	Wygen III		2.72%	3,493,568
8	Total Change Including Pro Forma Balances		2.75%	1,137,747

As indicated in the above table, application of the recommended remaining life depreciation rates results in a \$2.36 million decrease in annual depreciation expense when applied to total depreciable assets as of December 31, 2008. When applied to pro forma balances including the addition of the Wygen III generating station, total depreciation expense increases by about \$1.14 million. The overall decrease in depreciation expense is primarily attributable to the following factors:

1. Other Production Plant (combustion turbine based generation) retirement dates have generally been extended by BHP. Application of recommended production plant depreciation rates reduces the depreciation expense by approximately \$609,000.
2. There is a general trend of longer service lives for transmission and distribution accounts. This combined with the remaining life adjustment reduces depreciation expense by about \$973,000.
3. The results of our analysis of general plant accounts resulted in a mix of longer and shorter services lives. However, the larger accounts (based on plant in service) generally showed a need for longer service lives, which accounts for the overall decrease in depreciation expense of \$774,000.

The scope of this report includes:

1. A discussion of the practice of depreciation accounting (Section 3).
2. The types of information examined in our analysis and the methods applied (Section 4).
3. The results of the analyses conducted pertaining to the production plant (Section 5).
4. The results of the mass property analyses conducted of BHP's transmission, distribution, and general plant (Section 6).
5. The recommended depreciation rates (Section 7).

**Table 1-3  
Recommended Depreciation Rates**

Line No.	[A] FERC Acct	[B] Description	[C]	[D]	[E]
			Current Depreciation Rate	Recommended Depreciation Rate	Change in Depreciation Expense
			%	%	\$
1		<b>Production Plant</b>			
2		Steam Production Plant			
3	310	Land and Land Rights	0.00%	0.00%	-
4	311-316	Osage	1.53%	2.59%	189,540
5	311-316	Ben French	2.21%	3.62%	188,693
6	311-316	Wyodak	2.87%	3.04%	132,710
7	311-316	Neil Simpson I	3.35%	3.49%	26,590
8	311-316	Neil Simpson II	2.54%	2.49%	(58,580)
9		Total Steam Production	2.61%	2.80%	478,953
10		<b>Other Production Plant</b>			
11	340	Land and Land Rights	0.00%	0.00%	-
12	341-346	Lange CT	3.97%	2.39%	(477,715)
13	341-346	Neil Simpson I CT	3.91%	2.51%	(407,746)
14	341-346	Ben French CT's	2.43%	1.38%	(202,487)
15		Total Other Production	3.57%	2.19%	(1,087,948)
16		<b>Total Production Plant</b>	2.84%	2.66%	(608,995)
17		<b>Transmission Plant</b>			
18	350	Land and Land Rights	0.00%	0.00%	-
19	352	Structures and Improvements	2.39%	1.95%	(6,901)
20	353	Station Equipment	2.66%	1.71%	(321,582)
21	354	Towers and Fixtures	2.04%	1.42%	(2,776)
22	355	Poles and Fixtures	2.22%	3.12%	128,194
23	356	Overhead Conductors and Devices	2.04%	2.15%	19,030
24	359	Roads and Trails	1.95%	2.23%	19
25	106	Completed Construction not Classified	2.32%	2.12%	(1,785)
26		<b>Total Transmission Plant</b>	2.40%	2.12%	(185,801)
27		<b>Distribution Plant</b>			
28	360	Land and Land Rights	0.00%	0.00%	-
29	361	Structures and Improvements	3.28%	3.29%	25
30	362	Station Equipment	2.85%	2.35%	(257,652)
31	364	Poles, Towers and Fixtures	3.27%	3.07%	(109,884)
32	365	Overhead Conductors and Devices	3.14%	2.27%	(282,703)
33	366	Underground Conduit	2.64%	1.83%	(9,812)
34	367	Underground Conductors and Devices	3.00%	3.40%	142,904
35	368	Line Transformers	3.02%	2.21%	(240,229)
36	369	Services	2.77%	2.73%	(9,146)
37	370	Meters	2.85%	3.27%	33,168
38	371	Installations on Customer Premises	4.14%	3.08%	(17,629)
39	373	Street Lighting and Signal Systems	4.34%	3.61%	(11,069)
40	106	Completed Construction not Classified	3.02%	2.72%	(24,803)
41		<b>Total Distribution Plant</b>	3.04%	2.72%	(786,829)
42		<b>General Plant</b>			
43	389	Land and Land Rights	0.00%	0.00%	-
44	390	Structures and Improvements	4.73%	2.52%	(231,334)
45	391	Office Furniture and Equipment	10.56%		(101,929)
	391.1	Office Furniture and Equipment		4.40%	-
	391.3	Computer Equipment		12.67%	-
46	392	Transportation Equipment	9.06%	3.89%	(266,054)
47	393	Stores Equipment	4.23%	5.82%	4,646
48	394	Tools, Shop and Garage Equipment	4.23%	2.54%	(82,015)
49	395	Laboratory Equipment	3.06%	1.52%	(9,350)
50	396	Power Operated Equipment	4.23%	2.72%	(4,783)
51	397	Communication Equipment	4.39%	3.84%	(41,967)
52	398	Miscellaneous Equipment	5.81%	2.75%	(10,574)
53	106	Completed Construction not Classified	6.63%	4.61%	(30,837)
54		<b>Total General Plant</b>	6.53%	4.61%	(774,197)
55		<b>Total Plant in Service @ 12/31/08</b>	3.11%	2.76%	(2,355,821)
56		<b>Pro Forma Adjustment</b>			
57		Steam Production Plant			
58	311-316	Wygen III	n/a	2.72%	3,493,568
59		<b>Pro Forma Plant in Service</b>	<b>3.11%</b>	<b>2.75%</b>	<b>1,137,747</b>

## 2.0 INTRODUCTION

In this report, we present the results of our analysis of the depreciation expense requirements for the electric utility property of Black Hills Power, Inc (BHP). We primarily base our analysis on plant activity through December 31, 2008. Implications of certain known and measurable changes that have occurred or are anticipated to occur subsequent to December 31, 2008 are incorporated in our analyses as appropriate.

Currently, with the exception of the production function, BHP accrues depreciation expense and accumulates reserve by Federal Energy Regulatory Commission (FERC) account. Within the production function, BHP accumulates reserve and calculates depreciation expense for each generating facility. In this report, annual depreciation accrual rates are calculated by individual FERC account and for each generating facility using the whole life method. These whole life rates are subsequently adjusted to remaining life rates.

In Section 3.0, we briefly discuss the practice of depreciation accounting. In Section 4.0, we discuss the type of information examined in our analysis and the methods applied in analyzing the information. The results of the analyses performed are discussed in Sections 5.0 and 6.0. These discussions include a determination of depreciation accrual rates for unit property accounts (Section 5.0), whole life depreciation accrual rates for mass property accounts (Section 6.1), and our analysis of the adequacy of current depreciation reserve amounts and remaining life rates for mass property (Section 6.2).

### **2.1 Existing Plant in Service and Depreciation Rates**

In Table 2-1 we show the plant in service and existing depreciation rates for production, transmission, distribution, and general plant. BHP has approximately \$10.7 million booked to Account 106 – Completed Construction Not Classified. We show these amounts by function in Table 2-1. The investment reported in Account 106 is about 1.5% of the existing plant in service.

For transmission, distribution, and general plant, BHP reports Depreciation Reserve of \$126.3 million as of December 31, 2008 (Table 2-1, Column D).

In Column D of Table 2-1, we show that BHP has accumulated reserve applicable to production plant of \$168.4 million.

To the extent that the depreciation accrual rates recommended in this report are different from the rates currently used, the change results generally from one or more of the following factors:

- Additional information regarding the history of the plant account (retirement history).
- Changes in life characteristics due to changes in equipment and/or manufacturing methods included in the plant.
- Changes in the anticipated retirement date of production plants and estimated cost of retirement (cost of removal/net salvage).



**Table 2-1  
Depreciable Plant in Service, Depreciation Reserve, and Existing Rates**

Line No.	[A] Description	[B] FERC Acct	[C] Plant in Service At 12/31/2008 \$	[D] Depreciation Reserve		[E] Existing Depreciation Rate %
				At 12/31/2008	At 12/31/2008	
1	<b>Production Plant</b>					
2	Steam Production Plant					
3	Land and Land Rights	310	333,941	-		0.00%
4	Kirk	311-316	-	239,554		0.00%
5	Osage	311-316	17,918,001	17,357,768		1.53%
6	Ben French	311-316	13,360,210	13,050,958		2.21%
7	Wyodak	311-316	79,050,217	50,672,287		2.87%
8	Neil Simpson I	311-316	18,913,575	16,151,840		3.35%
9	Neil Simpson II	311-316	125,534,971	38,724,257		2.54%
10	Total Steam Production		255,110,915	136,196,664		
11	Other Production Plant					
12	Land and Land Rights	340	2,705	-		0.00%
13	Lange CT	341-346	30,183,503	8,369,716		3.97%
14	Neil Simpson CT	341-346	29,130,532	9,850,982		3.91%
15	Ben French Other Production	341-346	19,323,720	14,007,037		2.43%
16	Total Other Production		78,640,459	32,227,735		
17	<b>Total Production Plant</b>		<b>333,751,374</b>	<b>168,424,399</b>		
18	<b>Transmission Plant</b>					
19	Land and Land Rights	350	2,159,768	-		0.00%
20	Structures and Improvements	352	1,568,466	535,697		2.39%
21	Station Equipment	353	33,850,757	12,876,640		2.66%
22	Towers and Fixtures	354	447,677	167,538		2.04%
23	Poles and Fixtures	355	14,243,734	5,280,479		2.22%
24	Overhead Conductors and Devices	356	17,300,024	6,398,076		2.04%
25	Roads and Trails	359	6,920	2,570		1.95%
26	Completed Construction not Classified	106	892,291	72,132		2.32%
27	Total Transmission Plant		70,469,637	25,333,132		
28	<b>Distribution Plant</b>					
29	Land and Land Rights	360	1,624,794	(21,552)		0.00%
30	Structures and Improvements	361	254,825	115,258		3.28%
31	Station Equipment	362	51,530,410	19,833,698		2.85%
32	Poles, Towers and Fixtures	364	54,941,936	18,370,367		3.27%
33	Overhead Conductors and Devices	365	32,494,569	12,187,100		3.14%
34	Underground Conduit	366	1,211,297	346,988		2.64%
35	Underground Conductors and Devices	367	35,726,003	10,339,823		3.00%
36	Line Transformers	368	29,657,925	10,400,878		3.02%
37	Services	369	22,865,627	7,357,128		2.77%
38	Meters	370	7,897,105	1,259,837		2.85%
39	Installations on Customer Premises	371	1,663,075	626,129		4.14%
40	Street Lighting and Signal Systems	373	1,516,328	611,471		4.34%
41	Completed Construction not Classified	106	8,267,701	533,504		3.02%
42	Total Distribution Plant		249,651,598	81,960,628		
43	<b>General Plant</b>					
44	Land and Land Rights	389	602,008	-		0.00%
45	Structures and Improvements	390	10,467,603	5,598,384		4.73%
46	Office Furniture and Equipment	391	9,161,820	6,086,841		10.56%
47	Transportation Equipment	392	5,146,117	2,771,584		9.06%
48	Stores Equipment	393	292,210	152,865		4.23%
49	Tools, Shop and Garage Equipment	394	4,852,946	2,429,345		4.23%
50	Laboratory Equipment	395	607,146	283,317		3.06%
51	Power Operated Equipment	396	316,735	131,158		4.23%
52	Communication Equipment	397	7,630,343	895,944		4.39%
53	Miscellaneous Equipment	398	345,552	179,498		5.81%
54	Completed Construction not Classified	106	1,526,583	484,814		6.63%
55	Total General Plant		40,949,064	19,013,751		
56	<b>Total Plant in Service</b>		<b>694,821,673</b>	<b>294,731,910</b>		

## 3.0 DEPRECIATION ACCOUNTING

The FERC Uniform System of Accounts defines depreciation as:

“The loss in service value<sup>1</sup> not restored by current maintenance, incurred in connection with the consumption or prospective retirement of electric plant in the course of service from causes that are known to be in current operation and against which the system is not protected by insurance. Among the causes considered are wear and tear, decay, action of the elements, inadequacy, obsolescence, changes in the art, changes in demand, and requirements of public authorities.”

Depreciation accounting provides a method whereby charges for the loss in service value are made against current income derived from operating the system. By properly charging depreciation, the total cost of utility property is appropriately distributed over the useful life in such a way as to equitably allocate cost to the period during which service is provided through the use and consumption of such property. For the purpose of this report, we use the term “total cost” to mean the original investment cost (gross plant), less salvage value (if any), plus cost of removal (if any).

### 3.1 *Annual Depreciation Expense*

Annual depreciation expense represents the annual charge against income associated with the loss of service value of utility property. Historically, utilities have relied on a number of methods to identify the appropriate level of depreciation expense. Some of these methods include:

- A direct apportionment by management;
- A percentage of revenues;
- An amount equal to the original cost investment retired during the year;
- A charge per unit of delivery (kWh, kW, etc.); and
- A percentage of the investment in depreciable property.

Prior to 1965, BHP employed the percentage of revenue method for determining the annual depreciation expense. The expense was calculated by applying a fixed percentage to revenues from sales, less maintenance expenses. The annual percentage varied from 15 to 17-1/2 percent during the years 1941 to 1964. After 1964, BHP began charging depreciation by applying a percentage to depreciable property. This rate yields an annual depreciation expense that is intended to amortize the total cost (original investment, plus cost of removal, less salvage) over the life (or remaining life) of the property in generally equal amounts.

### 3.2 *Depreciation Reserve*

Depreciation reserve is a balance sheet item that reflects the accumulation of annual depreciation activities and associated retirement accounting. Under the FERC System of Accounts, depreciation reserve is shown on the balance sheet as “Accumulated Provision for Depreciation.”

The depreciation expense charged against income is credited to (accumulated in) depreciation reserve. For utility properties, FERC provides that upon retirement of an asset, the utility reduces (debits) depreciation reserve by the original cost of the asset retired, increases (credits) reserve by any benefits derived from the sale of assets removed (salvage), and reduces (debits) reserve by the costs attributable to removal. As such, the use of appropriate depreciation rates corresponding to the service life of utility properties will result in accruals to the depreciation reserve which equal the total investment ultimately retired, as adjusted for salvage and cost of removal.

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<sup>1</sup> For the purposes of this report, we use the term “loss in service value” in the accounting sense where value represents the original cost of facilities.

## DEPRECIATION ACCOUNTING

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DEPRECIATION STUDY

For the purpose of this report, we have included consideration of net salvage (gross salvage less cost of removal) where appropriate. More specifically, for the depreciation rates recommended for unit and mass property accounts, we have provided allowance for net salvage based on industry trends and our experience with similar property. For the mass property accounts, we have also used as a reference, the historical salvage, cost of removal and retirement experience of BHP.

### 4.0 HISTORICAL INFORMATION

Depreciation expense rates are intended to recover the net investment (total cost) in utility property over its useful life. In this regard, depreciation rates typically consist of three components. These components, which are further defined below, include: (i) service life of the property; (ii) total cost to be recovered; and (iii) reserve deficiency.

Normally, the determination of average service life is largely dependent on analyses of detailed utility records. Such records generally provide information regarding additions and retirements by transaction year (year added or retired) and vintage (year originally installed) for each account. We adjust average service life based on historical experience to reflect expectations over the remaining service life based on our experience, judgment, and those conditions anticipated to occur.

We develop average service lives by account. We first separate accounts into two groups: mass property and unit property. Mass property represents relatively homogeneous property units that tend to be retired individually. Meters, conduit, conductor, services, and line transformers are examples of mass property. Conversely, unit property represents a more heterogeneous property group, which by the nature of their interconnected or integrated operations, tends (in large part) to be retired simultaneously, as a group. We normally consider power generation facilities for electric utilities as unit property. Generally, utilities maintain detailed unit property data by physical location. Utilities typically maintain mass property data on an aggregate level. For unit property accounts, we typically define service life based on planned retirement dates.<sup>2</sup>

For unit property, we normally develop a history of investment activity by account for each location or site. This life history reflects gross additions, retirements, surviving property, and account balances. Based on the estimated life (planned retirement date) for each unit property (generating station), we typically forecast plant investment activity (interim additions, retirements, and account balances) at the account level for each year that units within such an account are forecast to remain in service. We then calculate a remaining life, straight line depreciation accrual rate by dividing the unrecovered gross investment by the sum of the annual depreciable plant balances over the remaining life of the unit property. Unrecovered investment represents gross additions over the entire life of the unit less the depreciation reserve balance. Gross additions include both historical and forecast additions to unit properties throughout the entire lifespan of such properties. We also include allowance for cost of removal and salvage in gross investment.

For mass property, we initially define service lives and Iowa curves by account based on actuarial analysis (retirement or survivor curve analysis) or semi-actuarial analysis (simulated plant balance). These analyses rely on historical plant activity (retirements). Specifically, using a least squares technique, actual survivor stub curves representing the percent of original placements surviving at various ages are developed. We compare these stub curves to general survivor curves to identify the average service life which best fits historical experience. By comparing the results produced with results using other curve shapes, we determine the curve shape and average service life which best predicts historical experience. We use the average service life we developed as a principal determinant of the reasonable average service life applicable to each account. In addition to our analysis of historical experience, we consider our experience in the industry, practices of other utilities, and basic information regarding expected life characteristics of the property. Results derived from the application of these methodologies are then evaluated in connection with other available information such as: (i) past, present and anticipated economic conditions; (ii) recent industry trends; and (iii) engineering experience and judgment.

We further discuss these techniques, including a summary of the information required and the information provided by BHP in the following.

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<sup>2</sup> BHP provided estimated retirement dates for each production unit.

### **4.1 Black Hills Power Data**

The property records of BHP are kept in accordance with the Uniform System of Accounts as prescribed by the FERC. We rely on these records as the basis for the information used for our analysis. The investment in unit property accounts (steam production and other power production plant) is maintained within PowerPlant, a comprehensive Project – Asset software system. PowerPlant’s Asset System contains a fully functional CPR (Continuing Property Record) ledger.

#### **4.1.1 Mass Property Data**

The investment in mass property accounts (transmission, distribution and general plant) is maintained within PowerPlant. PowerPlant’s Asset System contains a fully functional CPR (Continuing Property Record) ledger. . BHP’s Continuing Property Record (CPR) provides additions and retirement data in detail by vintage since 1950. Thus, we are able to perform actuarial studies as a basis to determine the experienced mortality characteristics for each FERC account.

Salvage history since 1970 is reported by function. Removal costs are charged to construction work orders and allocated to major functional plant groups on the basis of investment retired. Salvage and Cost of Removal (COR) data by account for the transaction years 1997 through 2008 were used to develop reasonable gross salvage, COR and net salvage allowances for the mass property accounts.

#### **4.1.2 Planned Retirements (Unit Property Accounts)**

For BHP’s unit property, BHP provided the data needed to develop an investment history. A life history of gross additions, retirements, surviving property, and account balances by year since 1989 was provided for the analysis. Based on the estimated retirement date that BHP provided for the various units, we forecast plant investment activity (interim additions, retirements, and plant balances) for each year that we expect the property to remain in service. In the event that other reasonably anticipated planned additions and retirements are required in order for the property to reach the retirement date, we consider implications of such additions and retirements as well.

Based on the data described above, we calculate remaining life, straight line depreciation accrual rates by dividing the investment to be recovered (original investment, plus interim additions, plus cost of removal, less gross salvage less depreciation reserve) by the sum of the forecast annual depreciable balances over the remaining life of the unit property accounts. Forecast annual depreciable balances are based on the existing plant balances reported at December 31, 2008 plus forecast additions and retirements as adjusted for net salvage. Our recommended depreciation rates for unit property accounts are discussed in Section 5.0.

To accurately determine the composite depreciation accrual rate for the generating units, it is important to understand the retirement date and investment in each generating unit. BHP maintains historical data that includes additions, retirements, transfers, and net salvage by FERC account. This data provides sufficient information to evaluate interim additions, retirements, and salvage on an aggregate level for the steam and other production accounts for the period ending December 31, 2008. We supplement this information with BHP’s Continuing Property Record data as a means to identify additions and retirements specific to generating units to determine approximate investment by generating unit.

### 5.0 UNIT PROPERTY ANALYSIS

Table 5-1 summarizes the recommended remaining life depreciation rates for BHP's generating stations. We also show plant investment as of December 31, 2008, existing depreciation accrual rates, and the resulting change in annual depreciation expense by generating unit. The whole life accrual rate is defined as the rate which, when applied to the annual depreciable balances, will result in recovery of the original cost of gross additions over the entire life of the property. Adjustments to the whole life rates are made to reflect estimated salvage value and cost of removal. With the remaining life method, undepreciated investment plus forecast additions, cost of removal and salvage is recovered over the remaining life (of depreciable plant balances) of the property.

The annual accrual rates we develop will, if applied annually to unit property account balances over the remaining life of the various properties, recover BHP's investment, including consideration of the impact of net salvage. The principal forecasts, for which assumptions are made, that we rely on in the analyses include:

- The retirement date (life span) of the individual facilities.
- The level of interim additions and retirements.
- The level of major plant additions, upgrades, and improvements required for the individual units to reach the planned retirement date.
- The net salvage values associated with interim and final retirements.

We analyzed the investment history by account for steam production and other production plant through December 31, 2008. The life history reflects gross additions, retirements, surviving property and account balances. Based on the planned retirement date, we forecast plant investment activity (interim additions, retirements, and balances) for each year that we forecast the generating plant will remain in service. BHP provided us the data regarding the life span of unit property.

We calculate a remaining life, straight line depreciation accrual rate by dividing the gross investment (plant investment as of December 31, 2008 plus forecast interim additions less net salvage and accumulated depreciation) by the sum of the annual depreciable plant balances over the remaining life of the unit. Annual depreciable balances are based on plant balances as of December 31, 2008 plus forecast additions and retirements. Our recommended remaining life depreciation rate calculations are shown in the Appendix and are summarized in Table 5-1. For the total existing production plant, the composite proposed remaining life rate is 2.66 percent and the change in annual depreciation expense based on depreciable plant in service as of December 31, 2008 (as adjusted for known and measurable changes) is a decrease of about \$609,000 as shown in Table 5-1.

**Table 5-1  
Unit Property Analysis**

[A]	[B]	[C]	[D]	[E]	[F]	[G]	
Line No.	FERC Acct	Description	Plant Investment As of 12/31/2008	Current Remaining Life Accrual Rate	Indicated Whole Life Accrual Rate	Recommended Remaining Life Accrual Rate	Change in Depreciation Expense
			\$	%	%	%	\$
1		<b>Production Plant</b>					([F] - [D]) * [C]
2		Steam Production Plant					
3	310	Land and Land Rights	333,941	0.00%		0.00%	-
4	311-316	Osage	17,918,001	1.53%	2.69%	2.59%	189,540
5	311-316	Ben French	13,360,210	2.21%	3.49%	3.62%	188,693
6	311-316	Wyodak	79,050,217	2.87%	3.35%	3.04%	132,710
7	311-316	Neil Simpson I	18,913,575	3.35%	3.55%	3.49%	26,590
8	311-316	Neil Simpson II	125,534,971	2.54%	2.79%	2.49%	(58,580)
9		Total Steam Production	255,110,915	2.61%	3.05%	2.80%	478,953
10		Other Production Plant					
11	340	Land and Land Rights	2,705	0.00%		0.00%	-
12	341-346	Lange CT	30,183,503	3.97%	2.06%	2.39%	(477,715)
13	341-346	Neil Simpson I CT	29,130,532	3.91%	2.71%	2.51%	(407,746)
14	341-346	Ben French CT's	19,323,720	2.43%	1.84%	1.38%	(202,487)
15		Total Other Production	78,640,459	3.57%	2.25%	2.19%	(1,087,948)
16		<b>Total Production Plant</b>	<b>333,751,374</b>	<b>2.84%</b>	<b>2.87%</b>	<b>2.66%</b>	<b>(608,995)</b>
17		<b>Pro Forma Adjustment</b>					
18		Wygen III (in Service 2010)	128,440,000	n/a		2.72%	3,493,568
19		<b>Pro Forma Production Plant</b>	<b>462,191,374</b>	<b>2.84%</b>		<b>2.68%</b>	<b>2,884,573</b>

## 5.1 Steam Production Plant

The steam electric generating stations owned by BHP as of December 31, 2008 include one unit at Ben French Station, two units at the Neil Simpson Station, three units at the Osage Plant and a 20 percent share of the 335 MW (net plant capacity) Wyodak Unit 1. Wygen III is currently under construction and is scheduled to be placed in service in 2010. BHP owns a 52 percent share of the 110 MW coal plant.

Table 5-2 summarizes the nameplate rating, year of installation, and forecast retirement date for each unit as provided by BHP.

**Table 5-2**  
**Steam Production Plant Data**

Line No.	[A] Steam Production Plant	[B] Nameplate Rating kW	[C] Date Installed	[D] Estimated Retirement	[E] Estimated Service Life years
1	Ben French Steam	25,000	1960	2023	63
2	Osage #1 Steam	11,500	1948	2013	65
3	Osage #2 Steam	11,500	1950	2013	63
4	Osage #3 Steam	11,500	1952	2013	61
5	Neil Simpson #1 Steam	21,760	1969	2023	54
6	Neil Simpson #2 Steam	91,000	1995	2045	50
7	Wyodak #1 Steam (1)	72,400	1978	2030	52
8	Wygen III Steam (2)	57,200	2010	2055	45

(1) BHP's 20 percent share.

(2) BHP's 52 percent share.

**Ben French Station.** This station located in Rapid City has one steam generating unit with a maximum net capability of 21,600 kW. The age of this station at the end of 2008 was 48 years and the remaining life is estimated to be 15 years based on the forecast retirement of the unit in 2023. The Ben French station will have major capital additions of \$1.9 million in 2011 and \$2.1 million in 2016. Other than these major capital additions, nominal levels of interim additions and interim retirements are expected to be made over the remaining life of the station. The Appendix summarizes the derivation of whole life rates and remaining life rates (with and without cost of removal) applicable to the Ben French Station. A whole life accrual rate of 3.49 percent and a remaining life accrual rate of 3.62 percent (with cost of removal) are shown in Table 5-1. The accumulated depreciation reserve for the Ben French Plant is \$13,050,958 compared to the plant balance of \$13,360,210 as of December 31, 2008.

**Neil Simpson Station.** This generating station is located at the Wyodak coal mine site at Wyodak, Wyoming. This mine was acquired by BHP in 1954 from the Wyodak Coal Company, a subsidiary of the Homestake Mining Company.

Neil Simpson Unit 1 was placed in service in 1969 and has a nameplate rating of 21,760 kW. This unit features an air-cooled condenser which permits plant operation with a minimum amount of water. The age of Neil Simpson Unit 1 at the end of 2008 was 39 years and the remaining life is estimated to be 15 years based on the forecast retirement of the unit in 2023. The Neil Simpson Unit 1 will have major capital additions of \$2.1 million in 2009 and \$2.6 million in 2017. Other than these major capital additions, nominal levels of interim additions and interim retirements are expected to be made over the remaining life of the station. Based on the unit property methodology, the whole life accrual rate for Neil Simpson Unit 1 is 3.55 percent and the remaining life rate (with cost of removal) is 3.49 percent as shown in Table 5-1. The accumulated depreciation reserve for the Neil Simpson I is \$16,151,840 compared to the plant balance of \$18,913,575 for the period ending December 31, 2008. The analysis showing the development of these rates is shown in the Appendix.

Neil Simpson Unit 2 was placed in service in 1995 and has a nameplate rating of 91,000 kW. The age of Neil Simpson Unit 2 at the end of 2008 was 13 years and the remaining life is estimated to be 37 years based on



the forecast retirement of the unit in 2045. There will be major capital additions of \$1.6 million in 2012, with recurring capital costs every seven years escalated at a 2.5 percent annual inflation rate through 2040. Other than these major capital additions, nominal levels of interim additions and interim retirements are expected to be made over the remaining life of the station. Based on the unit property methodology, the whole life accrual rate for Neil Simpson Unit 2 is 2.79 percent and the remaining life rate (with cost of removal) is 2.49 percent as shown in Table 5-1. The accumulated depreciation reserve for the plant is \$38,724,257 compared to the plant balance of \$125,534,971 as of December 31, 2008. The analysis showing the development of these rates is shown in the Appendix.

**Osage Plant.** The Osage Plant units were placed in service between 1948 through 1952. The steam production facilities at this location include two 10,150 kW (net plant capability) generating units originally owned by BHP and one 10,150 kW generating unit acquired from Rushmore REA Co-op in early 1992. At the end of 2008, the age of the units ranged from 56 to 60 years and the remaining life of all three is estimated to be 5 years based on the forecast retirement of the plant in 2013.

Based on the unit property methodology, the whole life accrual rate for Osage Plant is 2.69 percent and the remaining life rate (with cost of removal) is 2.59 percent as shown in Table 5-1. The accumulated depreciation reserve is \$17,357,768 compared to the plant balance of \$17,918,001 as of December 31, 2008. The analysis showing the development of these rates is shown in the Appendix.

**Wyodak Plant.** The Wyodak Plant is located adjacent to the Neil Simpson Station in Wyodak, Wyoming and was placed in service in 1978. From 1978 through 1990, this plant was jointly leased by BHP and Pacific Power & Light Company. At the end of 1990, BHP and Pacific Power acquired the plant from the leaseholders. BHP receives a 20 percent of the plant capacity of 335 MW. At the end of 2008, the age of the facility was 30 years and the remaining life is estimated to be 22 years based on the forecast retirement of the unit in 2030.

The plant will have major capital additions amounting to \$4.8 million in 2011. Also, there will be major capital costs of \$2.5 million in 2016, with recurring capital costs every five years escalated at a 2.5 percent annual inflation rate over the remaining life of the plant. Other than these major capital additions, nominal levels of interim additions and interim retirements are expected to be made over the remaining life of the station. Based on the unit property methodology, the whole life accrual rate for Wyodak Plant is 3.35 percent and the remaining life rate (with cost of removal) is 3.04 percent as shown in Table 5-1. The accumulated depreciation reserve is \$50,672,287 compared to the plant balance of \$79,050,217 as of December 31, 2008. The analysis showing the development of these rates is shown in the Appendix.

**Kirk Plant.** The Kirk Plant was acquired from Homestake Mining Company in 1954 and retired by Black Hills in October 2000. Since the Kirk Plant has already been retired, it is not included in our analysis. As of December 31, 2008, the retired Kirk plant has zero plant in service, but \$239,554 remaining in depreciation reserve. It is our understanding that the remaining depreciation reserve in the Kirk plant is to cover any residual retirement costs and will be written off if none materialize.

### 5.2 Other Production Plant

The other electric generating stations owned by BHP as of December 31, 2008 include the Ben French combustion turbines and diesel driven generator sets, the Neil Simpson Unit 1 combustion turbine and the Lange combustion turbine. BHP forecasts 50 and 48 year service lives for the Neil Simpson and Lange combustion turbines, respectively. The Ben French combustion turbines and diesel generation units are estimated to be retired by 2030. These forecast retirement dates result in services lives considerably greater than those we normally use for this type equipment. However, when considering BHP's aggressive capital maintenance schedules and limited use of these facilities, we find the estimates to be reasonable.

Table 5-3 summarizes the nameplate rating, year of installation, and forecast retirement date for each unit as provided by BHP.

**Table 5-3  
Other Production Plant Data**

Line No.	[A] Other Production Plant	[B] Nameplate Rating	[C] Date Installed	[D] Estimated Retirement	[E] Estimated Service Life
		kW			years
1	BF - Diesel #1	2,000	1965	2020	55
2	BF - Diesel #2	2,000	1965	2020	55
3	BF - Diesel #3	2,000	1965	2020	55
4	BF - Diesel #4	2,000	1965	2020	55
5	BF - Diesel #5	2,000	1965	2020	55
6	BF - Combustion Turbine #1	25,000	1977	2030	53
7	BF - Combustion Turbine #2	25,000	1977	2030	53
8	BF - Combustion Turbine #3	25,000	1978	2030	52
9	BF - Combustion Turbine #4	25,000	1979	2030	51
10	Neil Simpson CT #1	40,000	2000	2050	50
11	Lange CT #1	40,000	2002	2050	48

**Ben French Combustion Turbines.** The four combustion turbines were installed in the period 1977 through 1979. At the end of 2008, the age of the facility ranged from 29 to 31 years and the remaining life is estimated to be 22 years based on the forecast retirement of all units in 2030. This is an 11 year life extension compared to our previous study.

Based on the unit property methodology, the whole life accrual rate for Ben French CTs is 1.84 percent and the remaining life rate (with cost of removal) is 1.38 percent as shown in Table 5-1. This is a significant decrease from the existing rate of 2.43% due to the retirement date being extended 11 years since our previous study. The accumulated depreciation for the plant is \$14,007,037 compared to the plant balance of \$19,323,720 for the period ending December 31, 2008. The analysis showing the development of these rates is shown in the Appendix.

**Neil Simpson Unit 1 Combustion Turbine.** This combustion turbine was installed in 2000. At the end of 2008, the age of the facility was 8 years and the remaining life was estimated to be 42 years based on the forecast retirement of the unit in 2050. This is a 20 year life extension compared to our previous study.

In 2009, a hot gas path replacement will take place at a capital cost of approximately \$1.8 million, with recurring capital costs every seven years escalated at a 2.5 percent annual inflation rate through 2030. Other than these major capital additions, nominal levels of interim additions and interim retirements are expected to be made over the remaining life of the station. Based on the unit property methodology, the whole life accrual rate for Neil Simpson Unit 1 CT is 2.71 percent and the remaining life rate (with cost of removal) is 2.51 percent as shown in Table 5-1. This is a significant decrease from the existing rate of 3.91% due to the retirement date being extended 20 years from our previous study. The accumulated depreciation reserve is \$9,850,982 compared to the plant balance of \$29,130,532 as of December 31, 2008. The analysis showing the development of these rates is shown in the Appendix.

**Lange Combustion Turbine.** This combustion turbine was installed in 2002. At the end of 2008, the age of the facility was 6 years and the remaining life was estimated to be 42 years based on the forecast retirement of the unit in 2050. This represents an 18 year increase in the life from the previous retirement year of 2032.

In 2013, the Lange CT will have major capital additions of approximately \$2.2 million, with recurring capital costs every seven years escalated at a 2.5 percent annual inflation rate over the remaining life of the unit (through 2041). Other than these major capital additions, nominal levels of interim additions and interim retirements are expected to be made over the remaining life of the station. Based on the unit property methodology, the whole life accrual rate for Lange CT is 2.06 percent and the remaining life rate (with cost of removal) is 2.39 percent. This is a significant decrease from the existing rate of 3.97% due to the retirement date being extended 18 years since our previous study. The accumulated depreciation reserve is \$8,369,716 compared to the plant balance of \$30,183,503 as of December 31, 2008. The analysis showing the development of these rates is shown in the Appendix.

### **5.3 Wygen III Depreciation Rate**

BHP is constructing the Wygen III Project at its Wyodak Energy Complex outside Gillette, Wyoming. Wygen III is expected to be completed in spring of 2010 at a cost of \$247 million and will provide power to BHP for 45 years. BHP has a 52 percent ownership stake in the plant and its share of plant in service is \$128.4 million. Wygen III is nominally rated as a 110 MW baseload power station and the fourth plant of a proven economical and efficient design constructed by BHC. Neil Simpson II, Wygen I, and Wygen II are sister plants located at the Wyodak Energy Complex. Wygen III is designed with the latest available emissions control technology to meet Wyoming's strict air quality standards.

BHP asked that we recommend depreciation rates for its investment in Wygen III. In 2007 we developed the depreciation rate for Wygen II, which is owned and operated by the Black Hills Corporation (BHC) subsidiary Cheyenne Light, Fuel & Power (CLFP). The depreciation rate for Wygen II was generally modeled after BHP's Neil Simpson II unit. To develop an accrual rate for Wygen III, we generally follow the template used in for the Wygen II depreciation rate and recommend the same applied rate of 2.72%. Both rates are premised on a 45 year service life. The annual accrual rates we develop will, if applied annually to unit property account balances over the life of the plant, recover BHP's investment in Wygen III, including consideration of the impact of net salvage. The principal forecasts, for which we make assumptions include:

- The retirement date (life span) of the generating station,
- The level of interim additions and retirements,
- The level of major plant additions, upgrades, and improvements required for the plant to reach the planned retirement date,
- The net salvage values associated with interim and final retirements.

We base our recommended depreciation rates for unit property on the remaining life depreciation expense rate method. For a new plant coming on line such as Wygen III, the remaining life rate equals the whole life rate since the remaining life is the full service life and no adjustment is needed for accumulated depreciation reserve. Based on the fact that Wygen III will be completed by spring 2010 and will have a 45-year service life, we forecast plant investment activity (interim additions, retirements, and balances) for each year that we forecast the generating plant would remain in service.

In the Appendix, we show our depreciation analysis for Wygen III. We calculate a whole life, straight line depreciation accrual rate by dividing the gross investment (plant investment in 2010 plus forecast interim additions less net salvage) by the sum of the forecast annual depreciable plant balances over the life of the unit. Annual depreciable balances are based on plant balances in 2010 plus forecast additions and retirements. Our recommended whole life depreciation rate calculations presented in the Appendix are summarized in Table 5-4. The calculated whole life depreciation rate for Wygen III is 2.72 percent.

**Table 5-4  
Wygen III Depreciation Rate**

<u>Account</u>	<u>Description</u>	<u>Projected Investment (1) 2010\$</u>	<u>Depreciation Rate</u>
310	Land	0	0.00%
311	Structure & Improvements	5,837,329	2.77%
312	Boiler Plant Equipment	66,704,214	2.90%
313	Engines & Engine Driven Generators	0	0.00%
314	Turbo Generator Equipment	49,459,211	2.50%
315	Accessory Electric Equipment	6,379,598	2.50%
316	Misc Power Equipment	59,649	5.72%
	<b>Total</b>	<b>128,440,000</b>	<b>2.72%</b>

(1) BHP's 52% ownership share

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There are two fundamental approaches (methods) used to develop depreciation rates. These are the whole life approach and the remaining life approach. The basic equation used to determine a whole life depreciation rate is as follows:

$$\text{Whole Life Rate} = \frac{1 - \text{Salvage Ratio}}{\text{Average Service Life}}$$

As evident from the above, this equation consists of two elements. The first element reflects recovery of the initial investment (1/ASL). The second element (-SR/ASL) reflects credit for net salvage. As we previously indicated, the purpose of considering net salvage in determining the accrual rate is to credit salvage and recover cost of removal over the life of the property.

An underlying assumption of the whole life method is that for mass property accounts, as property is retired and new property is installed, the average service life of the group does not change significantly. The whole life method is predicated on homogeneity of the property units included in the group. For mass property accounts that have significant retirement history, where vintage retirement history is available, and where we consider life characteristics in the future to be similar to those observed in the past, we use an actuarial analysis as the principal basis to estimate average service life.

Conversely, the basic equation used to determine a remaining life depreciation rate is as follows:

$$\text{Remaining Life Rate} = \frac{1 - \text{Salvage Ratio} - \text{Reserve Ratio}}{\text{Estimated Average Remaining Life}}$$

As demonstrated above, the whole life and remaining life equations are comparable. The only difference is, as the names imply, that under the whole life approach, investment is recovered equally over the entire life. With the remaining life method, undepreciated investment is recovered over the remaining life. So long as no change in life or other characteristics occur, the whole life and remaining life depreciation rates will be the same. Typically, as we do here in Section 6.2, an adjustment to whole life depreciation rates to reflect the amortization of reserve deficiency converts the whole life rate to a remaining life rate.

The traditional approach for incorporating allowances for net salvage is to compare annual net salvage (gross salvage minus cost of removal) to the original cost of the plant retired during that year. Typically this approach involves activity over a representative historical period, preferably at least 10 years. The traditional approach assumes that the ratio of net salvage dollars to the original cost dollars of the retirements is representative of the allowance that will ultimately apply to all plant in service over the life of the asset. In a whole life depreciation calculation, this allowance (ratio) is deducted before dividing by the average service life.

### 6.1 *Whole Life Analysis for Mass Property*

In Table 6-1, we summarize our recommended average service lives (ASL), Iowa curves, and net salvage ratios we use to calculate our indicated whole life depreciation rates applicable to mass property accounts. For mass property accounts (transmission, distribution, and general plant), we develop average service lives based on retirement (actuarial) analyses. We base our recommended net salvage ratios on BHP history, previous experience with similar systems, and judgment.

In this section, we summarize BHP's existing remaining life rates and indicated whole life depreciation rates. To determine the average service life (ASL), we rely on retirement analyses for transmission, distribution and general plant.

BHP provided us with salvage and cost of removal data by plant account for the years 1997 through 2008. We analyzed the data, and developed average gross salvage, cost of removal and net salvage for distribution, transmission and general plant accounts. Our recommended gross salvage, cost of removal, and net salvage adjustments are based on BHP's 12 years of data, our experience, and professional judgment.

Table 6-1 shows the development of our indicated whole life rates using our recommended average service lives, Iowa curves, and net salvage adjustment.

## 6.1.1 Transmission Plant

Transmission plant facilities consist of 11 transmission substations and 447 pole miles of transmission circuits, plus 47 miles jointly owned with Basin Electric. Transmission voltage is 230 kV. In 2004 and 2005, transmission investment associated with 47 kV and 69 kV lines was reclassified to distribution plant. Historically, the primary cause for retirement of transmission plant has been obsolescence resulting from voltage upgrading. Other factors such as deterioration of wood poles and core wire oxidation of steel reinforced aluminum conductor affect historical retirements. Based on the review of the results of our actuarial analyses, along with consideration of the average age of retired properties and engineering judgment, we developed indicated service lives for transmission plant. The net salvage ratios are based on BHP data, our experience and professional judgment. A listing of average service lives and net salvage ratios for each plant account is shown in Table 6-1.

The actuarial analysis indicated a few changes in the whole life rates as compared to the existing rates. As shown in Table 6-1, actuarial analyses suggest that the average service lives for Structures and Improvements (Account 352), Station Equipment (Account 353), Towers and Fixtures (Account 354), and Roads and Trails (Account 359) increased from 3 to 5 years, while Poles and Fixtures (Account 355) and Overhead Conductors and Devices (Account 356) stayed the same as compared to our 2006 report. An analysis of the historical salvage and cost of removal data indicates that, in general, the transmission function has a negative net salvage (cost of removal exceeds salvage value). Net salvage ratios for transmission plant have remained primarily the same as existing rates, with the one change being Overhead Conductor and Devices (Account 356) changing from -15% to -10% (Table 6-1, Column K). As shown in Table 6-1, the indicated composite whole life rate for transmission plant is 2.18%.

## 6.1.2 Distribution Plant

BHP's distribution plant consists of substations, overhead and underground lines, transformers, services, meters, and lighting facilities. A listing of average service lives, Iowa curves, and net salvage ratios we use for each plant account is shown in Table 6-1.

Much like our actuarial analysis of transmission plant, some changes were identified for distribution plant accrual rates. As shown in Table 6-1, the actuarial analysis suggests that Structures and Improvements (Account 361), Underground Conductors and Devices (Account 367), and Meters (Account 370) decrease ASL by 2 to 5 years. Of the remaining 8 distribution accounts, the actuarial analysis indicates 7 show the need for longer average service lives. The specific changes are shown below:

- Station Equipment (Account 362) increases from 35 to 37 years,
- Poles, Towers and Fixtures (Account 364) increases from 40 to 44 years,
- Overhead Conductor and Devices (Account 365) increases from 40 to 45 years,
- Underground Conduit (Account 366) increases from 40 to 45 years,
- Line Transformers (Account 368) increases from 33 to 34 years,
- Services (Account 369) increases from 40 to 45 years,
- Installations (Account 371) increases from 25 to 30 years.

Based on our analysis of BHP's history of gross salvage and cost of removal, as well as our experience we recommend changes in net salvage ratios for 5 distribution accounts, as summarized below:

- Poles, Towers and Fixtures (Account 364) changes from -25% to -30%,
- Overhead Conductor and Devices (Account 365) changes from -20% to -10%,
- Line Transformers (Account 368) changes from 5% to 10%,
- Services (Account 369) changes from -5% to -25%,
- Installations (Account 371) changes from 0% to -10%.

As shown in Table 6-1, the indicated composite whole life rate for distribution plant is 2.79%

### 6.1.3 General Plant

General plant consists of facilities and equipment which are used to support all functional activities. A listing of the average service lives and net salvage ratios for each plant account is shown in Table 6-1.

Based on the results of our actuarial analysis, four general plant accounts indicated the need for longer services lives and four indicate a reduction in ASL. Specific recommended changes are shown below:

- Structures and Improvements (Account 390) increases from 30 to 33 years
- Office Furniture and Equipment (Account 391) increases from 10 to 13 years
- Transportation Equipment (Account 392) increases from 10 to 12 years
- Tools, Shop, and Garage Equipment (Account 394) decreases from 30 to 25 years
- Laboratory Equipment (Account 395) decreases from 50 to 45 years
- Power Operated Equipment (Account 396) decreases from 30 to 25 years
- Communication Equipment (Account 397) decreases from 30 to 25 years
- Miscellaneous Equipment (Account 398) increases from 20 to 27 years

For Account 391, Office Furniture and Equipment, we recommend dividing the account into two distinct subaccounts with different depreciation rates. The combination of office furniture and computer and associated software results in a mix of assets with considerably difference life characteristics. Based on our experience, we estimate a service life for Computer Equipment of not more than 7.5 years. When we combine that 7.5 year life with the 13 year service life indicated by our actuarial analysis for the combined account a 21.6 year service life for Office Furniture and Equipment is indicated. We maintain the same 5% net salvage ratio for both new subaccounts, which results in whole life rates of 4.40% for Office Furniture and Equipment and 12.67% for Computer Equipment.

We recommend changes to net salvage ratios for 3 accounts. The net salvage ratio for Transportation Equipment (Account 392) changes from 20% to 15%, changes from 5% to 0% for Stores Equipment (Account 393), and changes from 5% to 0% for Miscellaneous Equipment (Account 398). As shown in Table 6-1, the indicated composite whole life rate for general plant accounts is 5.37%

## 6.2 Depreciation Reserve Analysis

As a final step in the development of our recommended depreciation rates, we account for any reserve deficiency or excess by converting the rates from whole life to remaining life rates. As we described previously in Section 6.0, the formula for calculating remaining life depreciation rates is:

$$\text{Remaining Life Rate} = \frac{1 - \text{Salvage Ratio} - \text{Reserve Ratio}}{\text{Estimated Average Remaining Life}}$$

We show our development of remaining life rates in Table 6-2. The key factors that differentiate a remaining life calculation and a whole life rate calculation are the inclusion of the existing reserve ratio and using the remaining life (in years) as the divisor instead of the average service life. We calculate the existing reserve ratio in Column E of Table 6-2. Our recommended net salvage ratio is shown in Column N. The remaining

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life shown in Column O represents the probable life based on the average age of existing plant and the Iowa curve type and ASL. The calculated remaining life rates are shown in Column P of Table 6-2.

Overall, our recommended remaining life rates are lower on a composite basis than existing rates for transmission, distribution, and general plant assets. For transmission accounts, the composite rate decreases from 2.32% to 2.12%. This results in an estimated decrease in depreciation expense<sup>3</sup> of \$186,000. The composite rate for distribution accounts decreases from 3.02% to 2.72%, which results in an estimated decrease in depreciation expense<sup>5</sup> of \$787,000. For general plant accounts, the composite rate decreases from 6.43% to 4.61%, a decrease of \$774,000 in annual depreciation expense<sup>5</sup>. We attribute these decreases to two main factors: first, we find a general trend of longer service lives compared to the previous study, and second, as a result of the longer service lives, the theoretical reserve ratio, all other factors equal, will generally be lower than the existing reserve ratio. To account for the existing reserve ratio being higher than theoretical, the remaining life calculation effectively lowers the applied rate.

Our recommended remaining life rates are summarized in Table 6-2, Column P. The composite remaining life rate for all accounts is 2.82%, which is a decrease from the previous composite rate of 3.27%. The estimated annual effect on depreciation expense is a decrease of \$1.7 million, as shown in Column Q.

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<sup>3</sup> Based on December 31, 2008 plant balances



**Table 6-1  
Summary of Mass Property Analysis**

Line No.	FERC Acct	[B] Description	[C] Plant in Service At 12/31/2008 \$	[D] Existing			[G] Recommended					[L] Equivalent Whole Life Rates (1 - [K]) / [H]
				[D] Existing Rem. Life Rates	[E] Adjustment for Net Salvage	[F] Whole Life ASL in Current Rates	[G] Iowa Curve	[H] Average Service Life	[I] Gross Salvage	[J] Cost of Removal	[K] Net Salvage	
1		<b>Transmission Plant</b>										
2	350	Land and Land Rights	2,159,768	0.00%	0%				0%	0%	0%	0.00%
3	352	Structures and Improvements	1,568,466	2.39%	-10%	45	S4	48	0%	10%	-10%	2.29%
4	353	Station Equipment	33,850,757	2.66%	5%	35	S0	40	10%	5%	5%	2.38%
5	354	Towers and Fixtures	447,677	2.04%	-15%	55	R1.5	60	5%	20%	-15%	1.92%
6	355	Poles and Fixtures	14,243,734	2.22%	-25%	55	S4	55	15%	40%	-25%	2.27%
7	356	Overhead Conductors and Devices	17,300,024	2.04%	-15%	55	R4	55	30%	40%	-10%	2.00%
8	359	Roads and Trails	6,920	1.95%	0%	50	S6	53	0%	0%	0%	1.89%
9	106	Completed Construction not Classified	892,291	2.32%								2.18%
10		Total Transmission Plant	70,469,637	2.32%								2.18%
11		<b>Distribution Plant</b>										
12	360	Land and Land Rights	1,624,794	0.00%	0%				0%	0%	0%	0.00%
13	361	Structures and Improvements	254,825	3.28%	-10%	35	S0	33	0%	10%	-10%	3.33%
14	362	Station Equipment	51,530,410	2.85%	5%	35	R3	37	15%	10%	5%	2.57%
15	364	Poles, Towers and Fixtures	54,941,936	3.27%	-25%	40	R2.5	44	20%	50%	-30%	2.95%
16	365	Overhead Conductors and Devices	32,494,569	3.14%	-20%	40	R1.5	45	30%	40%	-10%	2.44%
17	366	Underground Conduit	1,211,297	2.64%	0%	40		45	0%	0%	0%	2.22%
18	367	Underground Conductors and Devices	35,726,003	3.00%	0%	35	S2	30	5%	5%	0%	3.33%
19	368	Line Transformers	29,657,925	3.02%	5%	33	S0.5	34	10%	0%	10%	2.65%
20	369	Services	22,865,627	2.77%	-5%	40	R4	45	25%	50%	-25%	2.78%
21	370	Meters	7,897,105	2.85%	5%	35	L2	32	15%	10%	5%	2.97%
22	371	Installations on Customer Premises	1,663,075	4.14%	0%	25	L0	30	20%	30%	-10%	3.67%
23	373	Street Lighting and Signal Systems	1,516,328	4.34%	-5%	25	L0	25	20%	25%	-5%	4.20%
24	106	Completed Construction not Classified	8,267,701	3.02%								2.79%
25		Total Distribution Plant	249,651,598	3.02%								2.79%
26		<b>General Plant</b>										
27	389	Land and Land Rights	602,008	0.00%	0%				0%	0%	0%	0.00%
28	390	Structures and Improvements	10,467,603	4.73%	-10%	30	L1	33	0%	10%	-10%	3.33%
29	391	Office Furniture and Equipment	9,161,820	10.56%	5%	10	O4	13				
30	391.1	Office Furniture and Equipment	3,570,058					21.6	10%	5%	5%	4.40%
31	391.3	Computer/Software Equipment	5,591,762					7.5	10%	5%	5%	12.67%
32	392	Transportation Equipment	5,146,117	9.06%	20%	10	R1	12	15%	0%	15%	7.08%
33	393	Stores Equipment	292,210	4.23%	5%	30		30	10%	10%	0%	3.33%
34	394	Tools, Shop and Garage Equipment	4,852,946	4.23%	5%	30	L1.5	25	5%	0%	5%	3.80%
35	395	Laboratory Equipment	607,146	3.06%	0%	50	L1	45	0%	0%	0%	2.22%
36	396	Power Operated Equipment	316,735	4.23%	5%	30	S5	25	5%	0%	5%	3.80%
37	397	Communication Equipment	7,630,343	4.39%	0%	30	L2	25	0%	0%	0%	4.00%
38	398	Miscellaneous Equipment	345,552	5.81%	5%	20	L1	27	0%	0%	0%	3.70%
39	106	Completed Construction not Classified	1,526,583	6.63%								5.37%
40		Total General Plant	40,949,064	6.43%								5.37%
41		<b>Total Mass Property</b>	<b>361,070,299</b>	<b>3.27%</b>								<b>2.97%</b>

**Table 6-2  
Calculation of Remaining Life Rates**

Line No.	FERC Acct	[B] Description	[C] Plant in Service At 12/31/2008 \$	[D] Depreciation Reserve At 12/31/2008 \$	Existing				Recommended					[O] Remaining Life Based on Curve years	[P] Indicated Remaining Life Rate with COR (1-[N]-[E])/[O]	[Q] Indicated Change in Depr Exp ([P] - [G])*[C]	[R] Indicated Remaining Life Rate w/o COR (1-[L]-[E])/[O]	
					[E] Reserve Ratio [D] / [C]	[F] Average Age years	[G] Rem. Life Rates	[H] Adjustment for Net Salvage	[I] Whole Life ASL in Current Rates	[J] Iowa Curve	[K] Average Service Life	[L] Gross Salvage	[M] Cost of Removal					[N] Net Salvage [L] - [M]
1		<b>Transmission Plant</b>																
2	350	Land and Land Rights	2,159,768	-	0.0%		0.00%	0%				0%	0%	0%	0.00%		0.00%	
3	352	Structures and Improvements	1,568,466	535,697	34.2%	9.1	2.39%	-10%	45	S4	48	0%	10%	-10%	38.9	1.95%	(6,901)	1.69%
4	353	Station Equipment	33,850,757	12,876,640	38.0%	8.8	2.66%	5%	35	S0	40	10%	5%	5%	33.4	1.71%	(321,582)	1.56%
5	354	Towers and Fixtures	447,677	167,538	37.4%	6.7	2.04%	-15%	55	R1.5	60	5%	20%	-15%	54.7	1.42%	(2,776)	1.05%
6	355	Poles and Fixtures	14,243,734	5,280,479	37.1%	26.9	2.22%	-25%	55	S4	55	15%	40%	-25%	28.2	3.12%	128,194	1.70%
7	356	Overhead Conductors and Devices	17,300,024	6,398,076	37.0%	21.7	2.04%	-15%	55	R4	55	30%	40%	-10%	33.9	2.15%	19,030	0.97%
8	359	Roads and Trails	6,920	2,570	37.1%	24.8	1.95%	0%	50	S6	53	0%	0%	0%	28.2	2.23%	19	2.23%
9	106	Completed Construction not Classified	892,291	72,132	8.1%		2.32%									2.12%	(1,785)	
10		Total Transmission Plant	70,469,637	25,333,132	35.9%		2.32%									2.12%	(185,801)	1.38%
11		<b>Distribution Plant</b>																
12	360	Land and Land Rights	1,624,794	(21,552)	-1.3%		0.00%	0%				0%	0%	0%	0.00%		0.00%	
13	361	Structures and Improvements	254,825	115,258	45.2%	21.1	3.28%	-10%	35	S0	33	0%	10%	-10%	19.7	3.29%	25	2.78%
14	362	Station Equipment	51,530,410	19,833,698	38.5%	14.3	2.85%	5%	35	R3	37	15%	10%	5%	24.0	2.35%	(257,652)	1.94%
15	364	Poles, Towers and Fixtures	54,941,936	18,370,367	33.4%	14.3	3.27%	-25%	40	R2.5	44	20%	50%	-30%	31.5	3.07%	(109,884)	1.48%
16	365	Overhead Conductors and Devices	32,494,569	12,187,100	37.5%	17.6	3.14%	-20%	40	R1.5	45	30%	40%	-10%	31.9	2.27%	(282,703)	1.02%
17	366	Underground Conduit	1,211,297	346,988	28.6%	6.0	2.64%	0%	40		45	0%	0%	0%	39.0	1.83%	(9,812)	1.83%
18	367	Underground Conductors and Devices	35,726,003	10,339,823	28.9%	9.7	3.00%	0%	35	S2	30	5%	5%	0%	20.9	3.40%	142,904	3.16%
19	368	Line Transformers	29,657,925	10,400,878	35.1%	11.9	3.02%	5%	33	S0.5	34	10%	0%	10%	24.9	2.21%	(240,229)	2.21%
20	369	Services	22,865,627	7,357,128	32.2%	11.5	2.77%	-5%	40	R4	45	25%	50%	-25%	34.0	2.73%	(9,146)	1.26%
21	370	Meters	7,897,105	1,259,837	16.0%	8.6	2.85%	5%	35	L2	32	15%	10%	5%	24.2	3.27%	33,168	2.85%
22	371	Installations on Customer Premises	1,663,075	626,129	37.6%	12.8	4.14%	0%	25	L0	30	20%	30%	-10%	23.5	3.08%	(17,629)	1.80%
23	373	Street Lighting and Signal Systems	1,516,328	611,471	40.3%	15.8	4.34%	-5%	25	L0	25	20%	25%	-5%	17.9	3.61%	(11,069)	2.22%
24	106	Completed Construction not Classified	8,267,701	533,504	6.5%		3.02%									2.72%	(24,803)	
25		Total Distribution Plant	249,651,598	81,960,628	32.8%		3.02%									2.72%	(786,829)	1.82%
26		<b>General Plant</b>																
27	389	Land and Land Rights	602,008	-	0.0%		0.00%	0%				0%	0%	0%	0.00%		0.00%	
28	390	Structures and Improvements	10,467,603	5,598,384	53.5%	16.2	4.73%	-10%	30	L1	33	0%	10%	-10%	22.4	2.52%	(231,334)	2.08%
29	391	Office Furniture and Equipment	9,161,820	6,086,841	66.4%	9.2	10.56%	5%	10	O4	13	0%	0%	0%	15.5			
30	391.1	Office Furniture and Equipment	3,570,058	1,274,510	35.7%							21.6	10%	5%	5%	4.40%	(219,916)	4.17%
31	391.3	Computer/Software Equipment	5,591,762	4,812,330	86.1%							7.5	10%	5%	5%	12.67%	117,986	12.00%
32	392	Transportation Equipment	5,146,117	2,771,584	53.9%	5.9	9.06%	20%	10	R1	12	15%	0%	15%	8.0	3.89%	(266,054)	3.89%
33	393	Stores Equipment	292,210	152,865	52.3%	21.8	4.23%	5%	30		30	10%	10%	0%	8.2	5.82%	4,646	4.60%
34	394	Tools, Shop and Garage Equipment	4,852,946	2,429,345	50.1%	9.8	4.23%	5%	30	L1.5	25	5%	0%	5%	17.7	2.54%	(82,015)	2.54%
35	395	Laboratory Equipment	607,146	283,317	46.7%	12.4	3.06%	0%	50	L1	45	0%	0%	0%	35.2	1.52%	(9,350)	1.52%
36	396	Power Operated Equipment	316,735	131,158	41.4%	5.3	4.23%	5%	30	S5	25	5%	0%	5%	19.7	2.72%	(4,783)	2.72%
37	397	Communication Equipment	7,630,343	895,944	11.7%	2.1	4.39%	0%	30	L2	25	0%	0%	0%	23.0	3.84%	(41,967)	3.84%
38	398	Miscellaneous Equipment	345,552	179,498	51.9%	16.8	5.81%	5%	20	L1	27	0%	0%	0%	17.5	2.75%	(10,574)	2.75%
39	106	Completed Construction not Classified	1,526,583	484,814	31.8%		6.63%									4.61%	(30,837)	
40		Total General Plant	40,949,064	19,013,751	46.4%		6.43%									4.61%	(774,197)	4.14%
41		<b>Total</b>	<b>361,070,299</b>	<b>126,307,511</b>	<b>35.0%</b>		<b>3.27%</b>									<b>2.82%</b>	<b>(1,746,827)</b>	<b>1.99%</b>

### 7.0 RECOMMENDED DEPRECIATION RATES

We summarize our recommended depreciation rates for unit property and mass property in Table 7-1

#### **7.1 Unit Property Depreciation Rates**

Our recommended composite depreciation rate for Steam Production Plant is 2.80%, a 7% increase from the existing rate of 2.61%. This increase is primarily due to the effect of the remaining life adjustment and the impact of major capital additions. For Other Production Plant, the composite rate decreases 39% to 2.19%. This reduction is primarily due to 18 to 20 year life extensions at the Neil Simpson CT and Lange CT facilities. For all generation facilities, the composite rate decreases from 2.84% to 2.66%, resulting in an estimated decrease in depreciation expense of \$609,000.

By including Wygen III, with depreciation rate of 2.72%, the composite rate for all unit property increases to 2.68%. When including the estimated depreciation expense for Wygen III, the total increase in depreciation expense for unit property is \$2.88 million.

#### **7.2 Mass Property Depreciation Rates**

For transmission accounts, the composite rate decreases from 2.40% to 2.12%. This results in an estimated decrease in depreciation expense of \$186,000. The composite rate for distribution accounts decreases from 3.04% to 2.72%, which results in an estimated decrease in depreciation expense of \$787,000. For general plant accounts, the composite rate decreases from 6.53% to 4.61%, a decrease of \$774,000 in depreciation expense. We attribute these decreases to two main factors: first, we find a general trend of longer service lives compared to the previous study, and second, the longer service lives, all other factors equal, results in a theoretical reserve ratio lower than the existing reserve ratio. To account for the existing reserve ration being higher than theoretical, the remaining life calculation effectively lowers the applied rate.

The composite rate for all mass property accounts is 2.82%, which is a 14% decrease from the current composite rate of 3.27%. The estimated impact on depreciation expense for mass property accounts is a decrease of \$1.75 million.

#### **7.3 Summary**

Overall, our recommended depreciation rates are 11% lower than existing, based on plant balances at December 31, 2008. The overall impact is a decrease in annual depreciation expense of \$2.36 million. The depreciation expense for the Wygen III generating unit will however generate an additional \$3.49 million in annual depreciation expense, bringing the overall change in depreciation expense to an increase of \$1.14 million.

# RECOMMENDED DEPRECIATION RATES

BLACK HILLS POWER  
DEPRECIATION STUDY

**Table 7-1  
Recommended Depreciation Rates**

Line No.	[A] Description	[B] FERC Acct	[C] Plant in Service At 12/31/2008 \$	[D] Existing		[F] Recommended		[H] Change in Expense \$
				Depreciation Rate	Depreciation Expense (1)	Depreciation Rate (2)	Depreciation Expense (1)	
				%	\$	%	\$	
1	<b>Production Plant</b>							
2	Steam Production Plant							
3	Land and Land Rights	310	333,941	0.00%	-	0.00%	-	-
4	Osage	311-316	17,918,001	1.53%	274,145	2.59%	463,686	189,540
5	Ben French	311-316	13,360,210	2.21%	295,261	3.62%	483,953	188,693
6	Wyodak	311-316	79,050,217	2.87%	2,268,741	3.04%	2,401,452	132,710
7	Neil Simpson I	311-316	18,913,575	3.35%	633,605	3.49%	660,195	26,590
8	Neil Simpson II	311-316	<u>125,534,971</u>	2.54%	<u>3,188,588</u>	2.49%	<u>3,130,008</u>	<u>(58,580)</u>
9	Total Steam Production		255,110,915	2.61%	6,660,340	2.80%	7,139,293	478,953
10	Other Production Plant							
11	Land and Land Rights	340	2,705	0.00%	-	0.00%	-	-
12	Lange CT	341-346	30,183,503	3.97%	1,198,285	2.39%	720,570	(477,715)
13	Neil Simpson CT	341-346	29,130,532	3.91%	1,139,004	2.51%	731,258	(407,746)
14	Ben French Other Production	341-346	<u>19,323,720</u>	2.43%	<u>469,566</u>	1.38%	<u>267,079</u>	<u>(202,487)</u>
15	Total Other Production		78,640,459	3.57%	2,806,855	2.19%	1,718,908	(1,087,948)
16	<b>Total Production Plant</b>		<b>333,751,374</b>	<b>2.84%</b>	<b>9,467,196</b>	<b>2.66%</b>	<b>8,858,201</b>	<b>(608,995)</b>
17	<b>Transmission Plant</b>							
18	Land and Land Rights	350	2,159,768	0.00%	-	0.00%	-	-
19	Structures and Improvements	352	1,568,466	2.39%	37,486	1.95%	30,585	(6,901)
20	Station Equipment	353	33,850,757	2.66%	900,430	1.71%	578,848	(321,582)
21	Towers and Fixtures	354	447,677	2.04%	9,133	1.42%	6,357	(2,776)
22	Poles and Fixtures	355	14,243,734	2.22%	316,211	3.12%	444,404	128,194
23	Overhead Conductors and Devices	356	17,300,024	2.04%	352,920	2.15%	371,951	19,030
24	Roads and Trails	359	6,920	1.95%	135	2.23%	154	19
25	Completed Construction not Classified	106	<u>892,291</u>	2.32%	<u>20,701</u>	2.12%	<u>18,917</u>	<u>(1,785)</u>
26	Total Transmission Plant		70,469,637	2.40%	1,637,017	2.12%	1,451,216	(185,801)
27	<b>Distribution Plant</b>							
28	Land and Land Rights	360	1,624,794	0.00%	-	0.00%	-	-
29	Structures and Improvements	361	254,825	3.28%	8,358	3.29%	8,384	25
30	Station Equipment	362	51,530,410	2.85%	1,468,617	2.35%	1,210,965	(257,652)
31	Poles, Towers and Fixtures	364	54,941,936	3.27%	1,796,601	3.07%	1,686,717	(109,884)
32	Overhead Conductors and Devices	365	32,494,569	3.14%	1,020,329	2.27%	737,627	(282,703)
33	Underground Conduit	366	1,211,297	2.64%	31,978	1.83%	22,167	(9,812)
34	Underground Conductors and Devices	367	35,726,003	3.00%	1,071,780	3.40%	1,214,684	142,904
35	Line Transformers	368	29,657,925	3.02%	895,669	2.21%	655,440	(240,229)
36	Services	369	22,865,627	2.77%	633,378	2.73%	624,232	(9,146)
37	Meters	370	7,897,105	2.85%	225,068	3.27%	258,235	33,168
38	Installations on Customer Premises	371	1,663,075	4.14%	68,851	3.08%	51,223	(17,629)
39	Street Lighting and Signal Systems	373	1,516,328	4.34%	65,809	3.61%	54,739	(11,069)
40	Completed Construction not Classified	106	<u>8,267,701</u>	3.02%	<u>249,685</u>	2.72%	<u>224,881</u>	<u>(24,803)</u>
41	Total Distribution Plant		249,651,598	3.04%	7,536,123	2.72%	6,749,294	(786,829)
42	<b>General Plant</b>							
43	Land and Land Rights	389	602,008	0.00%	-	0.00%	-	-
44	Structures and Improvements	390	10,467,603	4.73%	495,118	2.52%	263,784	(231,334)
45	Office Furniture and Equipment	391	9,161,820	10.56%	967,488	9.45%	865,559	(101,929)
46	Office Furniture and Equipment	391.1				4.40%	-	-
47	Computer Equipment	391.3				12.67%	-	-
48	Transportation Equipment	392	5,146,117	9.06%	466,238	3.89%	200,184	(266,054)
49	Stores Equipment	393	292,210	4.23%	12,360	5.82%	17,007	4,646
50	Tools, Shop and Garage Equipment	394	4,852,946	4.23%	205,280	2.54%	123,265	(82,015)
51	Laboratory Equipment	395	607,146	3.06%	18,579	1.52%	9,229	(9,350)
52	Power Operated Equipment	396	316,735	4.23%	13,398	2.72%	8,615	(4,783)
53	Communication Equipment	397	7,630,343	4.39%	334,972	3.84%	293,005	(41,967)
54	Miscellaneous Equipment	398	345,552	5.81%	20,077	2.75%	9,503	(10,574)
55	Completed Construction not Classified	106	<u>1,526,583</u>	6.63%	<u>101,212</u>	4.61%	<u>70,375</u>	<u>(30,837)</u>
56	Total General Plant		40,949,064	6.53%	2,634,722	4.61%	1,860,525	(774,197)
57	<b>Total Plant in Service at 12/31/08</b>		<b>694,821,673</b>	<b>3.11%</b>	<b>21,275,057</b>	<b>2.76%</b>	<b>18,919,236</b>	<b>(2,355,821)</b>
58	<b>Pro Forma Adjustment</b>							
59	Steam Production Plant							
60	Wygen III (in Service 2010)	311-316	<u>128,440,000</u>	n/a	-	2.72%	<u>3,493,568</u>	<u>3,493,568</u>
61	<b>Pro Forma Plant in Service</b>		<b>823,261,673</b>	<b>3.11%</b>	<b>21,275,057</b>	<b>2.75%</b>	<b>22,412,804</b>	<b>1,137,747</b>

Notes:

(1) Based on December 31, 2008 Balances

(2) Reference: Table 5-1, Column E for Production Plant / Table 6-2, Column P for Mass Property Accounts

APPENDIX  
UNIT PROPERTY ANALYSIS

### ***Unit Property Analysis***

The unit property analysis for each plant is presented in the following sections. The analysis for each plant is done by account on a whole life basis, including recognition of interim and forecast additions and retirements and final net salvage. The remaining life portion of these analyses are summarized by plant and adjusted to reflect accumulated depreciation to determine a forecast remaining life balance. Accumulated depreciation is maintained by BHP on a total plant basis and not by individual account. The recommended remaining life rates with COR and without COR are determined on each plant summary page. The remaining life results in this Appendix are carried forward to Table 5-1 in the body of the report.

Summary by Plant  
 Black Hills Power  
**Osage Facility**

Account	Description	Direct Investment 2008\$	Depreciation Rate
310	Land		
311	Structure & Improvements	4,392,152	3.16%
312	Boiler Plant Equipment	7,298,517	2.57%
313	Engines & Engine Driven Generators		
314	Turbo Generator Equipment	4,616,858	2.56%
315	Accessory Electric Equipment	1,054,888	2.23%
316	Misc Power Equipment	452,022	2.56%
<b>Total</b>		17,814,438	<span style="border: 1px solid black; padding: 2px;">2.69%</span> whole life weighted average rate

**Remaining Life Depreciation Rate Calculation**

Per Books Balance 12/31/08	17,918,001
Forecast Interim Additions	396,337
Forecast Gross Salvage Value	901,939
Forecast Less Cost of Removal	1,803,878
Forecast Net Salvage Value	(901,939)
Forecast Total to be Recovered with COR	19,216,276
Forecast Total to be Recovered w/o COR	17,412,399
Accumulated Depreciation (2008 EOY)	(17,357,768)
Forecast Remaining Life Balance with COR	1,858,508
Forecast Remaining Life Balance w/o COR	54,631
Forecast Plant Balances	71,817,516
Remaining Life Rate with COR	2.59%
Remaining Life Rate w/o COR	0.08%













Summary by Plant  
 Black Hills Power  
**Ben French Facility**

Account	Description	Direct Investment 2008\$	Depreciation Rate
310	Land		
311	Structure & Improvements	2,119,670	2.68%
312	Boiler Plant Equipment	6,403,948	3.90%
313	Engines & Engine Driven Generators	0	0.00%
314	Turbo Generator Equipment	3,105,937	3.46%
315	Accessory Electric Equipment	747,759	2.24%
316	Misc Power Equipment	459,835	3.78%

**Total** 12,837,149 3.49% whole life weighted average rate

**Remaining Life Depreciation Rate Calculation**

Per Books Balance 12/31/08	13,360,210
Forecast Interim Additions	7,221,185
Forecast Gross Salvage Value	966,460
Forecast Less Cost of Removal	1,932,919
Forecast Net Salvage Value	(966,460)
Forecast Total to be Recovered with COR	21,547,854
Forecast Total to be Recovered w/o COR	19,614,935
Accumulated Depreciation (2008 EOY)	(13,050,958)
Forecast Remaining Life Balance with COR	8,496,897
Forecast Remaining Life Balance w/o COR	6,563,977
Forecast Plant Balances	234,568,689
Remaining Life Rate with COR	3.62%
Remaining Life Rate w/o COR	2.80%









Black Hills Power

Gross Salvage 5%

Unit Property Depreciation Rate Analysis

Cost of Removal 10%

Net Salvage -5%

Unit Property: Steam Production, Ben French Plant

Install Date 1960

Retirement Date 2023

Service Life, Yrs 63

2008

Historical and Forecast Plant Additions & Balances

Account: 315 Accessory Electric Equipment Initial Plant Balance 0

Table with columns [A] through [N] and rows for Line, Vintage Year, and Vintage Age. Includes sub-headers for Reported Per Books, Adjustments to Transaction Year, Adjusted Transaction Year, Transfers and Adjustments, and EOY Plant Balance (Per Books, Simulated). Rows 1-50 show detailed data for vintage years 1960-2008.

Major Additions/Retirements

Summary table for Routine Activity showing \$ 175,777 and \$ 45,057.

Table with columns for Line, Vintage Year, and Vintage Age, showing forecast data for years 2009-2023. Includes sub-totals for \$ 833,051 and \$ 104,918.

Whole Life Depreciation Rate Calculation

Table for Whole Life Depreciation Rate Calculation showing Historical Additions, Forecast Additions, Total Additions, Gross Salvage Value, Less Cost of Removal, Net Salvage Value, and Total to be Recovered.

Forecast Plant Balances 42,785,171

Whole Life Accrual Rate 2.04%

Cost of Removal Accrual Rate 0.19%

Whole Life Accrual Rate (Excluding Cost of Removal) 2.24%

Depreciable Service Life, years 44.7

Remaining Life Depreciation Rate Calculation

Table for Remaining Life Depreciation Rate Calculation showing Account Balance - 12/31/08, Forecast Additions, Gross Salvage Value, Less Cost of Removal, Net Salvage Value, and Forecast Plant Balances.

Forecast Plant Balances 11,053,215



Summary by Plant  
 Black Hills Power  
**Wyodak Facility**

Account	Description	Direct Investment 2008\$	Depreciation Rate
310	Land		
311	Structure & Improvements	9,039,917	3.58%
312	Boiler Plant Equipment	51,154,925	3.22%
313	Engines & Engine Driven Generators	249,991	4.79%
314	Turbo Generator Equipment	11,199,149	3.42%
315	Accessory Electric Equipment	6,213,171	3.35%
316	Misc Power Equipment	892,134	7.21%
<b>Total</b>		78,749,286	<span style="border: 1px solid black;">3.35%</span> whole life weighted average rate

**Remaining Life Depreciation Rate Calculation**

Per Books Balance 12/31/08	79,050,217
Forecast Interim Additions	23,744,384
Forecast Gross Salvage Value	4,987,227
Forecast Less Cost of Removal	10,469,954
Forecast Net Salvage Value	(5,482,728)
Forecast Total to be Recovered with COR	108,277,328
Forecast Total to be Recovered w/o COR	97,807,374
Accumulated Depreciation (2008 EOY)	(50,672,287)
Forecast Remaining Life Balance with COR	57,605,041
Forecast Remaining Life Balance w/o COR	47,135,087
Forecast Plant Balances	1,896,224,299
Remaining Life Rate with COR	3.04%
Remaining Life Rate w/o COR	2.49%



Black Hills Power

Gross Salvage 5%
Cost of Removal 10%
Net Salvage -5%
Install Date 1978
Retirement Date 2030
Service Life, Yrs 52

2008

Unit Property Depreciation Rate Analysis
Unit Property: Steam Production, Wyodak Plant

Historical and Forecast Plant Additions & Balances

Account: 312 Boiler Plant Equipment Initial Plant Balance 16,022,256

Table with columns [A] through [N] representing various financial metrics over time from 1978 to 2030. Includes rows for Line, Vintage Year, and various balance and adjustment figures.

Major Additions/Retirements

1989 \$ 12,327,586
1991 \$ 29,761,701
2007 \$ 2,654,859

Routine Activity

\$ 5,081,613 \$ 1,774,105
Historical Interim Activity 0.46% 0.16%
Forecast Interim Activity 0.46% 0.16%

Table showing forecasted plant balances and depreciation rates from 2009 to 2030. Includes columns for Line, Vintage Year, and various balance and rate figures.

Whole Life Depreciation Rate Calculation

Historical Additions 47,170,900
Forecast Additions 19,304,858
Total Additions 66,475,758
Gross Salvage Value 3,421,289
Less Cost of Removal 6,842,579
Net Salvage Value (3,421,289)
Total to be Recovered 69,897,047

Forecast Plant Balances 2,381,006,411

Whole Life Accrual Rate 2.94%
Cost of Removal Accrual Rate 0.29%
Whole Life Accrual Rate (Excluding Cost of Removal) 3.22%

Depreciable Service Life, years 34.1

Remaining Life Depreciation Rate Calculation

Account Balance 12/31/08 51,154,925
Forecast Additions 19,304,858
Gross Salvage Value 3,421,289
Less Cost of Removal 6,842,579
Net Salvage Value (3,421,289)
Forecast Plant Balances 1,279,796,923

**Black Hills Power**

Gross Salvage 5%  
 Cost of Removal 10%  
 Net Salvage -5%  
 Install Date 1978  
 Retirement Date 2030  
 Service Life, Yrs 52

**Unit Property Depreciation Rate Analysis**  
**Unit Property: Steam Production, Wyodak Plant**

2008

**Historical and Forecast Plant Additions & Balances**

Account: 313 Engine and Engine Driven Generators Initial Plant Balance 0

Line	Vintage Year	Vintage Age	Reported Per Books			Adjustments to Transaction Year		Adjusted Transaction Year		Transfers and Adjustments	EOY Plant Balance		
			Transaction Year		Vintage Year	Year		Per Books	Simulated				
			Beg Balance	Additions		Retirements	Additions				Retirements		
1	1978	52											
2	1979	51											
3	1980	50											
4	1981	49											
5	1982	48											
6	1983	47											
7	1984	46											
8	1985	45											
9	1986	44											
10	1987	43											
11	1988	42											
12	1989	41	0										
13	1990	40											
14	1991	39											
15	1992	38											
16	1993	37											
17	1994	36											
18	1995	35											
19	1996	34											
20	1997	33											
21	1998	32											
22	1999	31											
23	2000	30											
24	2001	29											
25	2002	28		232,960				232,960			232,960	232,960	
26	2003	27		7,427				7,427			240,387	240,387	
27	2004	26		19,645				19,645			260,032	260,032	
28	2005	25							(10,041)		249,991	249,991	
29	2006	24									249,991	249,991	
30	2007	23									249,991	249,991	
31	2008	22									249,991	249,991	
32	Total		\$ -	\$ 260,032	\$ -	\$ -	\$ -	\$ 260,032	\$ -	\$ (10,041)	\$ -	\$ 1,733,340	\$ 1,733,340

Major Additions/Retirements

2002	\$ 232,960		
Routine Activity	\$ 27,072		
33 Historical Interim Activity	1.56%	0.00%	
34 Forecast Interim Activity	1.00%	0.00%	

35	2009	21					2,500	-				252,490	
36	2010	20					2,525	-				255,015	
37	2011	19					2,550	-				257,565	
38	2012	18					2,576	-				260,141	
39	2013	17					2,601	-				262,743	
40	2014	16					2,627	-				265,370	
41	2015	15					2,654	-				268,024	
42	2016	14					2,680	-				270,704	
43	2017	13					2,707	-				273,411	
44	2018	12					2,734	-				276,145	
45	2019	11					2,761	-				278,906	
46	2020	10					2,789	-				281,696	
47	2021	9					2,817	-				284,513	
48	2022	8					2,845	-				287,358	
49	2023	7					2,874	-				290,231	
50	2024	6					2,902	-				293,134	
51	2025	5					2,931	-				296,065	
52	2026	4					2,961	-				299,026	
53	2027	3					2,990	-				302,016	
54	2028	2					3,020	-				305,036	
55	2029	1					3,050	-				308,086	
56	2030	0							(308,086)			-	
										\$ 318,127	\$ -		\$ 7,601,014

**Whole Life Depreciation Rate Calculation**

Historical Additions	260,032
Forecast Additions	58,096
Total Additions	318,127
Gross Salvage Value	15,404
Less Cost of Removal	30,809
Net Salvage Value	(15,404)
Total to be Recovered	333,532

Forecast Plant Balances 7,601,014

Whole Life Accrual Rate 4.39%  
 Cost of Removal Accrual Rate 0.41%  
 Whole Life Accrual Rate (Excluding Cost of Removal) 4.79%

Depreciable Service Life, years 22.8

**Remaining Life Depreciation Rate Calculation**

Account Balance 12/31/08	249,991
Forecast Additions	58,096
Gross Salvage Value	15,404
Less Cost of Removal	30,809
Net Salvage Value	(15,404)

Forecast Plant Balances 5,867,674



**Black Hills Power**

Gross Salvage 5%  
 Cost of Removal 10%  
 Net Salvage -5%  
 Install Date 1978  
 Retirement Date 2030  
 Service Life, Yrs 52

**Unit Property Depreciation Rate Analysis**  
**Unit Property: Steam Production, Wyodak Plant**

2008

**Historical and Forecast Plant Additions & Balances**

Account: 315 Accessory Electric Equipment Initial Plant Balance 0

Line	Vintage Year	Vintage Age	Reported Per Books				Adjustments to Transaction Year				Transfers and Adjustments	EOY Plant Balance			
			Transaction Year		Vintage Year Retirements	Year		Adjusted Transaction Year		Adjustments		Per Books	Simulated		
			Beg Balance	Additions		Additions	Retirements								
1	1978	52													
2	1979	51													
3	1980	50													
4	1981	49													
5	1982	48													
6	1983	47													
7	1984	46													
8	1985	45													
9	1986	44													
10	1987	43													
11	1988	42													
12	1989	41	0												
13	1990	40													
14	1991	39		5,733,052		249,639			5,733,052				5,733,052	5,733,052	
15	1992	38											5,733,052	5,733,052	
16	1993	37											5,733,052	5,733,052	
17	1994	36		8,595		5,988			8,595				5,741,647	5,741,647	
18	1995	35											5,741,647	5,741,647	
19	1996	34		296,346		208,756			296,346		208,756		5,829,237	5,829,237	
20	1997	33											5,829,237	5,829,237	
21	1998	32									99,024		5,928,261	5,928,261	
22	1999	31		288,579		1,649			288,579		1,649		6,215,192	6,215,192	
23	2000	30											6,215,192	6,215,192	
24	2001	29											6,215,192	6,215,192	
25	2002	28											6,215,192	6,215,192	
26	2003	27		6,803					6,803				6,221,995	6,221,995	
27	2004	26											6,221,995	6,221,995	
28	2005	25											6,221,995	6,221,995	
29	2006	24											6,221,995	6,221,995	
30	2007	23		36,398		45,222			36,398		45,222		6,213,171	6,213,171	
31	2008	22											6,213,171	6,213,171	
32	Total			\$ -	\$ 6,369,774	\$ 255,627	\$ 255,627	\$ -	\$ -	\$ 6,369,774	\$ 255,627	\$ 99,024	\$ -	\$ 108,444,277	\$ 108,444,277

Major Additions/Retirements  
 1991 \$ 5,733,052

Routine Activity \$ 636,722 \$ 255,627  
 33 Historical Interim Activity 0.59% 0.24%  
 34 Forecast Interim Activity 0.59% 0.24%

35	2009	21							36,480		14,646			6,235,006
36	2010	20							36,608		14,697			6,256,917
37	2011	19							36,737		14,749			6,278,905
38	2012	18							36,866		14,801			6,300,970
39	2013	17							36,996		14,853			6,323,113
40	2014	16							37,126		14,905			6,345,334
41	2015	15							37,256		14,957			6,367,632
42	2016	14							37,387		15,010			6,390,010
43	2017	13							37,518		15,063			6,412,465
44	2018	12							37,650		15,116			6,435,000
45	2019	11							37,783		15,169			6,457,614
46	2020	10							37,915		15,222			6,480,307
47	2021	9							38,049		15,275			6,503,080
48	2022	8							38,182		15,329			6,525,933
49	2023	7							38,316		15,383			6,548,867
50	2024	6							38,451		15,437			6,571,881
51	2025	5							38,586		15,491			6,594,976
52	2026	4							38,722		15,546			6,618,152
53	2027	3							38,858		15,600			6,641,409
54	2028	2							38,994		15,655			6,664,749
55	2029	1							39,132		15,710			6,688,170
56	2030	0										(6,688,170)		-
										\$ 7,163,387	\$ 574,241			

**Whole Life Depreciation Rate Calculation**

Historical Additions	6,369,774
Forecast Additions	793,613
Total Additions	7,163,387
Gross Salvage Value	334,408
Less Cost of Removal	668,817
Net Salvage Value	(334,408)
Total to be Recovered	7,497,795
Forecast Plant Balances	244,084,766
Whole Life Accrual Rate	3.07%
Cost of Removal Accrual Rate	0.27%
Whole Life Accrual Rate (Excluding Cost of Removal)	3.35%
Depreciable Service Life, years	32.6

**Remaining Life Depreciation Rate Calculation**

Account Balance 12/31/08	6,213,171
Forecast Additions	793,613
Gross Salvage Value	334,408
Less Cost of Removal	668,817
Net Salvage Value	(334,408)
Forecast Plant Balances	135,640,489





Summary by Plant  
 Black Hills Power  
**Neil Simpson I Facility**

Account	Description	Direct Investment 2008\$	Depreciation Rate
310	Land	0	0.00%
311	Structure & Improvements	2,139,727	3.23%
312	Boiler Plant Equipment	12,718,813	3.92%
313	Engines & Engine Driven Generators		
314	Turbo Generator Equipment	2,866,457	2.42%
315	Accessory Electric Equipment	744,885	2.87%
316	Misc Power Equipment	429,468	2.83%
<b>Total</b>		18,899,349	<span style="border: 1px solid black; padding: 2px;">3.55%</span> whole life weighted average rate

**Remaining Life Depreciation Rate Calculation**

Per Books Balance 12/31/08	18,913,575
Forecast Interim Additions	7,260,936
Forecast Gross Salvage Value	1,278,309
Forecast Less Cost of Removal	2,556,618
Forecast Net Salvage Value	(1,278,309)
Forecast Total to be Recovered with COR	27,452,820
Forecast Total to be Recovered w/o COR	24,896,202
Accumulated Depreciation (2008 EOY)	(16,151,840)
Forecast Remaining Life Balance with COR	11,300,980
Forecast Remaining Life Balance w/o COR	8,744,362
Forecast Plant Balances	323,756,007
Remaining Life Rate with COR	3.49%
Remaining Life Rate w/o COR	2.70%











Summary by Plant  
 Black Hills Power  
**Neil Simpson 2 Facility**

Account	Description	Direct Investment 2008\$	Depreciation Rate
310	Land		
311	Structure & Improvements	13,248,871	2.73%
312	Boiler Plant Equipment	75,551,337	2.87%
313	Engines & Engine Driven Generators		
314	Turbo Generator Equipment	29,102,926	2.59%
315	Accessory Electric Equipment	6,272,379	2.58%
316	Misc Power Equipment	479,676	7.23%
<b>Total</b>		124,655,189	<span style="border: 1px solid black; padding: 2px;">2.79%</span> whole life weighted average rate

**Remaining Life Depreciation Rate Calculation**

Per Books Balance 12/31/08	125,534,971
Forecast Interim Additions	29,159,701
Forecast Gross Salvage Value	7,637,352
Forecast Less Cost of Removal	15,274,704
Forecast Net Salvage Value	(7,637,352)
Forecast Total to be Recovered with COR	162,332,024
Forecast Total to be Recovered w/o COR	147,057,320
Accumulated Depreciation (2008 EOY)	(38,724,257)
Forecast Remaining Life Balance with COR	123,607,767
Forecast Remaining Life Balance w/o COR	108,333,063
Forecast Plant Balances	4,957,526,249
Remaining Life Rate with COR	2.49%
Remaining Life Rate w/o COR	2.19%



**Black Hills Power Company**

Gross Salvage 5%  
 Cost of Removal 10%  
 Net Salvage -5%  
 Install Date 1998  
 Retirement Date 2045  
 Service Life, Yrs 47

**Unit Property Depreciation Rate Analysis**  
**Unit Property: Steam Production, Neil Simpson 2 Plant**

2008

**Historical and Forecast Plant Additions & Balances**

Account: 311 Structures & Improvements Initial Plant Balance 0

Line	Vintage Year	Vintage Age	Reported Per Books			Adjustments to Transaction		Adjusted Transaction Year		Transfers and Adjustments	EOY Plant Balance			
			Transaction Year		Vintage Year	Year		Year			Adjustments	Per Books	Simulated	
			Beg. Balance	Additions		Retirements	Additions	Retirements	Additions					Retirements
41	1998	47		11,540,435		17,822					11,540,435	11,540,435		
42	1999	46		322,184				322,184	-	624,511	12,487,130	12,487,130		
43	2000	45		87,340				87,340	-		12,574,470	12,574,470		
44	2001	44						-	-		12,574,470	12,574,470		
45	2002	43		5,484				5,484	-		12,579,954	12,579,954		
46	2003	42		22,835				22,835	-		12,602,789	12,602,789		
47	2004	41		338,036				338,036	-		12,940,825	12,940,825		
48	2005	40						-	-		12,940,825	12,940,825		
49	2006	39		84,446				84,446	-	165,739	13,191,009	13,191,009		
50	2007	38		76,060		17,822		76,060	17,822	(376)	13,248,871	13,248,871		
51	2008	37						-	-		13,248,871	13,248,871		
52	Total		\$ -	\$ 12,476,819	\$ 17,822	\$ 17,822	\$ -	\$ -	\$ 12,476,819	\$ 17,822	\$ 789,874	\$ -	\$ 139,929,647	\$ 139,929,647

Major Additions/Retirements  
1998

\$ 11,540,435

Routine Activity

\$ 936,383

53	Historical Interim Activity	0.67%	0.01%
54	Forecast Interim Activity	0.67%	0.01%

55	2009	36						88,659	1,687			13,335,842	
56	2010	35						89,241	1,699			13,423,385	
57	2011	34						89,827	1,710			13,511,502	
58	2012	33						90,416	1,721			13,600,197	
59	2013	32						91,010	1,732			13,689,475	
60	2014	31						91,607	1,744			13,779,339	
61	2015	30						92,209	1,755			13,869,793	
62	2016	29						92,814	1,767			13,960,840	
63	2017	28						93,423	1,778			14,052,486	
64	2018	27						94,037	1,790			14,144,732	
65	2019	26						94,654	1,802			14,237,585	
66	2020	25						95,275	1,813			14,331,047	
67	2021	24						95,901	1,825			14,425,122	
68	2022	23						96,530	1,837			14,519,815	
69	2023	22						97,164	1,849			14,615,130	
70	2024	21						97,802	1,861			14,711,070	
71	2025	20						98,444	1,874			14,807,640	
72	2026	19						99,090	1,886			14,904,844	
73	2027	18						99,740	1,898			15,002,686	
74	2028	17						100,395	1,911			15,101,171	
75	2029	16						101,054	1,923			15,200,302	
76	2030	15						101,718	1,936			15,300,083	
77	2031	14						102,385	1,949			15,400,520	
78	2032	13						103,057	1,962			15,501,616	
79	2033	12						103,734	1,974			15,603,375	
80	2034	11						104,415	1,987			15,705,803	
81	2035	10						105,100	2,000			15,808,903	
82	2036	9						105,790	2,014			15,912,680	
83	2037	8						106,485	2,027			16,017,137	
84	2038	7						107,184	2,040			16,122,281	
85	2039	6						107,887	2,053			16,228,115	
86	2040	5						108,596	2,067			16,334,644	
87	2041	4						109,308	2,080			16,441,872	
88	2042	3						110,026	2,094			16,549,803	
89	2043	2						110,748	2,108			16,658,444	
90	2044	1						111,475	2,122			16,767,797	
91	2045	0								(16,767,797)		-	
									\$ 16,064,021	\$ 86,098			

**Whole Life Depreciation Rate Calculation**

Historical Additions	12,476,819
Forecast Additions	3,587,202
Total Additions	16,064,021
Gross Salvage Value	838,390
Less Cost of Removal	1,676,780
Net Salvage Value	(838,390)
Total to be Recovered	16,902,411
Forecast Plant Balances	679,506,724
Whole Life Accrual Rate	2.49%
Cost of Removal Accrual Rate	0.25%
Whole Life Accrual Rate (Excluding Cost of Removal)	2.73%
Depreciable Service Life, years	40.2

**Remaining Life Depreciation Rate Calculation**

Account Balance 12/31/08	13,248,871
Forecast Additions	3,587,202
Gross Salvage Value	838,390
Less Cost of Removal	1,676,780
Net Salvage Value	(838,390)
Forecast Plant Balances	539,577,076

Black Hills Power Company

Gross Salvage	5%
Cost of Removal	10%
Net Salvage	-5%
Install Date	1998
Retirement Date	2045
Service Life, Yrs	47

Unit Property Depreciation Rate Analysis

Unit Property: Steam Production, Neil Simpson 2 Plant

2008

Historical and Forecast Plant Additions & Balances

Account: 312 Boiler Plant Equipment Initial Plant Balance 0

Line	Vintage Year	Vintage Age	[A]	[B]	[C]	[D]	[E]	[F]	[G]	[H]	[I]	[J]	[K]	[L]	[M]	[N]
			Reported Per Books				Adjustments to Transaction		Adjusted Transaction Year		Transfers and Adjustments	EOY Plant Balance				
			Beg Balance	Additions	Retirements	Retirements	Additions	Retirements	Additions	Retirements		Adjustments	Per Books	Simulated		
13	1970	75						6,013	-	-	-	-	-	-	-	-
14	1971	74							-	-	-	-	-	-	-	-
15	1972	73							-	-	-	-	-	-	-	-
16	1973	72							-	-	-	-	-	-	-	-
17	1974	71							-	-	-	-	-	-	-	-
18	1975	70							-	-	-	-	-	-	-	-
19	1976	69							-	-	-	-	-	-	-	-
20	1977	68							-	-	-	-	-	-	-	-
21	1978	67							-	-	-	-	-	-	-	-
22	1979	66							-	-	-	-	-	-	-	-
23	1980	65							-	-	-	-	-	-	-	-
24	1981	64							-	-	-	-	-	-	-	-
25	1982	63							-	-	-	-	-	-	-	-
26	1983	62							-	-	-	-	-	-	-	-
27	1984	61							-	-	-	-	-	-	-	-
28	1985	60							-	-	-	-	-	-	-	-
29	1986	59							-	-	-	-	-	-	-	-
30	1987	58							-	-	-	-	-	-	-	-
31	1988	57						6,533	-	-	-	-	-	-	-	-
32	1989	56							-	-	-	-	-	-	-	-
33	1990	55							-	-	-	-	-	-	-	-
34	1991	54							-	-	-	-	-	-	-	-
35	1992	53							-	-	-	-	-	-	-	-
36	1993	52							-	-	-	-	-	-	-	-
37	1994	51							-	-	-	-	-	-	-	-
38	1995	50							-	-	-	-	-	-	-	-
39	1996	49							-	-	-	-	-	-	-	-
40	1997	48			28,341				28,341					28,341		28,341
41	1998	47			74,009,175	6,533	1,658,776		74,009,175	6,533				74,030,983	74,030,983	
42	1999	46			869,214	30,316			869,214	30,316		(467,515)		74,402,366	74,402,366	
43	2000	45			587,861	31,013			587,861	31,013				74,959,214	74,959,214	
44	2001	44			105,595	112,000			105,595	112,000				74,952,809	74,952,809	
45	2002	43			135,029	3,344			135,029	3,344				75,084,494	75,084,494	
46	2003	42			77,435				77,435					75,161,928	75,161,928	
47	2004	41			380,167	50,000			380,167	50,000				75,492,095	75,492,095	
48	2005	40			16,469	8,484			16,469	8,484				75,500,080	75,500,080	
49	2006	39										183,186		75,683,266	75,683,266	
50	2007	38			1,293,706	1,429,632			1,293,706	1,429,632		3,997		75,551,337	75,551,337	
51	2008	37												75,551,337	75,551,337	
52	Total		\$ -	\$ 77,502,991	\$ 1,671,322	\$ 1,671,322	\$ -	\$ -	\$ 77,502,991	\$ 1,671,322	\$ -	\$ (280,332)	\$ -	\$ 826,398,249	\$ 826,398,249	

Major Additions/Retirements

1998	\$ 74,037,516	
2007	\$ 1,293,706	\$ 1,429,632
Routine Activity	\$ 2,171,769	\$ 241,690
53 Historical Interim Activity	0.26%	0.03%
54 Forecast Interim Activity	0.26%	0.03%

55	2009	36	198,548	22,096					198,548	22,096						75,727,789
56	2010	35	199,012	22,148					199,012	22,148						75,904,654
57	2011	34	199,477	22,199					199,477	22,199						76,081,931
58	2012	33	1,775,881	22,251					1,775,881	22,251						77,835,561
59	2013	32	204,551	22,764					204,551	22,764						78,017,348
60	2014	31	205,029	22,817					205,029	22,817						78,199,560
61	2015	30	205,508	22,870					205,508	22,870						78,382,198
62	2016	29	205,988	22,924					205,988	22,924						78,565,262
63	2017	28	206,469	22,977					206,469	22,977						78,748,753
64	2018	27	206,951	23,031					206,951	23,031						78,932,673
65	2019	26	2,080,730	23,085					2,080,730	23,085						80,990,318
66	2020	25	212,842	23,687					212,842	23,687						81,179,473
67	2021	24	213,339	23,742					213,339	23,742						81,369,071
68	2022	23	213,837	23,797					213,837	23,797						81,559,111
69	2023	22	214,337	23,853					214,337	23,853						81,749,594
70	2024	21	214,837	23,909					214,837	23,909						81,940,523
71	2025	20	215,339	23,965					215,339	23,965						82,131,898
72	2026	19	2,442,601	24,020					2,442,601	24,020						84,550,478
73	2027	18	222,198	24,728					222,198	24,728						84,747,948
74	2028	17	222,717	24,786					222,717	24,786						84,945,880
75	2029	16	223,237	24,843					223,237	24,843						85,144,274
76	2030	15	223,759	24,901					223,759	24,901						85,343,131
77	2031	14	224,281	24,960					224,281	24,960						85,542,452
78	2032	13	224,805	25,018					224,805	25,018						85,742,239
79	2033	12	2,872,247	25,076					2,872,247	25,076						88,589,410
80	2034	11	232,812	25,909					232,812	25,909						88,796,313
81	2035	10	233,356	25,970					233,356	25,970						89,003,700
82	2036	9	233,901	26,030					233,901	26,030						89,211,570
83	2037	8	234,447	26,091					234,447	26,091						89,419,927
84	2038	7	234,995	26,152					234,995	26,152						89,628,770
85	2039	6	235,544	26,213					235,544	26,213						89,838,101
86	2040	5	3,382,446	26,274					3,382,446	26,274						93,194,272
87	2041	4	244,914	27,256					244,914	27,256						93,411,930
88	2042	3	245,486	27,319					245,486	27,319						93,630,097
89	2043	2	246,059	27,383					246,059	27,383						93,848,773
90	2044	1	246,634	27,447					246,634	27,447						94,067,959
91	2045	0										(94,067,959)				-
			\$ 96,902,106	\$ 2,553,814					\$ 96,902,106	\$ 2,553,814					\$ 826,371,189	\$ 826,371,189

Whole Life Depreciation Rate Calculation

Historical Additions	77,502,991
Forecast Additions	19,399,115
Total Additions	96,902,106
Gross Salvage Value	4,703,398
Less Cost of Removal	9,406,796
Net Salvage Value	(4,703,398)
Total to be Recovered	101,605,504
Forecast Plant Balances	3,862,371,189
Whole Life Accrual Rate	2.63%
Cost of Removal Accrual Rate	0.24%
Whole Life Accrual Rate (Excluding Cost of Removal)	2.87%
Depreciable Service Life, years	38.0

Remaining Life Depreciation Rate Calculation

Account Balance 12/31/08	75,551,337
Forecast Additions	19,399,115
Gross Salvage Value	4,703,398
Less Cost of Removal	9,406,796
Net Salvage Value	(4,703,398)
Forecast Plant Balances	3,035,972,939

**Black Hills Power Company**

Gross Salvage 5%  
 Cost of Removal 10%  
 Net Salvage -5%  
 Install Date 1998  
 Retirement Date 2045  
 Service Life, Yrs 47

**Unit Property Depreciation Rate Analysis**  
**Unit Property: Steam Production, Neil Simpson 2 Plant**

2008

**Historical and Forecast Plant Additions & Balances**

Account: 314 Turbogenerator Equipment Initial Plant Balance 0

Line	Vintage Year	Vintage Age	Reported Per Books				Adjustments to Transaction				Transfers and Adjustments	EOY Plant Balance		
			Transaction Year			Vintage Year	Year		Adjusted Transaction Year			Adjustments	Per Books	Simulated
			Beg Balance	Additions	Retirements		Additions	Retirements	Additions	Retirements				
41	1998	47		27,051,645		192,000				27,051,645	-		27,051,645	27,051,645
42	1999	46								-	(77,928)		26,973,718	26,973,718
43	2000	45		37,085						37,085	-		27,010,803	27,010,803
44	2001	44		3,265						3,265	-		27,014,068	27,014,068
45	2002	43		1,713,883						1,713,883	-		28,727,951	28,727,951
46	2003	42		121,566						121,566	-		28,849,517	28,849,517
47	2004	41		76,317						76,317	-		28,925,834	28,925,834
48	2005	40								-	-		28,925,834	28,925,834
49	2006	39		285,377	192,000					285,377	192,000	7,967	29,027,178	29,027,178
50	2007	38		75,749						75,749	-		29,102,926	29,102,926
51	2008	37								-	-		29,102,926	29,102,926
52	Total		\$ -	\$ 29,364,887	\$ 192,000	\$ 192,000	\$ -	\$ -	\$ 29,364,887	\$ 192,000	\$ (69,961)	\$ -	\$ 310,712,400	\$ 310,712,400

Major Additions/Retirements

1998 \$ 27,051,645  
 2002 \$ 1,713,883  
 Routine Activity \$ 599,359 \$ 192,000  
 53 Historical Interim Activity 0.19% 0.06%  
 54 Forecast Interim Activity 0.19% 0.00%

55	2009	36								56,139	-			29,159,066	
56	2010	35								56,247	-			29,215,313	
57	2011	34								56,356	-			29,271,669	
58	2012	33								56,465	-			29,328,133	
59	2013	32								56,574	-			29,384,707	
60	2014	31								56,683	-			29,441,390	
61	2015	30								56,792	-			29,498,181	
62	2016	29								56,902	-			29,555,083	
63	2017	28								57,011	-			29,612,094	
64	2018	27								57,121	-			29,669,216	
65	2019	26								57,231	-			29,726,447	
66	2020	25								57,342	-			29,783,789	
67	2021	24								57,452	-			29,841,241	
68	2022	23								57,563	-			29,898,805	
69	2023	22								57,674	-			29,956,479	
70	2024	21								57,786	-			30,014,264	
71	2025	20								57,897	-			30,072,162	
72	2026	19								58,009	-			30,130,170	
73	2027	18								58,121	-			30,188,291	
74	2028	17								58,233	-			30,246,524	
75	2029	16								58,345	-			30,304,869	
76	2030	15								58,458	-			30,363,326	
77	2031	14								58,570	-			30,421,897	
78	2032	13								58,683	-			30,480,580	
79	2033	12								58,797	-			30,539,377	
80	2034	11								58,910	-			30,598,286	
81	2035	10								59,024	-			30,657,310	
82	2036	9								59,137	-			30,716,448	
83	2037	8								59,252	-			30,775,699	
84	2038	7								59,366	-			30,835,065	
85	2039	6								59,480	-			30,894,545	
86	2040	5								59,595	-			30,954,140	
87	2041	4								59,710	-			31,013,850	
88	2042	3								59,825	-			31,073,676	
89	2043	2								59,941	-			31,133,616	
90	2044	1								60,056	-			31,193,672	
91	2045	0										(31,193,672)		-	
											\$ 31,455,633	\$ 192,000			\$ 1,396,661,779

**Whole Life Depreciation Rate Calculation**

Historical Additions 29,364,887  
 Forecast Additions 2,090,746  
 Total Additions 31,455,633  
 Gross Salvage Value 1,559,684  
 Less Cost of Removal 3,119,367  
 Net Salvage Value (1,559,684)  
 Total to be Recovered 33,015,317

Forecast Plant Balances 1,396,661,779

Whole Life Accrual Rate 2.36%  
 Cost of Removal Accrual Rate 0.22%  
 Whole Life Accrual Rate (Excluding Cost of Removal) 2.59%

Depreciable Service Life, years 42.3

**Remaining Life Depreciation Rate Calculation**

Account Balance 12/31/08 29,102,926  
 Forecast Additions 2,090,746  
 Gross Salvage Value 1,559,684  
 Less Cost of Removal 3,119,367  
 Net Salvage Value (1,559,684)

Forecast Plant Balances 1,085,949,379

**Black Hills Power Company**

Gross Salvage 5%  
 Cost of Removal 10%  
 Net Salvage -5%  
 Install Date 1998  
 Retirement Date 2045  
 Service Life, Yrs 47

**Unit Property Depreciation Rate Analysis**  
**Unit Property: Steam Production, Neil Simpson 2 Plant**

2008

**Historical and Forecast Plant Additions & Balances**

Account: 315 Accessory Electric Equipment Initial Plant Balance 0

Line	Vintage Year	Vintage Age	Reported Per Books			Adjustments to Transaction Year		Adjusted Transaction Year		Transfers and Adjustments	EOY Plant Balance			
			Transaction Year		Vintage Year	Year		Per Books	Simulated					
			Beg Balance	Additions		Retirements	Additions				Retirements			
41	1998	47		6,135,296				6,135,296	-		6,135,296	6,135,296		
42	1999	46		11,151				11,151	-		6,146,447	6,146,447		
43	2000	45						-	-		6,146,447	6,146,447		
44	2001	44						-	-		6,146,447	6,146,447		
45	2002	43						-	-		6,146,447	6,146,447		
46	2003	42						-	-		6,146,447	6,146,447		
47	2004	41		139,183				139,183	-		6,285,630	6,285,630		
48	2005	40						-	-		6,285,630	6,285,630		
49	2006	39						-	-	(13,251)	6,272,379	6,272,379		
50	2007	38						-	-		6,272,379	6,272,379		
51	2008	37						-	-		6,272,379	6,272,379		
52	Total		\$ -	\$ 6,285,630	\$ -	\$ -	\$ -	\$ -	\$ 6,285,630	\$ -	\$ (13,251)	\$ -	\$ 68,255,930	\$ 68,255,930

Major Additions/Retirements  
 1998

\$ 6,135,296

Routine Activity

\$ 150,334

53 Historical Interim Activity  
 54 Forecast Interim Activity

0.22% 0.00%  
 0.22% 0.00%

55	2009	36						13,815	-			6,286,194		
56	2010	35						13,845	-			6,300,039		
57	2011	34						13,876	-			6,313,915		
58	2012	33						13,906	-			6,327,822		
59	2013	32						13,937	-			6,341,759		
60	2014	31						13,968	-			6,355,727		
61	2015	30						13,999	-			6,369,725		
62	2016	29						14,029	-			6,383,755		
63	2017	28						14,060	-			6,397,815		
64	2018	27						14,091	-			6,411,906		
65	2019	26						14,122	-			6,426,028		
66	2020	25						14,153	-			6,440,182		
67	2021	24						14,185	-			6,454,366		
68	2022	23						14,216	-			6,468,582		
69	2023	22						14,247	-			6,482,829		
70	2024	21						14,278	-			6,497,108		
71	2025	20						14,310	-			6,511,418		
72	2026	19						14,341	-			6,525,759		
73	2027	18						14,373	-			6,540,132		
74	2028	17						14,405	-			6,554,537		
75	2029	16						14,436	-			6,568,973		
76	2030	15						14,468	-			6,583,441		
77	2031	14						14,500	-			6,597,941		
78	2032	13						14,532	-			6,612,473		
79	2033	12						14,564	-			6,627,037		
80	2034	11						14,596	-			6,641,634		
81	2035	10						14,628	-			6,656,262		
82	2036	9						14,660	-			6,670,922		
83	2037	8						14,693	-			6,685,615		
84	2038	7						14,725	-			6,700,340		
85	2039	6						14,758	-			6,715,098		
86	2040	5						14,790	-			6,729,888		
87	2041	4						14,823	-			6,744,710		
88	2042	3						14,855	-			6,759,566		
89	2043	2						14,888	-			6,774,454		
90	2044	1						14,921	-			6,789,374		
91	2045	0								(6,789,374)		-		
										\$ 6,802,626	\$ -			\$ 303,503,255

**Whole Life Depreciation Rate Calculation**

Historical Additions	6,285,630
Forecast Additions	516,995
Total Additions	6,802,626
Gross Salvage Value	339,469
Less Cost of Removal	678,937
Net Salvage Value	(339,469)
Total to be Recovered	7,142,094

Forecast Plant Balances 303,503,255

Whole Life Accrual Rate 2.35%  
 Cost of Removal Accrual Rate 0.22%  
 Whole Life Accrual Rate (Excluding Cost of Removal) 2.58%

Depreciable Service Life, years 42.5

**Remaining Life Depreciation Rate Calculation**

Account Balance 12/31/08	6,272,379
Forecast Additions	516,995
Gross Salvage Value	339,469
Less Cost of Removal	678,937
Net Salvage Value	(339,469)

Forecast Plant Balances 235,247,325

**Black Hills Power Company**

Gross Salvage 5%  
 Cost of Removal 10%  
 Net Salvage -5%  
 Install Date 1998  
 Retirement Date 2045  
 Service Life, Yrs 47

**Unit Property Depreciation Rate Analysis**  
**Unit Property: Steam Production, Neil Simpson 2 Plant**

2008

**Historical and Forecast Plant Additions & Balances**

Account: 316 Miscellaneous Power Equipment Initial Plant Balance 0

Line	Vintage Year	Vintage Age	Reported Per Books			Adjustments to Transaction		Adjusted Transaction Year		Transfers and Adjustments	EOY Plant Balance			
			Transaction Year		Vintage Year	Year		Per Books	Simulated					
			Beg Balance	Additions		Retirements	Additions			Retirements				
41	1998	47		279,045				279,045	-		279,045	279,045		
42	1999	46		6,941			6,941	-	(79,068)		206,917	206,917		
43	2000	45		13,614			13,614	-	38,764		259,296	259,296		
44	2001	44		43,205			43,205	-			302,500	302,500		
45	2002	43		7,852			7,852	-			310,352	310,352		
46	2003	42		35,386			35,386	-			345,739	345,739		
47	2004	41		21,531			21,531	-			367,270	367,270		
48	2005	40		69,107			69,107	-			436,377	436,377		
49	2006	39		25,198	7,978	7,978	25,198	7,978	5,965		459,562	459,562		
50	2007	38					-	-			459,562	459,562		
51	2008	37		20,114			20,114	-			479,676	479,676		
52	Total		\$ -	\$ 521,993	\$ 7,978	\$ 7,978	\$ -	\$ -	\$ 521,993	\$ 7,978	\$ (34,340)	\$ -	\$ 3,906,296	\$ 3,906,296

Major Additions/Retirements 1998

\$ 279,045

Routine Activity

\$ 242,948

53 Historical Interim Activity  
 54 Forecast Interim Activity

6.22% 0.20%  
 6.22% 0.20%

55	2009	36						29,833	980			508,529		
56	2010	35						31,627	1,039			539,118		
57	2011	34						33,530	1,101			571,547		
58	2012	33						35,547	1,167			605,927		
59	2013	32						37,685	1,237			642,374		
60	2014	31						39,952	1,312			681,014		
61	2015	30						42,355	1,391			721,978		
62	2016	29						44,903	1,474			765,407		
63	2017	28						47,604	1,563			811,447		
64	2018	27						50,467	1,657			860,257		
65	2019	26						53,503	1,757			912,003		
66	2020	25						56,721	1,863			966,862		
67	2021	24						60,133	1,975			1,025,020		
68	2022	23						63,750	2,093			1,086,677		
69	2023	22						67,585	2,219			1,152,043		
70	2024	21						71,650	2,353			1,221,340		
71	2025	20						75,960	2,494			1,294,806		
72	2026	19						80,529	2,644			1,372,691		
73	2027	18						85,373	2,803			1,455,261		
74	2028	17						90,508	2,972			1,542,797		
75	2029	16						95,953	3,151			1,635,599		
76	2030	15						101,724	3,340			1,733,983		
77	2031	14						107,843	3,541			1,838,285		
78	2032	13						114,330	3,754			1,948,862		
79	2033	12						121,207	3,980			2,066,089		
80	2034	11						128,498	4,219			2,190,368		
81	2035	10						136,228	4,473			2,322,122		
82	2036	9						144,422	4,742			2,461,802		
83	2037	8						153,109	5,028			2,609,884		
84	2038	7						162,319	5,330			2,766,873		
85	2039	6						172,083	5,651			2,933,306		
86	2040	5						182,434	5,990			3,109,749		
87	2041	4						193,408	6,351			3,296,806		
88	2042	3						205,042	6,733			3,495,115		
89	2043	2						217,375	7,138			3,705,352		
90	2044	1						230,451	7,567			3,928,236		
91	2045	0								(3,928,236)		-		
										\$ 4,087,636	\$ 125,060			\$ 64,685,826

**Whole Life Depreciation Rate Calculation**

Historical Additions	521,993
Forecast Additions	3,565,643
Total Additions	4,087,636
Gross Salvage Value	196,412
Less Cost of Removal	392,824
Net Salvage Value	(196,412)
Total to be Recovered	4,284,047
Forecast Plant Balances	64,685,826
Whole Life Accrual Rate	6.62%
Cost of Removal Accrual Rate	0.61%
Whole Life Accrual Rate (Excluding Cost of Removal)	7.23%
Depreciable Service Life, years	15.1

**Remaining Life Depreciation Rate Calculation**

Account Balance 12/31/08	479,676
Forecast Additions	3,565,643
Gross Salvage Value	196,412
Less Cost of Removal	392,824
Net Salvage Value	(196,412)
Forecast Plant Balances	60,779,529

Summary by Plant  
 Black Hills Power  
**Lange CT Facility**

Account	Description	Direct Investment 2008\$	Depreciation Rate
341	Structure & Improvements	244,231	1.96%
342	Fuel Holders, Producers & Accessories	1,738,544	3.96%
343	Prime Movers		
344	Generators	26,038,901	1.94%
345	Accessory Electric Equipment	2,100,134	1.96%
346	Misc Plant Equipment	16,612	1.98%

**Total** 30,138,422 2.06% whole life weighted average rate

**Remaining Life Depreciation Rate Calculation**

Per Books Balance @ 12/31/08	30,183,503
Forecast Interim Additions	16,498,012
Forecast Gross Salvage Value	4,206,009
Forecast Less Cost of Removal	3,297,292
Forecast Net Salvage Value	908,717
Forecast Total to be Recovered with COR	45,772,797
Forecast Total to be Recovered w/o COR	42,475,506
Accumulated Depreciation (2008 EOY)	(8,369,716)
Forecast Remaining Life Balance with COR	37,403,081
Forecast Remaining Life Balance w/o COR	34,105,790
Forecast Plant Balances	1,566,753,479
Remaining Life Rate with COR	2.39%
Remaining Life Rate w/o COR	2.18%

**Black Hills Power**  
 Unit Property Depreciation Rate Analysis  
 Unit Property: Other Production, Lange Plant  
 Historical and Forecast Plant Additions & Balances  
 Account: 341 Structures & Improvements

Gross Salvage	8%
Cost of Removal	10%
Net Salvage	-2%
Install Date	2002
Retirement Date	2050
Service Life, Yrs	48

Initial Plant Balance 0

Line	Vintage Year	Vintage Age	Reported Per Books				Adjustments to Transaction				Transfers and Adjustments	EOY Plant Balance			
			Transaction Year			Vintage Year Retirements	Year		Adjusted Transaction Year			Adjustments	Per Books	Simulated	
Beg Balance	Additions	Retirements	Additions	Retirements	Additions		Retirements								
1	2002	48													
2	2003	47		219,851						219,851			219,851	219,851	
3	2004	46		24,380						24,380			244,231	244,231	
4	2005	45											244,231	244,231	
5	2006	44											244,231	244,231	
6	2007	43											244,231	244,231	
7	2008	42											244,231	244,231	
8	Total		\$ -	\$ 244,231	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 244,231	\$ -	\$ -	\$ -	\$ 1,441,004	\$ 1,441,004

Major Additions/Retirements

2003	\$ 219,851
Routine Activity	\$ 24,380
9 Historical Interim Activity	1.69% 0.00%
10 Forecast Interim Activity	0.00% 0.00%

11	2009	41													244,231
12	2010	40													244,231
13	2011	39													244,231
14	2012	38													244,231
15	2013	37													244,231
16	2014	36													244,231
17	2015	35													244,231
18	2016	34													244,231
19	2017	33													244,231
20	2018	32													244,231
21	2019	31													244,231
22	2020	30													244,231
23	2021	29													244,231
24	2022	28													244,231
25	2023	27													244,231
26	2024	26													244,231
27	2025	25													244,231
28	2026	24													244,231
29	2027	23													244,231
30	2028	22													244,231
31	2029	21													244,231
32	2030	20													244,231
33	2031	19													244,231
34	2032	18													244,231
35	2033	17													244,231
36	2034	16													244,231
37	2035	15													244,231
38	2036	14													244,231
39	2037	13													244,231
40	2038	12													244,231
41	2039	11													244,231
42	2040	10													244,231
43	2041	9													244,231
44	2042	8													244,231
45	2043	7													244,231
46	2044	6													244,231
47	2045	5													244,231
48	2046	4													244,231
49	2047	3													244,231
50	2048	2													244,231
51	2049	1													244,231
52	2050	0										(244,231)			
										\$ 244,231	\$ -				\$ 11,454,456

**Whole Life Depreciation Rate Calculation**

Historical Additions	244,231
Forecast Additions	-
Total Additions	244,231
Gross Salvage Value	19,538
Less Cost of Removal	24,423
Net Salvage Value	(4,885)
Total to be Recovered	249,115
Forecast Plant Balances	11,454,456
Whole Life Accrual Rate	2.17%
Cost of Removal Accrual Rate	0.21%
Whole Life Accrual Rate (Excluding Cost of Removal)	1.96%
Depreciable Service Life, years	46.0

**Remaining Life Depreciation Rate Calculation**

Account Balance 12/31/08	244,231
Forecast Additions	-
Gross Salvage Value	19,538
Less Cost of Removal	24,423
Net Salvage Value	(4,885)
Forecast Plant Balances	10,013,453

**Black Hills Power** Gross Salvage 8%  
 Cost of Removal 10%  
**Unit Property Depreciation Rate Analysis** Net Salvage -2%  
**Unit Property: Other Production, Lange Plant** Install Date 2002 2008  
 Retirement Date 2050  
 Service Life, Yrs 48

**Historical and Forecast Plant Additions & Balances**

Account: 342 Fuel Holders, Producers & Accessories Initial Plant Balance 0

Line	Vintage Year	Vintage Age	Reported Per Books				Adjustments to Transaction Year		Adjusted Transaction Year		Transfers and Adjustments	EOY Plant Balance		
			Transaction Year			Vintage Year Retirements	Additions	Retirements	Additions	Retirements		Adjustments	Per Books	Simulated
			Beg Balance	Additions	Retirements									
1	2002	48												
2	2003	47		1,738,544					1,738,544				1,738,544	1,738,544
3	2004	46											1,738,544	1,738,544
4	2005	45											1,738,544	1,738,544
5	2006	44											1,738,544	1,738,544
6	2007	43											1,738,544	1,738,544
7	2008	42											1,738,544	1,738,544
8	Total		\$ -	\$ 1,738,544	\$ -	\$ -	\$ -	\$ -	\$ 1,738,544	\$ -	\$ -	\$ -	\$ 10,431,266	\$ 10,431,266
Major Additions/Retirements														
2003			\$ 1,738,544											
Routine Activity			\$ -											
9	Historical Interim Activity		0.00% 0.00%											
10	Forecast Interim Activity		0.00% 0.00%											
11	2009	41												1,738,544
12	2010	40												1,738,544
13	2011	39												1,738,544
14	2012	38												1,738,544
15	2013	37						2,171,729						3,910,273
16	2014	36												3,910,273
17	2015	35												3,910,273
18	2016	34												3,910,273
19	2017	33												3,910,273
20	2018	32												3,910,273
21	2019	31												3,910,273
22	2020	30						2,581,503						6,491,776
23	2021	29												6,491,776
24	2022	28												6,491,776
25	2023	27												6,491,776
26	2024	26												6,491,776
27	2025	25												6,491,776
28	2026	24												6,491,776
29	2027	23						3,068,596						9,560,372
30	2028	22												9,560,372
31	2029	21												9,560,372
32	2030	20												9,560,372
33	2031	19												9,560,372
34	2032	18												9,560,372
35	2033	17												9,560,372
36	2034	16						3,647,596						13,207,968
37	2035	15												13,207,968
38	2036	14												13,207,968
39	2037	13												13,207,968
40	2038	12												13,207,968
41	2039	11												13,207,968
42	2040	10												13,207,968
43	2041	9						4,335,846						17,543,814
44	2042	8												17,543,814
45	2043	7												17,543,814
46	2044	6												17,543,814
47	2045	5												17,543,814
48	2046	4												17,543,814
49	2047	3												17,543,814
50	2048	2												17,543,814
51	2049	1												17,543,814
52	2050	0								(17,543,814)				-
			\$	17,543,814	\$	-			\$	-			\$	407,472,505

**Whole Life Depreciation Rate Calculation**

Historical Additions	1,738,544
Forecast Additions	15,805,270
Total Additions	17,543,814
Gross Salvage Value	1,403,505
Less Cost of Removal	1,754,381
Net Salvage Value	(350,876)
Total to be Recovered	17,894,691
Forecast Plant Balances	407,472,505
Whole Life Accrual Rate	4.39%
Cost of Removal Accrual Rate	0.43%
Whole Life Accrual Rate (Excluding Cost of Removal)	3.96%
Depreciable Service Life, years	22.8

**Remaining Life Depreciation Rate Calculation**

Account Balance 12/31/08	1,738,544
Forecast Additions	15,805,270
Gross Salvage Value	1,403,505
Less Cost of Removal	1,754,381
Net Salvage Value	(350,876)
Forecast Plant Balances	397,041,239



**Black Hills Power**

Gross Salvage 10%  
 Cost of Removal 5%  
 Net Salvage 5%  
 Install Date 2002  
 Retirement Date 2050  
 Service Life, Yrs 48

**Unit Property Depreciation Rate Analysis**  
**Unit Property: Other Production, Lange Plant**

2008

**Historical and Forecast Plant Additions & Balances**

Account: **344 Generators** Initial Plant Balance **0**

Line	Vintage Year	Vintage Age	Reported Per Books			Adjustments to Transaction Year		Adjusted Transaction Year		Transfers and Adjustments	EOY Plant Balance		
			Transaction Year		Vintage Year	Year		Retirements			Adjustments	Per Books	Simulated
			Beg Balance	Additions		Retirements	Additions	Retirements					
1	2002	48											
2	2003	47		25,997,285			25,997,285				25,997,285	25,997,285	
3	2004	46		10,225			10,225				26,007,510	26,007,510	
4	2005	45									26,007,510	26,007,510	
5	2006	44									26,007,510	26,007,510	
6	2007	43		55,005	23,614		55,005	23,614			26,038,901	26,038,901	
7	2008	42									26,038,901	26,038,901	
8	Total		\$ -	\$ 26,062,515	\$ 23,614	\$ -	\$ -	\$ -	\$ 26,062,515	\$ 23,614	\$ -	\$ 156,097,616	\$ 156,097,616

**Major Additions/Retirements**

2003	\$ 25,997,285	
Routine Activity	\$ 65,230	
9 Historical Interim Activity	0.04%	0.02%
10 Forecast Interim Activity	0.04%	0.02%

11	2009	41					10,881	3,939				26,045,843	
12	2010	40					10,884	3,940				26,052,786	
13	2011	39					10,887	3,941				26,059,732	
14	2012	38					10,890	3,942				26,066,680	
15	2013	37					10,893	3,943				26,073,629	
16	2014	36					10,896	3,944				26,080,580	
17	2015	35					10,898	3,945				26,087,533	
18	2016	34					10,901	3,946				26,094,488	
19	2017	33					10,904	3,947				26,101,445	
20	2018	32					10,907	3,949				26,108,404	
21	2019	31					10,910	3,950				26,115,364	
22	2020	30					10,913	3,951				26,122,327	
23	2021	29					10,916	3,952				26,129,291	
24	2022	28					10,919	3,953				26,136,257	
25	2023	27					10,922	3,954				26,143,225	
26	2024	26					10,925	3,955				26,150,195	
27	2025	25					10,928	3,956				26,157,166	
28	2026	24					10,930	3,957				26,164,140	
29	2027	23					10,933	3,958				26,171,115	
30	2028	22					10,936	3,959				26,178,092	
31	2029	21					10,939	3,960				26,185,072	
32	2030	20					10,942	3,961				26,192,053	
33	2031	19					10,945	3,962				26,199,035	
34	2032	18					10,948	3,963				26,206,020	
35	2033	17					10,951	3,964				26,213,007	
36	2034	16					10,954	3,965				26,219,995	
37	2035	15					10,957	3,966				26,226,985	
38	2036	14					10,960	3,968				26,233,977	
39	2037	13					10,963	3,969				26,240,971	
40	2038	12					10,966	3,970				26,247,967	
41	2039	11					10,968	3,971				26,254,965	
42	2040	10					10,971	3,972				26,261,964	
43	2041	9					10,974	3,973				26,268,966	
44	2042	8					10,977	3,974				26,275,969	
45	2043	7					10,980	3,975				26,282,974	
46	2044	6					10,983	3,976				26,289,981	
47	2045	5					10,986	3,977				26,296,990	
48	2046	4					10,989	3,978				26,304,001	
49	2047	3					10,992	3,979				26,311,014	
50	2048	2					10,995	3,980				26,318,028	
51	2049	1					10,998	3,981				26,325,045	
52	2050	0								(26,136,257)		-	
										\$ 26,511,026	\$ 185,981		

**Whole Life Depreciation Rate Calculation**

Historical Additions	26,062,515
Forecast Additions	448,511
Total Additions	26,511,026
Gross Salvage Value	2,613,626
Less Cost of Removal	1,306,813
Net Salvage Value	1,306,813
Total to be Recovered	25,204,213

Forecast Plant Balances 1,229,690,890

Whole Life Accrual Rate	2.05%
Cost of Removal Accrual Rate	0.11%
Whole Life Accrual Rate (Excluding Cost of Removal)	1.94%

Depreciable Service Life, years 51.5

**Remaining Life Depreciation Rate Calculation**

Account Balance - 12/31/08	26,038,901
Forecast Additions	448,511
Gross Salvage Value	2,613,626
Less Cost of Removal	1,306,813
Net Salvage Value	1,306,813

Forecast Plant Balances 1,073,593,274

**Black Hills Power**

Gross Salvage 8%  
 Cost of Removal 10%  
 Net Salvage -2%  
 Install Date 2002  
 Retirement Date 2050  
 Service Life, Yrs 48

2008

**Unit Property Depreciation Rate Analysis**  
**Unit Property: Other Production, Lange Plant**

**Historical and Forecast Plant Additions & Balances**

Account: 345 Accessory Electric Equipment Initial Plant Balance 0

Line	[A] Vintage Year	[B] Vintage Age	[C] [D] [E]			[F] Vintage Year Retirements	[G] [H]		[I] [J]		[K] Transfers and Adjustments	[L] [M] [N]		
			Reported Per Books				Adjustments to Transaction		Adjusted Transaction Year			EOY Plant Balance		
			Beg Balance	Additions	Retirements		Additions	Retirements	Additions	Retirements		Adjustments	Per Books	Simulated
1	2002	48												
2	2003	47		2,100,134					2,100,134				2,100,134	2,100,134
3	2004	46											2,100,134	2,100,134
4	2005	45											2,100,134	2,100,134
5	2006	44											2,100,134	2,100,134
6	2007	43											2,100,134	2,100,134
7	2008	42											2,100,134	2,100,134
8	Total		\$ -	\$ 2,100,134	\$ -	\$ -	\$ -	\$ -	\$ 2,100,134	\$ -	\$ -	\$ -	\$ 12,600,807	\$ 12,600,807

Major Additions/Retirements

2003 \$ 2,100,134

Routine Activity \$ -

9 Historical Interim Activity 0.00% 0.00%  
 10 Forecast Interim Activity 0.00% 0.00%

11	2009	41												2,100,134
12	2010	40												2,100,134
13	2011	39												2,100,134
14	2012	38												2,100,134
15	2013	37												2,100,134
16	2014	36												2,100,134
17	2015	35												2,100,134
18	2016	34												2,100,134
19	2017	33												2,100,134
20	2018	32												2,100,134
21	2019	31												2,100,134
22	2020	30												2,100,134
23	2021	29												2,100,134
24	2022	28												2,100,134
25	2023	27												2,100,134
26	2024	26												2,100,134
27	2025	25												2,100,134
28	2026	24												2,100,134
29	2027	23												2,100,134
30	2028	22												2,100,134
31	2029	21												2,100,134
32	2030	20												2,100,134
33	2031	19												2,100,134
34	2032	18												2,100,134
35	2033	17												2,100,134
36	2034	16												2,100,134
37	2035	15												2,100,134
38	2036	14												2,100,134
39	2037	13												2,100,134
40	2038	12												2,100,134
41	2039	11												2,100,134
42	2040	10												2,100,134
43	2041	9												2,100,134
44	2042	8												2,100,134
45	2043	7												2,100,134
46	2044	6												2,100,134
47	2045	5												2,100,134
48	2046	4												2,100,134
49	2047	3												2,100,134
50	2048	2												2,100,134
51	2049	1												2,100,134
52	2050	0									(2,100,134)			-
									\$ 2,100,134	\$ -				\$ 98,706,320

**Whole Life Depreciation Rate Calculation**

Historical Additions	2,100,134
Forecast Additions	-
Total Additions	2,100,134
Gross Salvage Value	168,011
Less Cost of Removal	210,013
Net Salvage Value	(42,003)
Total to be Recovered	2,142,137

Forecast Plant Balances 98,706,320

Whole Life Accrual Rate 2.17%  
 Cost of Removal Accrual Rate 0.21%  
 Whole Life Accrual Rate (Excluding Cost of Removal) 1.96%

Depreciable Service Life, years 51.1

**Remaining Life Depreciation Rate Calculation**

Account Balance - 12/31/08	2,100,134
Forecast Additions	-
Gross Salvage Value	168,011
Less Cost of Removal	210,013
Net Salvage Value	(42,003)

Forecast Plant Balances 86,105,513

**Black Hills Power**

Gross Salvage 8%  
 Cost of Removal 10%  
 Net Salvage -2%  
 Install Date 2002  
 Retirement Date 2050  
 Service Life, Yrs 48

2008

**Unit Property Depreciation Rate Analysis**  
**Unit Property: Other Production, Lange Plant**

**Historical and Forecast Plant Additions & Balances**  
**Account: 346 Miscellaneous Plant Equipment**

Initial Plant Balance 0

Line	[A] Vintage Year	[B] Vintage Age	[C] [D] [E]			[F] Vintage Year Retirements	[G] [H]		[I] Adjusted Transaction Year Additions	[J] Adjusted Transaction Year Retirements	[K] Transfers and Adjustments	[L] [M] [N]		
			Reported Per Books				Adjustments to Transaction Year					EOY Plant Balance		
			Beg Balance	Additions	Retirements		Additions	Retirements				Additions	Retirements	Adjustments
1	2002	48						-	-			-	-	
2	2003	47		7,927				7,927	-			7,927	7,927	
3	2004	46		8,685				8,685	-			16,612	16,612	
4	2005	45						-	-			16,612	16,612	
5	2006	44						-	-			16,612	16,612	
6	2007	43						-	-			16,612	16,612	
7	2008	42						-	-			16,612	16,612	
8	Total		\$ -	\$ 16,612	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 16,612	\$ -	\$ -	\$ 90,985	\$ 90,985
Major Additions/Retirements 2003 and 2004			\$	16,612										
Routine Activity			\$	-										
9	Historical Interim Activity			0.00%	0.00%									
10	Forecast Interim Activity			0.00%	0.00%									
11	2009	41						-	-				16,612	
12	2010	40						-	-				16,612	
13	2011	39						-	-				16,612	
14	2012	38						-	-				16,612	
15	2013	37						-	-				16,612	
16	2014	36						-	-				16,612	
17	2015	35						-	-				16,612	
18	2016	34						-	-				16,612	
19	2017	33						-	-				16,612	
20	2018	32						-	-				16,612	
21	2019	31						-	-				16,612	
22	2020	30						-	-				16,612	
23	2021	29						-	-				16,612	
24	2022	28						-	-				16,612	
25	2023	27						-	-				16,612	
26	2024	26						-	-				16,612	
27	2025	25						-	-				16,612	
28	2026	24						-	-				16,612	
29	2027	23						-	-				16,612	
30	2028	22						-	-				16,612	
31	2029	21						-	-				16,612	
32	2030	20						-	-				16,612	
33	2031	19						-	-				16,612	
34	2032	18						-	-				16,612	
35	2033	17						-	-				16,612	
36	2034	16						-	-				16,612	
37	2035	15						-	-				16,612	
38	2036	14						-	-				16,612	
39	2037	13						-	-				16,612	
40	2038	12						-	-				16,612	
41	2039	11						-	-				16,612	
42	2040	10						-	-				16,612	
43	2041	9						-	-				16,612	
44	2042	8						-	-				16,612	
45	2043	7						-	-				16,612	
46	2044	6						-	-				16,612	
47	2045	5						-	-				16,612	
48	2046	4						-	-				16,612	
49	2047	3						-	-				16,612	
50	2048	2						-	-				16,612	
51	2049	1						-	-				16,612	
52	2050	0						-	-	(16,612)			-	
			\$	16,612	\$	-						\$	772,060	

**Whole Life Depreciation Rate Calculation**

Historical Additions	16,612
Forecast Additions	
<u>Total Additions</u>	16,612
Gross Salvage Value	1,329
<u>Less Cost of Removal</u>	1,661
Net Salvage Value	(332)
Total to be Recovered	16,944
 Forecast Plant Balances	 772,060
 Whole Life Accrual Rate	 2.19%
Cost of Removal Accrual Rate	0.22%
Whole Life Accrual Rate (Excluding Cost of Removal)	1.98%
 Depreciable Service Life, years	 45.6

**Remaining Life Depreciation Rate Calculation**

Account Balance - 12/31/08	16,612
Forecast Additions	-
Gross Salvage Value	1,329
<u>Less Cost of Removal</u>	1,661
Net Salvage Value	(332)
Forecast Plant Balances	681,075

Summary by Plant  
 Black Hills Power  
**Neil Simpson CT Facility**

Account	Description	Direct Investment 2008\$	Depreciation Rate
341	Structures & Improvements	168,200	2.99%
342	Fuel Holders, Producers & Accessories	2,097,317	8.31%
343	Prime Movers		
344	Generators	24,290,109	2.25%
345	Accessory Electric Equipment	1,981,194	2.35%
346	Misc Power Equipment	51,539	4.97%
<b>Total</b>		28,588,359	<span style="border: 1px solid black; padding: 2px;">2.71%</span> whole life weighted average rate

**Remaining Life Depreciation Rate Calculation**

Per Books Balance 12/31/08	29,130,532
Forecast Interim Additions	21,399,564
Forecast Gross Salvage Value	4,466,845
Forecast Less Cost of Removal	3,568,411
Forecast Net Salvage Value	898,433
Forecast Total to be Recovered with COR	49,631,663
Forecast Total to be Recovered w/o COR	46,063,251
Accumulated Depreciation (2008 EOY)	(9,850,982)
Forecast Remaining Life Balance with COR	39,780,680
Forecast Remaining Life Balance w/o COR	36,212,269
Forecast Plant Balances	1,584,710,507
Remaining Life Rate with COR	2.51%
Remaining Life Rate w/o COR	2.29%

**Black Hills Power**

Gross Salvage 8%  
 Cost of Removal 10%  
 Net Salvage -2%  
 Install Date 2000  
 Retirement Date 2050  
 Service Life, Yrs 50

**Unit Property Depreciation Rate Analysis**  
**Unit Property: Other Production, Neil Simpson Plant**

2008

**Historical and Forecast Plant Additions & Balances**

Account: 341 Structures & Improvements Initial Plant Balance 0

Line	Vintage Year	Vintage Age	Reported Per Books			Adjustments to Transaction		Adjusted Transaction Year		Transfers and Adjustments	EOY Plant Balance			
			Transaction Year		Vintage Year	Year		Year			Adjustments	Per Books	Simulated	
			Beg Balance	Additions	Retirements	Retirements	Additions	Retirements	Additions	Retirements				
1	2000	50												
2	2001	49												
3	2002	48		152,735				152,735				152,735	152,735	
4	2003	47										152,735	152,735	
5	2004	46		15,465				15,465				168,200	168,200	
6	2005	45										168,200	168,200	
7	2006	44										168,200	168,200	
8	2007	43										168,200	168,200	
9	2008	42										168,200	168,200	
10	Total		\$ -	\$ 168,200	\$ -	\$ -	\$ -	\$ -	\$ 168,200	\$ -	\$ -	\$ -	\$ 1,299,206	\$ 1,299,206

Major Additions/Retirements

2001	\$ 152,735	
Routine Activity	\$ 15,465	
11 Historical Interim Activity	1.19%	0.00%
12 Forecast Interim Activity	1.19%	0.00%

13	2009	41						2,002	-				170,202
14	2010	40						2,026	-				172,229
15	2011	39						2,050	-				174,279
16	2012	38						2,075	-				176,353
17	2013	37						2,099	-				178,453
18	2014	36						2,124	-				180,577
19	2015	35						2,150	-				182,726
20	2016	34						2,175	-				184,901
21	2017	33						2,201	-				187,102
22	2018	32						2,227	-				189,330
23	2019	31						2,254	-				191,583
24	2020	30						2,281	-				193,864
25	2021	29						2,308	-				196,172
26	2022	28						2,335	-				198,507
27	2023	27						2,363	-				200,870
28	2024	26						2,391	-				203,261
29	2025	25						2,420	-				205,681
30	2026	24						2,448	-				208,129
31	2027	23						2,478	-				210,606
32	2028	22						2,507	-				213,113
33	2029	21						2,537	-				215,650
34	2030	20						2,567	-				218,217
35	2031	19						2,598	-				220,815
36	2032	18						2,629	-				223,443
37	2033	17						2,660	-				226,103
38	2034	16						2,691	-				228,795
39	2035	15						2,724	-				231,518
40	2036	14						2,756	-				234,274
41	2037	13						2,789	-				237,063
42	2038	12						2,822	-				239,885
43	2039	11						2,856	-				242,740
44	2040	10						2,890	-				245,630
45	2041	9						2,924	-				248,554
46	2042	8						2,959	-				251,513
47	2043	7						2,994	-				254,506
48	2044	6						3,030	-				257,536
49	2045	5						3,066	-				260,602
50	2046	4						3,102	-				263,704
51	2047	3						3,139	-				266,843
52	2048	2						3,176	-				270,019
53	2049	1						3,214	-				273,234
54	2050	0								(273,234)			-
			\$ -	\$ 273,234	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 10,227,789

**Whole Life Depreciation Rate Calculation**

Historical Additions	168,200
Forecast Additions	105,033
Total Additions	273,234
Gross Salvage Value	21,859
Less Cost of Removal	27,323
Net Salvage Value	(5,465)
Total to be Recovered	278,698
Forecast Plant Balances	10,227,789
Whole Life Accrual Rate	2.72%
Cost of Removal Accrual Rate	0.27%
Whole Life Accrual Rate (Excluding Cost of Removal)	2.99%
Depreciable Service Life, years	36.7

**Remaining Life Depreciation Rate Calculation**

Account Balance 12/31/08	168,200
Forecast Additions	105,033
Gross Salvage Value	21,859
Less Cost of Removal	27,323
Net Salvage Value	(5,465)
Forecast Plant Balances	8,928,583

**Black Hills Power**

Gross Salvage 8%  
 Cost of Removal 10%  
 Net Salvage -2%  
 Install Date 2000  
 Retirement Date 2050  
 Service Life, Yrs 50

**Unit Property Depreciation Rate Analysis**  
**Unit Property: Other Production, Neil Simpson Plant**

2008

**Historical and Forecast Plant Additions & Balances**

Account: 342 Fuel Holders, Producers & Accessories Initial Plant Balance 0

Line	Vintage Year	Vintage Age	Reported Per Books			Adjustments to Transaction Year		Adjusted Transaction Year		Transfers and Adjustments	EOY Plant Balance			
			Transaction Year		Vintage Year	Year		Year			Adjustments	Per Books	Simulated	
			Beg Balance	Additions	Retirements	Retirements	Additions	Retirements	Additions	Retirements				
1	2000	50												
2	2001	49												
3	2002	48		838,521				838,521				838,521	838,521	
4	2003	47										838,521	838,521	
5	2004	46										838,521	838,521	
6	2005	45										838,521	838,521	
7	2006	44										2,097,317	2,097,317	
8	2007	43		1,258,796				1,258,796				2,097,317	2,097,317	
9	2008	42										2,097,317	2,097,317	
10	Total		\$ -	\$ 2,097,317	\$ -	\$ -	\$ -	\$ -	\$ 2,097,317	\$ -	\$ -	\$ -	\$ 10,484,559	\$ 10,484,559

Major Additions/Retirements

2001	\$ 838,521		
Routine Activity	\$ 1,258,796		
Routine Additions	\$ -		
11 Historical Interim Activity		0.00%	0.00%
12 Forecast Interim Activity		0.00%	0.00%

13	2009	41						1,827,000						3,924,317
14	2010	40												3,924,317
15	2011	39												3,924,317
16	2012	38												3,924,317
17	2013	37												3,924,317
18	2014	36												3,924,317
19	2015	35												3,924,317
20	2016	34							2,171,729					6,096,046
21	2017	33												6,096,046
22	2018	32												6,096,046
23	2019	31												6,096,046
24	2020	30												6,096,046
25	2021	29												6,096,046
26	2022	28												6,096,046
27	2023	27												8,677,549
28	2024	26												8,677,549
29	2025	25												8,677,549
30	2026	24												8,677,549
31	2027	23												8,677,549
32	2028	22												8,677,549
33	2029	21												8,677,549
34	2030	20												11,746,145
35	2031	19							3,068,596					11,746,145
36	2032	18												11,746,145
37	2033	17												11,746,145
38	2034	16												11,746,145
39	2035	15												11,746,145
40	2036	14												11,746,145
41	2037	13												15,393,741
42	2038	12							3,647,596					15,393,741
43	2039	11												15,393,741
44	2040	10												15,393,741
45	2041	9												15,393,741
46	2042	8												15,393,741
47	2043	7												15,393,741
48	2044	6												19,729,587
49	2045	5							4,335,846					19,729,587
50	2046	4												19,729,587
51	2047	3												19,729,587
52	2048	2												19,729,587
53	2049	1												19,729,587
54	2050	0											(19,729,587)	-
										\$ 19,729,587	\$ -			\$ 449,726,675

**Whole Life Depreciation Rate Calculation**

Historical Additions	2,097,317
Forecast Additions	17,632,270
Total Additions	19,729,587
Gross Salvage Value	1,578,367
Less Cost of Removal	1,972,959
Net Salvage Value	15,659,311
Total to be Recovered	35,388,898
	-
Forecast Plant Balances	449,726,675
Whole Life Accrual Rate	7.87%
Cost of Removal Accrual Rate	0.44%
Whole Life Accrual Rate (Excluding Cost of Removal)	8.31%
Depreciable Service Life, years	12.7

<b>Remaining Life Depreciation 1</b>	<b>2,097,317</b>
Account Balance 12/31/08	2,097,317
Forecast Additions	17,632,270
Gross Salvage Value	1,578,367
Less Cost of Removal	1,972,959
Net Salvage Value	(394,592)
	439,242,117
Forecast Plant Balances	439,242,117

Black Hills Power  
 Unit Property Depreciation Rate Analysis  
 Unit Property: Other Production, Neil Simpson Plant

Gross Salvage 10%  
 Cost of Removal 5%  
 Net Salvage 5%  
 Install Date 2000  
 Retirement Date 2050  
 Service Life, Yrs 50

2008

Historical and Forecast Plant Additions & Balances  
 Account: 344 Generators Initial Plant Balance 0

Line	Vintage Year	Vintage Age	Reported Per Books			Adjustments to Transaction		Adjusted Transaction Year		Transfers and Adjustments	EOY Plant Balance		
			Transaction Year		Vintage Year Retirements	Year		Additions	Retirements		Adjustments	Per Books	Simulated
			Beg Balance	Additions		Retirements	Additions			Retirements			
1	2000	50											
2	2001	49		23,815,629				23,815,629			23,815,629	23,815,629	
3	2002	48		280,438				280,438			24,096,067	24,096,067	
4	2003	47									24,096,067	24,096,067	
5	2004	46									24,096,067	24,096,067	
6	2005	45									24,096,067	24,096,067	
7	2006	44									24,096,067	24,096,067	
8	2007	43		63,394	160,003			63,394	160,003		23,999,458	23,999,458	
9	2008	42		290,651				290,651			24,290,109	24,290,109	
10	Total		\$ -	\$ 24,450,112	\$ 160,003	\$ -	\$ -	\$ 24,450,112	\$ 160,003	\$ -	\$ -	\$ 192,585,529	\$ 192,585,529

Major Additions/Retirements

2001	\$ 23,815,629	
Routine Activity	\$ 634,483	
11 Historical Interim Activity	0.33%	0.08%
12 Forecast Interim Activity	0.33%	0.08%

13	2009	41						80,025	20,181			24,349,953	
14	2010	40						80,222	20,230			24,409,945	
15	2011	39						80,420	20,280			24,470,085	
16	2012	38						80,618	20,330			24,530,372	
17	2013	37						80,817	20,380			24,590,809	
18	2014	36						81,016	20,430			24,651,394	
19	2015	35						81,215	20,481			24,712,129	
20	2016	34						81,415	20,531			24,773,013	
21	2017	33						81,616	20,582			24,834,047	
22	2018	32						81,817	20,633			24,895,231	
23	2019	31						82,019	20,683			24,956,567	
24	2020	30						82,221	20,734			25,018,053	
25	2021	29						82,423	20,785			25,079,691	
26	2022	28						82,626	20,837			25,141,481	
27	2023	27						82,830	20,888			25,203,423	
28	2024	26						83,034	20,939			25,265,517	
29	2025	25						83,239	20,991			25,327,765	
30	2026	24						83,444	21,043			25,390,166	
31	2027	23						83,649	21,095			25,452,720	
32	2028	22						83,855	21,147			25,515,429	
33	2029	21						84,062	21,199			25,578,292	
34	2030	20						84,269	21,251			25,641,310	
35	2031	19						84,477	21,303			25,704,484	
36	2032	18						84,685	21,356			25,767,813	
37	2033	17						84,893	21,408			25,831,298	
38	2034	16						85,103	21,461			25,894,939	
39	2035	15						85,312	21,514			25,958,738	
40	2036	14						85,522	21,567			26,022,693	
41	2037	13						85,733	21,620			26,086,806	
42	2038	12						85,944	21,673			26,151,077	
43	2039	11						86,156	21,727			26,215,507	
44	2040	10						86,368	21,780			26,280,095	
45	2041	9						86,581	21,834			26,344,842	
46	2042	8						86,794	21,888			26,409,749	
47	2043	7						87,008	21,942			26,474,815	
48	2044	6						87,223	21,996			26,540,042	
49	2045	5						87,438	22,050			26,605,430	
50	2046	4						87,653	22,104			26,670,979	
51	2047	3						87,869	22,159			26,736,689	
52	2048	2						88,085	22,213			26,802,561	
53	2049	1						88,302	22,268			26,868,595	
54	2050	0								(26,868,595)			
									\$ 27,898,110	\$ 1,029,514			\$ 1,241,740,070

Whole Life Depreciation Rate Calculation

Historical Additions	24,450,112
Forecast Additions	3,447,998
Total Additions	27,898,110
Gross Salvage Value	2,686,860
Less Cost of Removal	1,343,430
Net Salvage Value	1,343,430
Total to be Recovered	26,554,680
Forecast Plant Balances	1,241,740,070
Whole Life Accrual Rate	2.14%
Cost of Removal Accrual Rate	0.11%
Whole Life Accrual Rate (Excluding Cost of Removal)	2.25%
Depreciable Service Life, years	46.8

Remaining Life Depreciation Rate Calculation

Account Balance 12/31/08	24,290,109
Forecast Additions	3,447,998
Gross Salvage Value	2,686,860
Less Cost of Removal	1,343,430
Net Salvage Value	1,343,430
Forecast Plant Balances	1,049,154,542

**Black Hills Power**

Gross Salvage 8%  
 Cost of Removal 10%  
 Net Salvage -2%  
 Install Date 2000  
 Retirement Date 2050  
 Service Life, Yrs 50

**Unit Property Depreciation Rate Analysis**  
**Unit Property: Other Production, Neil Simpson Plant**

2008

**Historical and Forecast Plant Additions & Balances**

Account: 345 Accessory Electric Equipment Initial Plant Balance 0

Line	Vintage Year	Vintage Age	Reported Per Books			Adjustments to Transaction		Adjusted Transaction Year		Transfers and Adjustments	EOY Plant Balance			
			Transaction Year		Vintage Year	Year		Year			Adjustments	Per Books	Simulated	
			Beg Balance	Additions	Retirements	Retirements	Additions	Retirements	Additions	Retirements				
1	2000	50												
2	2001	49		1,961,964				1,961,964	-			1,961,964	1,961,964	
3	2002	48		19,230				19,230	-			1,981,194	1,981,194	
4	2003	47						-	-			1,981,194	1,981,194	
5	2004	46						-	-			1,981,194	1,981,194	
6	2005	45						-	-			1,981,194	1,981,194	
7	2006	44						-	-			1,981,194	1,981,194	
8	2007	43						-	-			1,981,194	1,981,194	
9	2008	42						-	-			1,981,194	1,981,194	
10	Total		\$ -	\$ 1,981,194	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 15,830,321	\$ 15,830,321

Major Additions/Retirements

2001	\$ 1,961,964	
Routine Activity	\$ 19,230	
Historical Interim Activity	0.12%	0.00%
Forecast Interim Activity	0.12%	0.00%

13	2009	41						2,407	-				1,983,600
14	2010	40						2,410	-				1,986,010
15	2011	39						2,412	-				1,988,422
16	2012	38						2,415	-				1,990,838
17	2013	37						2,418	-				1,993,256
18	2014	36						2,421	-				1,995,677
19	2015	35						2,424	-				1,998,102
20	2016	34						2,427	-				2,000,529
21	2017	33						2,430	-				2,002,959
22	2018	32						2,433	-				2,005,392
23	2019	31						2,436	-				2,007,828
24	2020	30						2,439	-				2,010,267
25	2021	29						2,442	-				2,012,709
26	2022	28						2,445	-				2,015,154
27	2023	27						2,448	-				2,017,601
28	2024	26						2,451	-				2,020,052
29	2025	25						2,454	-				2,022,506
30	2026	24						2,457	-				2,024,963
31	2027	23						2,460	-				2,027,423
32	2028	22						2,463	-				2,029,885
33	2029	21						2,466	-				2,032,351
34	2030	20						2,469	-				2,034,820
35	2031	19						2,472	-				2,037,292
36	2032	18						2,475	-				2,039,766
37	2033	17						2,478	-				2,042,244
38	2034	16						2,481	-				2,044,725
39	2035	15						2,484	-				2,047,209
40	2036	14						2,487	-				2,049,696
41	2037	13						2,490	-				2,052,185
42	2038	12						2,493	-				2,054,678
43	2039	11						2,496	-				2,057,174
44	2040	10						2,499	-				2,059,673
45	2041	9						2,502	-				2,062,175
46	2042	8						2,505	-				2,064,680
47	2043	7						2,508	-				2,067,188
48	2044	6						2,511	-				2,069,699
49	2045	5						2,514	-				2,072,213
50	2046	4						2,517	-				2,074,730
51	2047	3						2,520	-				2,077,250
52	2048	2						2,523	-				2,079,774
53	2049	1						2,526	-				2,082,300
54	2050	0								(2,082,300)			-
									\$ 2,082,300	\$ -			\$ 99,165,316

**Whole Life Depreciation Rate Calculation**

Historical Additions	1,981,194
Forecast Additions	101,106
Total Additions	2,082,300
Gross Salvage Value	166,584
Less Cost of Removal	208,230
Net Salvage Value	(41,646)
Total to be Recovered	2,123,946
Forecast Plant Balances	99,165,316
Whole Life Accrual Rate	2.14%
Cost of Removal Accrual Rate	0.21%
Whole Life Accrual Rate (Excluding Cost of Removal)	2.35%
Depreciable Service Life, years	46.7

**Remaining Life Depreciation Rate Calculation**

Account Balance 12/31/08	1,981,194
Forecast Additions	101,106
Gross Salvage Value	166,584
Less Cost of Removal	208,230
Net Salvage Value	(41,646)
Forecast Plant Balances	83,334,995



**Black Hills Power**

Gross Salvage 8%  
 Cost of Removal 10%  
 Net Salvage -2%  
 Install Date 2000  
 Retirement Date 2050  
 Service Life, Yrs 50

**Unit Property Depreciation Rate Analysis**  
**Unit Property: Other Production, Neil Simpson Plant**

2008

**Historical and Forecast Plant Additions & Balances**

Account: 342 Misc Plant Equipment Initial Plant Balance 0

Line	Vintage Year	Vintage Age	Reported Per Books			Adjustments to Transaction		Adjusted Transaction Year		Transfers and Adjustments	EOY Plant Balance		
			Transaction Year		Vintage Year	Year		Year			Adjustments	Per Books	Simulated
			Beg Balance	Additions	Retirements	Retirements	Additions	Retirements	Additions	Retirements			
1	2000	50											
2	2001	49		40,635		36,672		40,635	-		40,635	40,635	
3	2002	48		4,777				4,777	-		45,412	45,412	
4	2003	47		6,643				6,643	-		52,056	52,056	
5	2004	46						-	-		52,056	52,056	
6	2005	45						-	-		52,056	52,056	
7	2006	44						-	-		52,056	52,056	
8	2007	43		36,155	36,672			36,155	36,672		51,539	51,539	
9	2008	42						-	-		51,539	51,539	
10	Total		\$ -	\$ 88,210	\$ 36,672	\$ 36,672	\$ -	\$ -	\$ 88,210	\$ 36,672	\$ -	\$ 397,347	\$ 397,347
Major Additions/Retirements 2001 and 2007				\$ 76,790	\$ 36,672								
Routine Activity				\$ 11,420	\$ -								
11	Historical Interim Activity			2.87%	0.00%								
12	Forecast Interim Activity			2.87%	0.00%								
13	2009	41						1,481	-			53,020	
14	2010	40						1,524	-			54,544	
15	2011	39						1,568	-			56,112	
16	2012	38						1,613	-			57,724	
17	2013	37						1,659	-			59,383	
18	2014	36						1,707	-			61,090	
19	2015	35						1,756	-			62,846	
20	2016	34						1,806	-			64,652	
21	2017	33						1,858	-			66,510	
22	2018	32						1,912	-			68,422	
23	2019	31						1,967	-			70,388	
24	2020	30						2,023	-			72,411	
25	2021	29						2,081	-			74,492	
26	2022	28						2,141	-			76,633	
27	2023	27						2,203	-			78,836	
28	2024	26						2,266	-			81,102	
29	2025	25						2,331	-			83,433	
30	2026	24						2,398	-			85,831	
31	2027	23						2,467	-			88,297	
32	2028	22						2,538	-			90,835	
33	2029	21						2,611	-			93,446	
34	2030	20						2,686	-			96,132	
35	2031	19						2,763	-			98,895	
36	2032	18						2,842	-			101,737	
37	2033	17						2,924	-			104,661	
38	2034	16						3,008	-			107,669	
39	2035	15						3,095	-			110,763	
40	2036	14						3,183	-			113,947	
41	2037	13						3,275	-			117,222	
42	2038	12						3,369	-			120,591	
43	2039	11						3,466	-			124,057	
44	2040	10						3,566	-			127,622	
45	2041	9						3,668	-			131,290	
46	2042	8						3,773	-			135,064	
47	2043	7						3,882	-			138,945	
48	2044	6						3,993	-			142,939	
49	2045	5						4,108	-			147,047	
50	2046	4						4,226	-			151,273	
51	2047	3						4,348	-			155,621	
52	2048	2						4,473	-			160,094	
53	2049	1						4,601	-			164,695	
54	2050	0								(164,695)		-	
				\$ 201,367	\$ 36,672							\$ 4,447,618	

**Whole Life Depreciation Rate Calculation**

Historical Additions	88,210
Forecast Additions	113,156
Total Additions	201,367
Gross Salvage Value	13,176
Less Cost of Removal	16,470
Net Salvage Value	(3,294)
Total to be Recovered	204,661
Forecast Plant Balances	4,447,618
Whole Life Accrual Rate	4.60%
Cost of Removal Accrual Rate	0.37%
Whole Life Accrual Rate (Excluding Cost of Removal)	4.97%
Depreciable Service Life, years	21.7

**Remaining Life Depreciation Rate Calculation**

Account Balance 12/31/08	51,539
Forecast Additions	113,156
Gross Salvage Value	13,176
Less Cost of Removal	16,470
Net Salvage Value	(3,294)
Forecast Plant Balances	4,050,271

Summary by Plant  
 Black Hills Power  
**Ben French CT Facility**

Account	Description	Direct Investment 2008\$	Depreciation Rate
341	Structures & Improvements	22,448	1.57%
342	Fuel Holders, Producers & Accessories	1,156,298	2.81%
343	Prime Movers		
344	Generators	17,086,809	1.74%
345	Accessory Electric Equipment	743,302	2.62%
346	Misc Power Equipment	14,718	1.57%
<b>Total</b>		19,023,575	<span style="border: 1px solid black; padding: 2px;">1.84%</span> whole life weighted average rate

**Remaining Life Depreciation Rate Calculation**

Per Books Balance 12/31/08	19,323,720
Forecast Interim Additions	1,146,934
Forecast Gross Salvage Value	1,932,856
Forecast Less Cost of Removal	1,106,072
Forecast Net Salvage Value	826,784
Forecast Total to be Recovered with COR	19,643,870
Forecast Total to be Recovered w/o COR	18,537,798
Accumulated Depreciation (2008 EOY)	(14,007,037)
Forecast Remaining Life Balance with COR	5,636,833
Forecast Remaining Life Balance w/o COR	4,530,761
Forecast Plant Balances	407,836,266
Remaining Life Rate with COR	1.38%
Remaining Life Rate w/o COR	1.11%

Black Hills Power  
Unit Property Depreciation Rate Analysis  
Unit Property: Other Production, Ben French CT Plant

Gross Salvage 8%  
Cost of Removal 10%  
Net Salvage -2%  
Install Date 1965  
Retirement Date 2030  
Service Life, Yrs 65

Historical and Forecast Plant Additions & Balances  
Account: 341 Structures & Improvements

Initial Plant Balance 0

Line	Vintage Year	Vintage Age	Reported Per Books				Adjustments to Transaction				Transfers and Adjustments	EOY Plant Balance			
			Transaction Year			Vintage Year Retirements	Year		Adjusted Transaction Year			Adjustments	Per Books	Simulated	
			Beg Balance	Additions	Retirements		Additions	Retirements	Additions	Retirements					
1	1965	65						22,448		22,448			22,448		
2	1966	64											22,448		
3	1967	63											22,448		
4	1968	62											22,448		
5	1969	61											22,448		
6	1970	60											22,448		
7	1971	59											22,448		
8	1972	58											22,448		
9	1973	57											22,448		
10	1974	56											22,448		
11	1975	55											22,448		
12	1976	54											22,448		
13	1977	53											22,448		
14	1978	52											22,448		
15	1979	51											22,448		
16	1980	50											22,448		
17	1981	49											22,448		
18	1982	48											22,448		
19	1983	47											22,448		
20	1984	46											22,448		
21	1985	45											22,448		
22	1986	44											22,448		
23	1987	43											22,448		
24	1988	42											22,448		
25	1989	41	22,448										22,448		
26	1990	40											22,448		
27	1991	39											22,448		
28	1992	38											22,448		
29	1993	37											22,448		
30	1994	36											22,448		
31	1995	35											22,448		
32	1996	34											22,448		
33	1997	33											22,448		
34	1998	32											22,448		
35	1999	31											22,448		
36	2000	30											22,448		
37	2001	29											22,448		
38	2002	28											22,448		
39	2003	27											22,448		
40	2004	26											22,448		
41	2005	25											22,448		
42	2006	24											22,448		
43	2007	23											22,448		
44	2008	22											22,448		
45	Total		\$ 22,448	\$ -	\$ -	\$ -	\$ 22,448	\$ -	\$ -	\$ 22,448	\$ -	\$ -	\$ 538,755	\$ 448,963	\$ 987,718

Major Additions/Retirements

46	Routine Activity	\$ -	\$ -
47	Historical Interim Activity	0.00%	0.00%
47	Forecast Interim Activity	0.00%	0.00%

48	2009	21													22,448
49	2010	20													22,448
50	2011	19													22,448
51	2012	18													22,448
52	2013	17													22,448
53	2014	16													22,448
54	2015	15													22,448
55	2016	14													22,448
56	2017	13													22,448
57	2018	12													22,448
58	2019	11													22,448
59	2020	10													22,448
60	2021	9													22,448
61	2022	8													22,448
62	2023	7													22,448
63	2024	6													22,448
64	2025	5													22,448
65	2026	4													22,448
66	2027	3													22,448
67	2028	2													22,448
68	2029	1													22,448
69	2030	0										(22,448)			-
			\$ 22,448	\$ -											\$ 1,459,129

Whole Life Depreciation Rate Calculation

Historical Additions	22,448
Forecast Additions	-
Total Additions	22,448
Gross Salvage Value	1,796
Less Cost of Removal	2,245
Net Salvage Value	(449)
Total to be Recovered	22,897
Forecast Plant Balances	1,459,129
Whole Life Accrual Rate	1.57%
Cost of Removal Accrual Rate	0.15%
Whole Life Accrual Rate (Excluding Cost of Removal)	1.42%
Depreciable Service Life, years	63.7

Remaining Life Depreciation Rate Calculation

Account Balance 12/31/08	22,448
Forecast Additions	-
Gross Salvage Value	1,796
Less Cost of Removal	2,245
Net Salvage Value	(449)
Forecast Plant Balances	471,411

**Black Hills Power**

Gross Salvage 8%  
 Cost of Removal 10%  
 Net Salvage -2%  
 Install Date 1965  
 Retirement Date 2030  
 Service Life, Yrs 65

**Unit Property Depreciation Rate Analysis**

**Unit Property: Other Production, Ben French Plant**

2008

**Historical and Forecast Plant Additions & Balances**

Account: 342 Fuel Holders, Producers & Accessories Initial Plant Balance 0

	[A]	[B]	[C]	[D]	[E]	[F]	[G]	[H]	[I]	[J]	[K]	[L]	[M]	[N]
Line	Vintage Year	Vintage Age	Reported Per Books				Adjustments to Transaction				Transfers and Adjustments	EOY Plant Balance		
			Transaction Year			Vintage Year Retirements	Year		Adjusted Transaction Year			Adjustments	Per Books	Simulated
			Beg Balance	Additions	Retirements		Additions	Retirements	Additions	Retirements				
1	1965	65				600,612			600,612		-		600,612	600,612
2	1966	64				8,973	696		8,973	696			608,890	608,890
3	1967	63				9,096	705		9,096	705			617,281	617,281
4	1968	62				9,222	715		9,222	715			625,788	625,788
5	1969	61				9,349	725		9,349	725			634,412	634,412
6	1970	60				9,478	735		9,478	735			643,155	643,155
7	1971	59				9,608	745		9,608	745			652,018	652,018
8	1972	58				9,741	755		9,741	755			661,004	661,004
9	1973	57				9,875	765		9,875	765			670,113	670,113
10	1974	56				10,011	776		10,011	776			679,348	679,348
11	1975	55				10,149	787		10,149	787			688,710	688,710
12	1976	54			25,000	10,289	798		10,289	798			698,202	698,202
13	1977	53				10,431	809		10,431	809			707,824	707,824
14	1978	52			1,068	10,574	820		10,574	820			717,578	717,578
15	1979	51			355,724	10,720	831		10,720	831			727,467	727,467
16	1980	50				10,868	842		10,868	842			737,493	737,493
17	1981	49				11,018	854		11,018	854			747,656	747,656
18	1982	48				11,169	866		11,169	866			757,960	757,960
19	1983	47				11,323	878		11,323	878			768,405	768,405
20	1984	46				11,479	890		11,479	890			778,995	778,995
21	1985	45				11,638	902		11,638	902			789,730	789,730
22	1986	44				11,798	915		11,798	915			800,614	800,614
23	1987	43				11,961	927		11,961	927			811,647	811,647
24	1988	42				12,125	940		12,125	940			822,833	822,833
25	1989	41	822,833										822,833	822,833
26	1990	40											822,833	822,833
27	1991	39											822,833	822,833
28	1992	38		91,568	25,000				91,568	25,000			889,401	889,401
29	1993	37		434,216					434,216				1,323,617	1,323,617
30	1994	36			1,068					1,068			1,322,549	1,322,549
31	1995	35											1,322,549	1,322,549
32	1996	34		43,348					43,348				1,365,897	1,365,897
33	1997	33		25,981	355,724				25,981	355,724	61,755		1,097,908	1,097,908
34	1998	32											1,097,908	1,097,908
35	1999	31											1,097,908	1,097,908
36	2000	30			58,390				58,390				1,156,298	1,156,298
37	2001	29											1,156,298	1,156,298
38	2002	28											1,156,298	1,156,298
39	2003	27											1,156,298	1,156,298
40	2004	26											1,156,298	1,156,298
41	2005	25											1,156,298	1,156,298
42	2006	24											1,156,298	1,156,298
43	2007	23			116,995				116,995				1,273,293	1,273,293
44	2008	22											1,156,298	1,156,298
45	Total		\$ 822,833	\$ 770,498	\$ 381,793	\$ 381,793	\$ 841,507	\$ 18,674	\$ 1,612,005	\$ 400,466	\$ 61,755	\$ 16,947,735	\$ 22,509,910	\$ 39,457,644

Major Additions/Retirements

1993 \$ 434,216  
 1997 \$ 355,724  
 Routine Activity \$ 336,282 \$ 26,068  
 46 Historical Interim Activity 1.49% 0.12%  
 47 Forecast Interim Activity 1.49% 0.12%

48	2009	21							17,274	1,339				1,172,233
49	2010	20							17,512	1,358				1,188,388
50	2011	19							17,754	1,376				1,204,765
51	2012	18							17,998	1,395				1,221,368
52	2013	17							18,246	1,414				1,238,200
53	2014	16							18,498	1,434				1,255,264
54	2015	15							18,753	22				1,273,995
55	2016	14							19,033	1,475				1,291,552
56	2017	13							19,295	1,496				1,309,852
57	2018	12							19,561	1,516				1,327,396
58	2019	11							19,830	1,537				1,345,689
59	2020	10							20,104	1,558				1,364,234
60	2021	9							20,381	1,580				1,383,035
61	2022	8							20,662	1,602				1,402,095
62	2023	7							20,946	1,624				1,421,417
63	2024	6							21,235	1,646				1,441,006
64	2025	5							21,528	1,669				1,460,865
65	2026	4							21,824	1,692				1,480,998
66	2027	3							22,125	1,715				1,501,407
67	2028	2							22,430	1,739				1,522,099
68	2029	1							22,739	1,763				1,543,075
69	2030	0									(1,543,075)			-
									\$ 2,029,731	\$ 431,416				\$ 67,806,079

**Whole Life Depreciation Rate Calculation**

Historical Additions	1,612,005
Forecast Additions	417,727
Total Additions	2,029,731
Gross Salvage Value	123,446
Less Cost of Removal	154,307
Net Salvage Value	(30,861)
Total to be Recovered	2,060,593
Forecast Plant Balances	67,806,079
Whole Life Accrual Rate	3.04%
Cost of Removal Accrual Rate	0.23%
Whole Life Accrual Rate (Excluding Cost of Removal)	2.81%
Depreciable Service Life, years	32.9

**Remaining Life Depreciation Rate Calculation**

Account Balance 12/31/08	1,156,298
Forecast Additions	417,727
Gross Salvage Value	123,446
Less Cost of Removal	154,307
Net Salvage Value	(30,861)
Forecast Plant Balances	28,348,435

Black Hills Power  
 Unit Property Depreciation Rate Analysis  
 Unit Property: Other Production, Ben French Plant  
 Historical and Forecast Plant Additions & Balances  
 Account: 344 Generators

Gross Salvage 10%  
 Cost of Removal 5%  
 Net Salvage 5%  
 Install Date 1965  
 Retirement Date 2030  
 Service Life, Yrs 65  
 Initial Plant Balance 0

2008

Line	Vintage Year	Vintage Age	Reported Per Books				Adjustments to Transaction				Transfers and Adjustments	EOY Plant Balance		
			Transaction Year			Vintage Year	Year		Adjusted Transaction Year			Per Books	Simulated	
			Beg Balance	Additions	Retirements	Retirements	Additions	Retirements	Additions	Retirements				
1	1965	65					15,520,600		15,520,600			15,520,600	15,520,600	
2	1966	64					31,041	15,521	31,041	15,521		15,536,121	15,536,121	
3	1967	63				79,337	31,072	15,536	31,072	15,536		15,551,657	15,551,657	
4	1968	62					31,103	15,552	31,103	15,552		15,567,209	15,567,209	
5	1969	61					31,134	15,567	31,134	15,567		15,582,776	15,582,776	
6	1970	60					31,166	15,583	31,166	15,583		15,598,359	15,598,359	
7	1971	59					31,197	15,598	31,197	15,598		15,613,957	15,613,957	
8	1972	58					31,228	15,614	31,228	15,614		15,629,571	15,629,571	
9	1973	57					31,259	15,630	31,259	15,630		15,645,201	15,645,201	
10	1974	56					31,290	15,645	31,290	15,645		15,660,846	15,660,846	
11	1975	55					31,322	15,661	31,322	15,661		15,676,507	15,676,507	
12	1976	54					31,353	15,677	31,353	15,677		15,692,183	15,692,183	
13	1977	53				673,529	31,384	15,692	31,384	15,692		15,707,875	15,707,875	
14	1978	52					47,321	15,708	47,321	15,708		15,723,583	15,723,583	
15	1979	51				47,321	31,447	15,724	31,447	15,724		15,739,307	15,739,307	
16	1980	50					31,479	15,739	31,479	15,739		15,755,046	15,755,046	
17	1981	49					31,510	15,755	31,510	15,755		15,770,801	15,770,801	
18	1982	48					31,542	15,771	31,542	15,771		15,786,572	15,786,572	
19	1983	47					31,573	15,787	31,573	15,787		15,802,359	15,802,359	
20	1984	46					31,605	15,802	31,605	15,802		15,818,161	15,818,161	
21	1985	45					31,636	15,818	31,636	15,818		15,833,979	15,833,979	
22	1986	44					31,668	15,834	31,668	15,834		15,849,813	15,849,813	
23	1987	43					31,700	15,850	31,700	15,850		15,865,663	15,865,663	
24	1988	42					31,731	15,866	31,731	15,866		15,881,529	15,881,529	
25	1989	41	15,006,487			217,004						15,006,487	15,006,487	
26	1990	40										15,006,487	15,006,487	
27	1991	39		18,862	220,008				18,862	220,008		14,805,342	14,805,342	
28	1992	38		43,461	9,500				43,461	9,500		14,839,303	14,839,303	
29	1993	37	1,334,256		290,000				1,334,256	290,000		15,883,559	15,883,559	
30	1994	36			2,000					2,000		15,881,559	15,881,559	
31	1995	35										15,881,559	15,881,559	
32	1996	34										15,881,559	15,881,559	
33	1997	33		43,032	24,000				43,032	24,000	61,755	15,962,346	15,962,346	
34	1998	32										15,962,346	15,962,346	
35	1999	31										15,962,346	15,962,346	
36	2000	30		1,393,832	290,000				1,393,832	290,000		17,066,178	17,066,178	
37	2001	29										17,066,178	17,066,178	
38	2002	28		32,631	12,000				32,631	12,000		17,086,809	17,086,809	
39	2003	27										17,086,809	17,086,809	
40	2004	26										17,086,809	17,086,809	
41	2005	25										17,086,809	17,086,809	
42	2006	24										17,086,809	17,086,809	
43	2007	23		450,813	217,004				450,813	217,004	(21)	17,320,597	17,320,597	
44	2008	22										17,086,809	17,086,809	
45	Total		\$ 15,006,487	\$ 3,316,888	\$ 1,064,512	\$ 1,064,512	\$ 16,242,457	\$ 360,928	\$ 19,559,345	\$ 1,425,440	\$ 61,734	\$ 376,809,675	\$ 325,046,699	\$ 701,856,374

Major Additions/Retirements  
 1993 \$ 1,334,256  
 1997 \$ 1,393,832  
 Routine Activity \$ 588,800 \$ 1,064,512  
 46 Historical Interim Activity 0.18% 0.33%  
 47 Forecast Interim Activity 0.20% 0.10%

48	2009	21							34,174	17,087			17,103,896
49	2010	20							34,208	17,104			17,121,000
50	2011	19							34,242	17,121			17,138,121
51	2012	18							34,276	17,138			17,155,259
52	2013	17							34,311	17,155			17,172,414
53	2014	16							34,345	17,172			17,189,587
54	2015	15							34,379	17,189			17,206,776
55	2016	14							34,413	17,206			17,223,992
56	2017	13							34,448	17,224			17,241,234
57	2018	12							34,482	17,241			17,258,501
58	2019	11							34,517	17,258			17,275,818
59	2020	10							34,551	17,276			17,293,194
60	2021	9							34,586	17,293			17,310,527
61	2022	8							34,620	17,310			17,327,917
62	2023	7							34,655	17,328			17,345,362
63	2024	6							34,690	17,345			17,362,862
64	2025	5							34,724	17,362			17,380,416
65	2026	4							34,759	17,380			17,398,024
66	2027	3							34,794	17,397			17,415,687
67	2028	2							34,829	17,414			17,433,406
68	2029	1							34,864	17,432			17,451,180
69	2030	0							34,898	17,449	(17,466,640)		17,466,640
									\$ 20,284,696	\$ 1,770,961			\$ 1,064,911,999

**Whole Life Depreciation Rate Calculation**  
 Historical Additions 19,559,345  
 Forecast Additions 725,352  
 Total Additions 20,284,696  
 Gross Salvage Value 1,746,664  
 Less Cost of Removal 873,332  
 Net Salvage Value 873,332  
 Total to be Recovered 19,411,364  
 Forecast Plant Balances 1,064,911,999  
 Whole Life Accrual Rate 1.82%  
 Cost of Removal Accrual Rate 0.08%  
 Whole Life Accrual Rate (Excluding Cost of Removal) 1.74%  
 Depreciable Service Life, years 54.9

**Remaining Life Depreciation Rate Calculation**  
 Account Balance 12/31/08 17,086,809  
 Forecast Additions 725,352  
 Gross Salvage Value 1,746,664  
 Less Cost of Removal 873,332  
 Net Salvage Value 873,332  
 Forecast Plant Balances 363,055,625

**Black Hills Power**

Gross Salvage 8%  
 Cost of Removal 10%  
 Net Salvage -2%  
 Install Date 1965  
 Retirement Date 2030  
 Service Life, Yrs 65

**Unit Property Depreciation Rate Analysis**  
**Unit Property: Other Production, Ben French Plant**

2008

**Historical and Forecast Plant Additions & Balances**  
**Account: 345 Accessory Electric Equipment**

Initial Plant Balance 0

			[A]	[B]	[C]	[D]	[E]	[F]	[G]	[H]	[I]	[J]	[K]	[L]	[M]	[N]
Line	Vintage Year	Vintage Age	Reported Per Books				Adjustments to Transaction				Transfers and Adjustments	EOY Plant Balance				
			Transaction Year			Vintage Year Retirements	Year		Adjusted Transaction Year			Adjustments	Per Books	Simulated		
			Beg Balance	Additions	Retirements		Additions	Retirements	Additions	Retirements						
1	1965	65						87,379			87,379					87,379
2	1966	64					4,000	22	-	22	-					87,400
3	1967	63						22	-	22	-					87,422
4	1968	62						22	-	22	-					87,443
5	1969	61						22	-	22	-					87,465
6	1970	60						22	-	22	-					87,486
7	1971	59						22	-	22	-					87,508
8	1972	58						22	-	22	-					87,529
9	1973	57						22	-	22	-					87,551
10	1974	56						22	-	22	-					87,572
11	1975	55						22	-	22	-					87,594
12	1976	54						22	-	22	-					87,616
13	1977	53						22	-	22	-					87,637
14	1978	52						22	-	22	-					87,659
15	1979	51						22	-	22	-					87,680
16	1980	50						22	-	22	-					87,702
17	1981	49						22	-	22	-					87,724
18	1982	48						22	-	22	-					87,745
19	1983	47					9,501	22	-	22	-					87,767
20	1984	46						22	-	22	-					87,789
21	1985	45						22	-	22	-					87,810
22	1986	44						22	-	22	-					87,832
23	1987	43						22	-	22	-					87,853
24	1988	42						22	-	22	-					87,875
25	1989	41	84,926					-	-	-	-				84,926	84,926
26	1990	40						-	-	-	-				84,926	84,926
27	1991	39						-	-	-	-				84,926	84,926
28	1992	38						-	-	-	-				84,926	84,926
29	1993	37						-	-	-	-				84,926	84,926
30	1994	36		52,758	13,501					52,758	13,501				124,183	124,183
31	1995	35								-	-				124,183	124,183
32	1996	34		2,243						2,243	-				126,426	126,426
33	1997	33								-	-				126,426	126,426
34	1998	32								-	-	616,876			743,302	743,302
35	1999	31								-	-	-			743,302	743,302
36	2000	30								-	-	-			743,302	743,302
37	2001	29								-	-	-			743,302	743,302
38	2002	28								-	-	-			743,302	743,302
39	2003	27								-	-	-			743,302	743,302
40	2004	26								-	-	-			743,302	743,302
41	2005	25								-	-	-			743,302	743,302
42	2006	24								-	-	-			743,302	743,302
43	2007	23								-	-	-			743,302	743,302
44	2008	22								-	-	-			743,302	743,302
45	Total		\$ 84,926	\$ 55,001	\$ 13,501	\$ 13,501	\$ 87,875	\$ -	\$ -	\$ 142,876	\$ 13,501	\$ 616,876	\$ 2,103,038	\$ 9,102,174	\$ 11,205,212	

Major Additions/Retirements  
 1994 \$ 52,758  
 1997 \$ -  
 Routine Activity \$ 2,243 \$ 13,501  
 Historical Interim Activity 0.02% 0.15%  
 Forecast Interim Activity 0.02% 0.00%

48	2009	21								183	-				743,485	743,485
49	2010	20								183	-				743,669	743,669
50	2011	19								183	-				743,852	743,852
51	2012	18								183	-				744,035	744,035
52	2013	17								183	-				744,218	744,218
53	2014	16								183	-				744,402	744,402
54	2015	15								183	-				744,585	744,585
55	2016	14								183	-				744,769	744,769
56	2017	13								184	-				744,952	744,952
57	2018	12								184	-				745,136	745,136
58	2019	11								184	-				745,319	745,319
59	2020	10								184	-				745,503	745,503
60	2021	9								184	-				745,687	745,687
61	2022	8								184	-				745,871	745,871
62	2023	7								184	-				746,054	746,054
63	2024	6								184	-				746,238	746,238
64	2025	5								184	-				746,422	746,422
65	2026	4								184	-				746,606	746,606
66	2027	3								184	-				746,790	746,790
67	2028	2								184	-				746,974	746,974
68	2029	1								184	-				747,158	747,158
69	2030	0								184	-				747,342	747,342
												(747,158)				
			\$ 146,732	\$ 13,501												
\$ 26,856,937																

**Whole Life Depreciation Rate Calculation**

Historical Additions	759,752
Forecast Additions	3,856
Total Additions	763,608
Gross Salvage Value	59,773
Less Cost of Removal	74,716
Net Salvage Value	(14,943)
Total to be Recovered	778,551

Forecast Plant Balances 26,856,937

Whole Life Accrual Rate 2.90%

Cost of Removal Accrual Rate 0.28%

Whole Life Accrual Rate (Excluding Cost of Removal) 2.62%

Depreciable Service Life, years 34.5

**Remaining Life Depreciation Rate Calculation**

Account Balance 12/31/08	743,302
Forecast Additions	3,856
Gross Salvage Value	59,773
Less Cost of Removal	74,716
Net Salvage Value	(14,943)

Forecast Plant Balances 15,651,725

Black Hills Power  
 Unit Property Depreciation Rate Analysis  
 Unit Property: Other Production, Ben French CT Plant

Gross Salvage 8%  
 Cost of Removal 10%  
 Net Salvage -2%  
 Install Date 1965  
 Retirement Date 2030  
 Service Life, Yrs 65

Historical and Forecast Plant Additions & Balances  
 Account: 346 Misc Power Equipment

Initial Plant Balance 0

Line	Vintage Year	Vintage Age	Reported Per Books				Adjustments to Transaction		Adjusted Transaction Year		Transfers and Adjustments	EOY Plant Balance			
			Transaction Year			Vintage Year	Year		Adjustments	Per Books		Simulated			
			Beg Balance	Additions	Retirements	Retirements	Additions	Retirements	Additions	Retirements	Adjustments	Per Books	Simulated		
1	1965	65						14,718				14,718		14,718	
2	1966	64										14,718		14,718	
3	1967	63										14,718		14,718	
4	1968	62										14,718		14,718	
5	1969	61										14,718		14,718	
6	1970	60										14,718		14,718	
7	1971	59										14,718		14,718	
8	1972	58										14,718		14,718	
9	1973	57										14,718		14,718	
10	1974	56										14,718		14,718	
11	1975	55										14,718		14,718	
12	1976	54										14,718		14,718	
13	1977	53										14,718		14,718	
14	1978	52										14,718		14,718	
15	1979	51										14,718		14,718	
16	1980	50										14,718		14,718	
17	1981	49										14,718		14,718	
18	1982	48										14,718		14,718	
19	1983	47										14,718		14,718	
20	1984	46										14,718		14,718	
21	1985	45										14,718		14,718	
22	1986	44										14,718		14,718	
23	1987	43										14,718		14,718	
24	1988	42										14,718		14,718	
25	1989	41	14,718										14,718	14,718	
26	1990	40											14,718	14,718	
27	1991	39											14,718	14,718	
28	1992	38											14,718	14,718	
29	1993	37											14,718	14,718	
30	1994	36											14,718	14,718	
31	1995	35											14,718	14,718	
32	1996	34											14,718	14,718	
33	1997	33											14,718	14,718	
34	1998	32											14,718	14,718	
35	1999	31											14,718	14,718	
36	2000	30											14,718	14,718	
37	2001	29											14,718	14,718	
38	2002	28											14,718	14,718	
39	2003	27											14,718	14,718	
40	2004	26											14,718	14,718	
41	2005	25											14,718	14,718	
42	2006	24											14,718	14,718	
43	2007	23											14,718	14,718	
44	2008	22											14,718	14,718	
45	Total		\$ 14,718	\$ -	\$ -	\$ -	\$ -	\$ 14,718	\$ -	\$ 14,718	\$ -	\$ -	\$ 353,223	\$ 294,352	\$ 647,575

Major Additions/Retirements

46	Routine Activity	\$ -	\$ -
47	Historical Interim Activity	0.00%	0.00%
47	Forecast Interim Activity	0.00%	0.00%

48	2009	21													14,718
49	2010	20													14,718
50	2011	19													14,718
51	2012	18													14,718
52	2013	17													14,718
53	2014	16													14,718
54	2015	15													14,718
55	2016	14													14,718
56	2017	13													14,718
57	2018	12													14,718
58	2019	11													14,718
59	2020	10													14,718
60	2021	9													14,718
61	2022	8													14,718
62	2023	7													14,718
63	2024	6													14,718
64	2025	5													14,718
65	2026	4													14,718
66	2027	3													14,718
67	2028	2													14,718
68	2029	1													14,718
69	2030	0													14,718
													(14,718)		
			\$ 14,718	\$ -											\$ 956,645

Whole Life Depreciation Rate Calculation

Historical Additions	14,718
Forecast Additions	-
Total Additions	14,718
Gross Salvage Value	1,177
Less Cost of Removal	1,472
Net Salvage Value	(294)
Total to be Recovered	15,012
Forecast Plant Balances	956,645
Whole Life Accrual Rate	1.57%
Cost of Removal Accrual Rate	0.15%
Whole Life Accrual Rate (Excluding Cost of Removal)	1.42%
Depreciable Service Life, years	63.7

Remaining Life Depreciation Rate Calculation

Account Balance 12/31/08	14,718
Forecast Additions	-
Gross Salvage Value	1,177
Less Cost of Removal	1,472
Net Salvage Value	(294)
Forecast Plant Balances	309,070

**Black Hills Power  
Wygen III Depreciation Rate**

Forecast Inservice Date: 2010  
 Forecast Retirement Date: 2055  
 Forecast Service Life (years): 45

Account	Description	Projected Investment 2010\$	Black Hills Power 52% Ownership	Depreciation Rate	
310	Land	-	-	0.00%	
311	Structure & Improvements	11,225,632	5,837,329	2.77%	
312	Boiler Plant Equipment	128,277,334	66,704,214	2.90%	
313	Engines & Engine Driven Generators	-	-	0.00%	
314	Turbo Generator Equipment	95,113,867	49,459,211	2.50%	
315	Accessory Electric Equipment	12,268,457	6,379,598	2.50%	
316	Misc Power Equipment	114,710	59,649	5.72%	
	<b>Total</b>	247,000,000	128,440,000	2.72%	whole life weighted average



<b>Black Hills Power</b>	Gross Salvage	5%
	Cost of Removal	10%
<b>Unit Property Depreciation Rate Analysis</b>	Net Salvage	-5%
<b>Unit Property: Steam Production, Wygen III Plant</b>	Install Date	2010
<b>Modeled on Wygen II Depreciation Rate Assumptions</b>	Retirement Date	2055
	Service Life, Yrs	45

**Historical and Forecast Plant Additions & Balances**

<b>Account:</b>	<b>311 Structures &amp; Improvements</b>	Projected Initial Plant Balance	5,837,329			
	[A]	[B]	[C]			
	[D]	[E]	[F]			
<b>Line</b>	<b>Vintage Year</b>	<b>Vintage Age</b>	<b>Interim Additions</b>	<b>Interim Retirements</b>	<b>Final Retirements</b>	<b>EOY Plant Balance</b>
			\$	\$	\$	\$
1	Forecast Interim Activity		0.80%	0.00%		
2	2010	45	-	-		5,837,329
3	2011	44	46,699	-		5,884,027
4	2012	43	47,072	-		5,931,099
5	2013	42	47,449	-		5,978,548
6	2014	41	47,828	-		6,026,377
7	2015	40	48,211	-		6,074,588
8	2016	39	48,597	-		6,123,184
9	2017	38	48,985	-		6,172,170
10	2018	37	49,377	-		6,221,547
11	2019	36	49,772	-		6,271,320
12	2020	35	50,171	-		6,321,490
13	2021	34	50,572	-		6,372,062
14	2022	33	50,976	-		6,423,039
15	2023	32	51,384	-		6,474,423
16	2024	31	51,795	-		6,526,218
17	2025	30	52,210	-		6,578,428
18	2026	29	52,627	-		6,631,055
19	2027	28	53,048	-		6,684,104
20	2028	27	53,473	-		6,737,577
21	2029	26	53,901	-		6,791,477
22	2030	25	54,332	-		6,845,809
23	2031	24	54,766	-		6,900,576
24	2032	23	55,205	-		6,955,780
25	2033	22	55,646	-		7,011,426
26	2034	21	56,091	-		7,067,518
27	2035	20	56,540	-		7,124,058
28	2036	19	56,992	-		7,181,050
29	2037	18	57,448	-		7,238,499
30	2038	17	57,908	-		7,296,407
31	2039	16	58,371	-		7,354,778
32	2040	15	58,838	-		7,413,616
33	2041	14	59,309	-		7,472,925
34	2042	13	59,783	-		7,532,709
35	2043	12	60,262	-		7,592,970
36	2044	11	60,744	-		7,653,714
37	2045	10	61,230	-		7,714,944
38	2046	9	61,720	-		7,776,663
39	2047	8	62,213	-		7,838,877
40	2048	7	62,711	-		7,901,588
41	2049	6	63,213	-		7,964,800
42	2050	5	63,718	-		8,028,519
43	2051	4	64,228	-		8,092,747
44	2052	3	64,742	-		8,157,489
45	2053	2	65,260	-		8,222,749
46	2054	1	65,782	-		8,288,531
47	2055	0	-	-	8,288,531	-
			2,451,202	-	\$ 8,288,531	314,688,805

**Whole Life Depreciation Rate Calculation**

Initial Balance	5,837,329
Interim Additions	2,451,202
Gross Salvage Value	414,427
Less Cost of Removal	828,853
Net Salvage Value	(414,427)
Total to be Recovered	8,702,957
Forecast Plant Balances	314,688,805
Gross Accrual Rate	2.50%
Cost of Removal Accrual Rate	0.26%
Whole Life Accrual Rate	2.77%

Whole Life Service Life, years 36.2

<b>Black Hills Power</b>	Gross Salvage	5%
	Cost of Removal	10%
<b>Unit Property Depreciation Rate Analysis</b>	Net Salvage	-5%
<b>Unit Property: Steam Production, Wygen III Plant</b>	Install Date	2010
<b>Modeled on Wygen II Depreciation Rate Assumptions</b>	Retirement Date	2055
	Service Life, Yrs	45

**Historical and Forecast Plant Additions & Balances**

Account: 312 Boiler Plant Equipment      Projected Initial Plant Balance      66,704,214

	[A]	[B]	[C]	[D]	[E]	[F]
Line	Vintage Year	Vintage Age	Interim		Final	EOY Plant
			Additions	Retirements	Retirements	Balance
			\$	\$	\$	\$
1	Forecast Interim Activity		0.50%	0.05%		
2	2010	45	-	-		66,704,214
3	2011	44	333,521	33,352		67,004,383
4	2012	43	335,022	33,502		67,305,902
5	2013	42	336,530	33,653		67,608,779
6	2014	41	338,044	33,804		67,913,018
7	2015	40	339,565	33,957		68,218,627
8	2016	39	341,093	34,109		68,525,611
9	2017	38	342,628	34,263		68,833,976
10	2018	37	2,753,636	34,417		71,553,195
11	2019	36	357,766	35,777		71,875,184
12	2020	35	359,376	35,938		72,198,623
13	2021	34	360,993	36,099		72,523,516
14	2022	33	362,618	36,262		72,849,872
15	2023	32	364,249	36,425		73,177,697
16	2024	31	365,888	36,589		73,506,996
17	2025	30	3,231,633	36,753		76,701,876
18	2026	29	383,509	38,351		77,047,034
19	2027	28	385,235	38,524		77,393,746
20	2028	27	386,969	38,697		77,742,018
21	2029	26	388,710	38,871		78,091,857
22	2030	25	390,459	39,046		78,443,270
23	2031	24	392,216	39,222		78,796,265
24	2032	23	3,798,493	39,398		82,555,360
25	2033	22	412,777	41,278		82,926,859
26	2034	21	414,634	41,463		83,300,030
27	2035	20	416,500	41,650		83,674,880
28	2036	19	418,374	41,837		84,051,417
29	2037	18	420,257	42,026		84,429,649
30	2038	17	422,148	42,215		84,809,582
31	2039	16	4,470,943	42,405		89,238,120
32	2040	15	446,191	44,619		89,639,692
33	2041	14	448,198	44,820		90,043,070
34	2042	13	450,215	45,022		90,448,264
35	2043	12	452,241	45,224		90,855,281
36	2044	11	454,276	45,428		91,264,130
37	2045	10	456,321	45,632		91,674,819
38	2046	9	5,268,861	45,837		96,897,842
39	2047	8	484,489	48,449		97,333,883
40	2048	7	486,669	48,667		97,771,885
41	2049	6	488,859	48,886		98,211,859
42	2050	5	491,059	49,106		98,653,812
43	2051	4	493,269	49,327		99,097,754
44	2052	3	495,489	49,549		99,543,694
45	2053	2	497,718	49,772		99,991,641
46	2054	1	499,958	49,996		100,441,603
47	2055	0	-	50,221	100,391,382	-
			35,537,604	1,850,435	\$ 100,391,382	3,700,870,786

**Whole Life Depreciation Rate Calculation**

Initial Balance	66,704,214
Interim Additions	35,537,604
Gross Salvage Value	5,019,569
Less Cost of Removal	10,039,138
Net Salvage Value	(5,019,569)
Total to be Recovered	107,261,387

Forecast Plant Balances      3,700,870,786

Gross Accrual Rate	2.63%
Cost of Removal Accrual Rate	0.27%
Whole Life Accrual Rate	2.90%

Whole Life Service Life, years      34.5

<b>Black Hills Power</b>	Gross Salvage	5%
	Cost of Removal	10%
<b>Unit Property Depreciation Rate Analysis</b>	Net Salvage	-5%
<b>Unit Property: Steam Production, Wygen III Plant</b>	Install Date	2010
<b>Modeled on Wygen II Depreciation Rate Assumptions</b>	Retirement Date	2055
	Service Life, Yrs	45

**Historical and Forecast Plant Additions & Balances**

**Account: 314 Turbogenerator Equipment**      Projected Initial Plant Balance      49,459,211

Line	[A]	[B]	[C]		[D]	[E]	[F]
	Vintage	Vintage	Interim			Final	EOY Plant
	Year	Age	Additions	Retirements	Retirements	Balance	
			\$	\$	\$	\$	
1	Forecast Interim Activity		0.30%	0.03%			
2	2010	45	-	-			49,459,211
3	2011	44	148,378	14,838			49,592,751
4	2012	43	148,778	14,878			49,726,651
5	2013	42	149,180	14,918			49,860,913
6	2014	41	149,583	14,958			49,995,538
7	2015	40	149,987	14,999			50,130,526
8	2016	39	150,392	15,039			50,265,878
9	2017	38	150,798	15,080			50,401,596
10	2018	37	151,205	15,120			50,537,680
11	2019	36	151,613	15,161			50,674,132
12	2020	35	152,022	15,202			50,810,952
13	2021	34	152,433	15,243			50,948,142
14	2022	33	152,844	15,284			51,085,702
15	2023	32	153,257	15,326			51,223,633
16	2024	31	153,671	15,367			51,361,937
17	2025	30	154,086	15,409			51,500,614
18	2026	29	154,502	15,450			51,639,666
19	2027	28	154,919	15,492			51,779,093
20	2028	27	155,337	15,534			51,918,896
21	2029	26	155,757	15,576			52,059,077
22	2030	25	156,177	15,618			52,199,637
23	2031	24	156,599	15,660			52,340,576
24	2032	23	157,022	15,702			52,481,895
25	2033	22	157,446	15,745			52,623,597
26	2034	21	157,871	15,787			52,765,680
27	2035	20	158,297	15,830			52,908,148
28	2036	19	158,724	15,872			53,051,000
29	2037	18	159,153	15,915			53,194,237
30	2038	17	159,583	15,958			53,337,862
31	2039	16	160,014	16,001			53,481,874
32	2040	15	160,446	16,045			53,626,275
33	2041	14	160,879	16,088			53,771,066
34	2042	13	161,313	16,131			53,916,248
35	2043	12	161,749	16,175			54,061,822
36	2044	11	162,185	16,219			54,207,789
37	2045	10	162,623	16,262			54,354,150
38	2046	9	163,062	16,306			54,500,906
39	2047	8	163,503	16,350			54,648,058
40	2048	7	163,944	16,394			54,795,608
41	2049	6	164,387	16,439			54,943,556
42	2050	5	164,831	16,483			55,091,904
43	2051	4	165,276	16,528			55,240,652
44	2052	3	165,722	16,572			55,389,802
45	2053	2	166,169	16,617			55,539,354
46	2054	1	166,618	16,662			55,689,310
47	2055	0	-	16,707	55,672,604		-
			6,922,333	708,940	\$ 55,672,604		2,363,133,589

**Whole Life Depreciation Rate Calculation**

Initial Balance	49,459,211
Interim Additions	6,922,333
Gross Salvage Value	2,783,630
Less Cost of Removal	5,567,260
Net Salvage Value	(2,783,630)
Total to be Recovered	59,165,174

Forecast Plant Balances      2,363,133,589

Gross Accrual Rate	2.27%
Cost of Removal Accrual Rate	0.24%
Whole Life Accrual Rate	2.50%

Whole Life Service Life, years      39.9

<b>Black Hills Power</b>	Gross Salvage	5%
	Cost of Removal	10%
<b>Unit Property Depreciation Rate Analysis</b>	Net Salvage	-5%
<b>Unit Property: Steam Production, Wygen III Plant</b>	Install Date	2010
<b>Modeled on Wygen II Depreciation Rate Assumptions</b>	Retirement Date	2055
	Service Life, Yrs	45

**Historical and Forecast Plant Additions & Balances**

Account: 315 Accessory Electric Equipment      Projected Initial Plant Balance      6,379,598

Line	[A]	[B]	[C]		[D]	[E]	[F]
	Vintage Year	Vintage Age	Interim			Final	EOY Plant
			Additions	Retirements		Retirements	Balance
			\$	\$		\$	\$
1	Forecast Interim Activity		0.30%	0.03%			
2	2010	42	-	-			6,379,598
3	2008	44	19,139	1,914			6,396,823
4	2009	43	19,190	1,919			6,414,094
5	2010	42	19,242	1,924			6,431,412
6	2011	41	19,294	1,929			6,448,777
7	2012	40	19,346	1,935			6,466,189
8	2013	39	19,399	1,940			6,483,647
9	2014	38	19,451	1,945			6,501,153
10	2015	37	19,503	1,950			6,518,706
11	2016	36	19,556	1,956			6,536,307
12	2017	35	19,609	1,961			6,553,955
13	2018	34	19,662	1,966			6,571,650
14	2019	33	19,715	1,971			6,589,394
15	2020	32	19,768	1,977			6,607,185
16	2021	31	19,822	1,982			6,625,025
17	2022	30	19,875	1,988			6,642,912
18	2023	29	19,929	1,993			6,660,848
19	2024	28	19,983	1,998			6,678,832
20	2025	27	20,036	2,004			6,696,865
21	2026	26	20,091	2,009			6,714,947
22	2027	25	20,145	2,014			6,733,077
23	2028	24	20,199	2,020			6,751,256
24	2029	23	20,254	2,025			6,769,485
25	2030	22	20,308	2,031			6,787,762
26	2031	21	20,363	2,036			6,806,089
27	2032	20	20,418	2,042			6,824,466
28	2033	19	20,473	2,047			6,842,892
29	2034	18	20,529	2,053			6,861,368
30	2035	17	20,584	2,058			6,879,893
31	2036	16	20,640	2,064			6,898,469
32	2037	15	20,695	2,070			6,917,095
33	2038	14	20,751	2,075			6,935,771
34	2039	13	20,807	2,081			6,954,498
35	2040	12	20,863	2,086			6,973,275
36	2041	11	20,920	2,092			6,992,103
37	2042	10	20,976	2,098			7,010,981
38	2043	9	21,033	2,103			7,029,911
39	2044	8	21,090	2,109			7,048,892
40	2045	7	21,147	2,115			7,067,924
41	2046	6	21,204	2,120			7,087,007
42	2047	5	21,261	2,126			7,106,142
43	2048	4	21,318	2,132			7,125,329
44	2049	3	21,376	2,138			7,144,567
45	2050	2	21,434	2,143			7,163,857
46	2051	1	21,492	2,149			7,183,200
47	2052	0	-	2,155	7,181,045		-
			892,891	91,444	\$ 7,181,045		304,813,627

**Whole Life Depreciation Rate Calculation**

Initial Balance	6,379,598
Interim Additions	892,891
Gross Salvage Value	359,052
Less Cost of Removal	718,104
Net Salvage Value	(359,052)
Total to be Recovered	7,631,541

Forecast Plant Balances      304,813,627

Gross Accrual Rate	2.27%
Cost of Removal Accrual Rate	0.24%
Whole Life Accrual Rate	2.50%

Whole Life Service Life, years      39.9

<b>Black Hills Power</b>	Gross Salvage	5%
	Cost of Removal	10%
<b>Unit Property Depreciation Rate Analysis</b>	Net Salvage	-5%
<b>Unit Property: Steam Production, Wygen III Plant</b>	Install Date	2010
<b>Modeled on Wygen II Depreciation Rate Assumptions</b>	Retirement Date	2055
	Service Life, Yrs	45

**Historical and Forecast Plant Additions & Balances**

Account: 316 Miscellaneous Plant Equipment      Projected Initial Plant Balance      59,649

Line	[A]	[B]	[C]		[D]	[E]	[F]
	Vintage Year	Vintage Age	Interim			Final	EOY Plant
			Additions	Retirements		Retirements	Balance
			\$	\$		\$	\$
1	Forecast Interim Activity		5.00%	0.50%			
2	2009	45	-	-			59,649
2	2010	44	2,982	298			62,333
3	2011	43	3,117	312			65,138
4	2012	42	3,257	326			68,070
5	2013	41	3,403	340			71,133
6	2014	40	3,557	356			74,334
7	2015	39	3,717	372			77,679
8	2016	38	3,884	388			81,174
9	2017	37	4,059	406			84,827
10	2018	36	4,241	424			88,644
11	2019	35	4,432	443			92,633
12	2020	34	4,632	463			96,802
13	2021	33	4,840	484			101,158
14	2022	32	5,058	506			105,710
15	2023	31	5,286	529			110,467
16	2024	30	5,523	552			115,438
17	2025	29	5,772	577			120,633
18	2026	28	6,032	603			126,061
19	2027	27	6,303	630			131,734
20	2028	26	6,587	659			137,662
21	2029	25	6,883	688			143,857
22	2030	24	7,193	719			150,330
23	2031	23	7,517	752			157,095
24	2032	22	7,855	785			164,165
25	2033	21	8,208	821			171,552
26	2034	20	8,578	858			179,272
27	2035	19	8,964	896			187,339
28	2036	18	9,367	937			195,769
29	2037	17	9,788	979			204,579
30	2038	16	10,229	1,023			213,785
31	2039	15	10,689	1,069			223,405
32	2040	14	11,170	1,117			233,458
33	2041	13	11,673	1,167			243,964
34	2042	12	12,198	1,220			254,942
35	2043	11	12,747	1,275			266,415
36	2044	10	13,321	1,332			278,404
37	2045	9	13,920	1,392			290,932
38	2046	8	14,547	1,455			304,024
39	2047	7	15,201	1,520			317,705
40	2048	6	15,885	1,589			332,001
41	2049	5	16,600	1,660			346,941
42	2050	4	17,347	1,735			362,554
43	2051	3	18,128	1,813			378,869
44	2052	2	18,943	1,894			395,918
45	2053	1	19,796	1,980			413,734
46	2054	0	-	2,069		411,666	-
			393,428	41,411	\$	411,666	8,282,289

**Whole Life Depreciation Rate Calculation**

Initial Balance	59,649
Interim Additions	393,428
Gross Salvage Value	20,583
Less Cost of Removal	41,167
Net Salvage Value	(20,583)
Total to be Recovered	473,660

Forecast Plant Balances      8,282,289

Gross Accrual Rate	5.22%
Cost of Removal Accrual Rate	0.50%
Whole Life Accrual Rate	5.72%

Whole Life Service Life, years      17.5