Black Hills Power, Inc. South Dakota Cost of Service Model Description

Section P

20:10:13:100. Statement P -- Fuel cost adjustment factor. Statement P shall show the derivation of the cost adjustment factor as stated therein if the rate schedule or sales contract embodies a fuel clause or gas adjustment clause. If the fuel clause differs from the one prescribed by the commission, the statement shall show the derivation as proposed by the company and as prescribed by the commission.

Source: 2 SDR 90, effective July 7, 1976; 12 SDR 151, 12 SDR 155, effective July 1, 1986.

General Authority:SDCL <u>49-34A-4.</u>

Law Implemented:SDCL <u>49-34A-10</u>, <u>49-34A-12</u>, <u>49-34A-41</u>.

Statement P page 1 is the Steam Plant Fuel Adjustment. This schedule calculates the base unit cost for Steam Plant Fuel expenses by taking the adjusted Steam Plant Fuel expenses and dividing by the adjusted system energy sales.

Statement P page 2 is the Transmission Adjustment. This schedule calculates a base unit cost for Transmission by taking the adjusted Transmission expenses and dividing by the total adjusted retail energy sales.

Statement P page 3 is the Adjustment for Other Fuel and Purchased Power. This schedule calculates a base unit cost for the Other Fuel and Purchase Power Expense by taking the adjusted Other Fuel and Purchase Power Expenses and dividing them by the adjusted total system energy sales.

Statement P Page 1 of 3

BLACK HILLS POWER, INC. DERIVATION OF BASE UNIT COST FOR STEAM PLANT FUEL COST ADJUSTMENT FOR THE TEST YEAR ENDED JUNE 30, 2009

Line			
No.	Steam Plant Fuel Cost Adjustment Calculation	Reference	Amount
1	Steam Plant Fuel Expense - FERC Account 501	Stmt H Sum of Ln.3 - Ln.1.7(a)	\$ 20,927,309
2 3	Less: Steam Plant Fuel Expense for Power Marketing	Sched H-12 Ln.5 + Sched H-14 Ln.19(k)	(5,670,368)
4 5	Plus: Increase in Stmt R Pricing	Sched H-15 Ln.7(g)	1,539,886
6 7	Plus: Increase in Coal Handling for Wygen III	Sched H-6 Ln.6(d)	258,306
8 9	Plus: Wygen III Coal Usage	Sched H-7 pg.2 Ln.16 (Total)	3,596,934
10			
11 12	Plus: Wage Increase for Coal Handling	Stmt H Ln. 3(b)	43,170
13 14	Base Cost for Steam Plant Fuel Expense	Sum of Ln.1 - Ln.11	\$ 20,695,237
15 16	<u>kWh SALE</u>	<u>S</u>	
17 18	System Energy Sales (Adjusted)	WP-1 Ln.39(e) *1000	1,971,984,000
19	Base Unit Cost for Steam Plant Fuel	Ln.13 ÷ Ln.17	<u>\$ 0.01049</u> /kWh
20 21	Base Unit Cost for Steam Plant Fuel	Approved Docket EL06-019	<u>\$ 0.00631</u> /kWh
22 23	Increase/(Decrease) in Base Unit Cost for Transmission	Ln.19 - Ln.21	<u>\$ 0.00418</u> /kWh

BLACK HILLS POWER, INC. DERIVATION OF BASE UNIT COST OF TRANSMISSION FOR THE TEST YEAR ENDED JUNE 30, 2009

Statement P Page 2 of 3

Line No.	Transmission Cost Adjustment Calculation	Reference	Amount	
			-	
1	Transmission Expense	Stmt H pg.2 Ln.54(a)	\$	13,029,554
2				
3	Less: Transmission Expense for Power Marketing	Sched H-12 Ln.11		(1,217,426)
4				
5	Transmission Adjustments	Sched H-11 Ln.20		1,710,973
6				
7	Base Cost for Transmission Expense	Sum of Ln.1 - Ln.5	\$	13,523,101
8				
9	<u>kWh SALES</u>			
10				
11	Retail Energy Sales	WP-1 Ln.34(e) * 1000	1	,655,919,000
12				
13	Base Unit Cost for Transmission	$Ln.7 \div Ln.11$	\$	0.00817 /kWh
14				
15	Base Unit Cost for Transmission	Approved Docket EL06-019	\$	0.00599 /kWh
16				
17	Increase/(Decrease) in Base Unit Cost for Transmission	Ln.13 - Ln.15	\$	0.00218 /kWh

BLACK HILLS POWER, INC. DERIVATION OF BASE UNIT COST OF OTHER FUEL AND PURCHASED POWER (CECA) FOR THE TEST YEAR ENDED JUNE 30, 2009

Statement P Page 3 of 3

Line			
No.	Conditional Energy Cost Adjustment (CECA)	Reference	 Amount
1 2	Other Fuel - Per Books	Stmt H Ln.26(a)	\$ 2,778,194
2 3 4	Purchase Power Expenses - Per Books	Stmt H Ln.44(a)	57,649,169
5 6	Less: Other Fuel used in Power Marketing	Sched H-12 Ln.7	(1,407,885)
7 8	Less: Purchase Power used in Power Marketing	Sched H-12 Ln.9	(37,407,018)
9 10	Less: Savings due to Wygen III	Sched H-9 Ln.9 + Sched H-9 Ln.19	(12,953,335)
11 12	Base Cost for Other Fuel and Purchase Power Expense	Sum of Ln.1 - Ln.11	\$ 8,659,125
13 14	<u>kWh SALES</u>		
15 16	System Energy Sales (Adjusted)	WP-1 Ln.39(e) *1000	1,971,984,000
17 18	Base Unit Cost for Other Fuel and Purchased Power	Ln.11 ÷ Ln.15	\$ 0.00439 /kWh
19 20	Base Unit Cost for Other Fuel and Purchased Power	Approved Docket EL06-019	 0.00817 /kWh
21	Increase/(Decrease) in Base Unit Cost for Transmission	Ln.17 - Ln.19	 (0.00378) /kWh