



**TRANSMISSION FACILITY ADJUSTMENT**  
**For the Pro Forma Year Ended May 31, 2016**

Schedule	Description	Page
5-1	Cost Recovery Rate Calculation	2
5-2	Balancing Account	3
5-3	Overall Cost of Service Year 2	4
5-4	Rate Base Year 2	5
5-5	O&M and Taxes Year 2	6
5-6	Cost of Service By Customer Class Year 1	7
5-7	Overall Cost of Service Year 1	8
5-8	Rate Base Year 1	9
5-9	O&M and Taxes Year 1	10
5-10	Other Operating Revenue Year 1	11
5-11	Customer Impact	12



**BLACK HILLS POWER**  
**COST RECOVERY RATE - TRANSMISSION FACILITIES**  
 Rate Calculation Effective June 1, 2015

Line No.	Description	Reference	South Dakota
1			
2	Transmission Facilities Year 2 Revenue Requirement (June 1, 2015 through May 31, 2016)	Schedule 5-3, line 2	\$ 336,098
3			
4	Production Capacity Allocators by Customer Class		
5	Residential	Section No. 3C, Sheet No. 16	34.00%
6	Small General Service	Section No. 3C, Sheet No. 16	34.33%
7	Large General Service and Industrial	Section No. 3C, Sheet No. 16	30.70%
8	Lighting	Section No. 3C, Sheet No. 16	0.97%
9			
10	Revenue Requirement by Customer Class		
11	Residential		
12	Forecasted 2nd Year TFA Revenue Requirement	line 2 x line 5	\$ 114,273
13	Balancing Account Under/(Over) Recovery	Schedule 5-2, line 10	<u>(62,829)</u>
14	Net Residential Revenue Requirement	line 12 + line 13	<u>\$ 51,444</u>
15			
16	Small General Service		
17	Forecasted 2nd Year TFA Revenue Requirement	line 2 x line 6	\$ 115,382
18	Balancing Account Under/(Over) Recovery	Schedule 5-2, line 23	<u>(56,667)</u>
19	Net Small General Service Revenue Requirement	line 17 + line 18	<u>\$ 58,715</u>
20			
21	Large General Service and Industrial		
22	Forecasted 2nd Year TFA Revenue Requirement	line 2 x line 7	\$ 103,182
23	Balancing Account Under/(Over) Recovery	Schedule 5-2, line 36	<u>(54,253)</u>
24	Net Large General Service and Industrial Revenue Requirement	line 22 + line 23	<u>\$ 48,929</u>
25			
26	Lighting		
27	Forecasted 2nd Year TFA Revenue Requirement	line 2 x line 8	\$ 3,260
28	Balancing Account Under/(Over) Recovery	Schedule 5-2, line 49	<u>(565)</u>
29	Net Lighting Revenue Requirement	line 27 + line 28	<u>\$ 2,695</u>
30			
31	Forecasted South Dakota kWh sales		
32	Residential	6/1/15 - 5/31/16 BHP Sales Budget	515,920,540
33	Small General Service	6/1/15 - 5/31/16 BHP Sales Budget	425,969,988
34	Large General Service and Industrial	6/1/15 - 5/31/16 BHP Sales Budget	527,698,670
35	Lighting	6/1/15 - 5/31/16 BHP Sales Budget	14,208,746
36			
37	Transmission Facilities Adjustment Rate / kWh (June 1, 2015 through May 31, 2016)		
38	Residential	line 14 ÷ line 32	\$ 0.00010
39	Small General Service	line 19 ÷ line 33	\$ 0.00014
40	Large General Service and Industrial	line 24 ÷ line 34	\$ 0.00009
41	Lighting	line 29 ÷ line 35	\$ 0.00019



BLACK HILLS POWER  
TFA ANNUAL BALANCING ACCOUNT TRUE-UP

Line No.	Actual Jun-14	Actual Jul-14	Actual Aug-14	Actual Sep-14	Actual Oct-14	Actual Nov-14	Actual Dec-14	Actual Jan-15	Forecasted Feb-15	Forecasted Mar-15	Forecasted Apr-15	Forecasted May-15	Forecasted Jun-15
1	<b>Residential</b>												
2	\$ 2,335	\$ 4,670	\$ 4,670	\$ 4,670	\$ 4,670	\$ 4,670	\$ 4,670	\$ 4,670	\$ 4,670	\$ 4,670	\$ 4,670	\$ 4,670	\$ 2,335
3	3,020	8,271	9,987	8,348	7,549	8,350	12,469	13,151	11,663	11,651	9,642	8,442	3,978
4	(685)	(3,601)	(5,317)	(3,679)	(2,879)	(3,680)	(7,800)	(8,482)	(6,993)	(6,981)	(4,972)	(3,772)	(1,643)
5													
6	30	31	31	30	31	30	31	31	28	31	30	31	30
7	7.00%	7.00%	7.00%	7.00%	7.00%	7.00%	7.00%	7.00%	7.00%	7.00%	7.00%	7.00%	7.00%
8	(4)	(26)	(57)	(77)	(97)	(116)	(167)	(218)	(236)	(304)	(324)	(359)	(359)
9													
10	\$ (689)	\$ (4,316)	\$ (9,690)	\$ (13,446)	\$ (16,422)	\$ (20,218)	\$ (28,184)	\$ (36,884)	\$ (44,113)	\$ (51,398)	\$ (56,694)	\$ (60,826)	\$ (62,829)
11													
12													
13	<b>Small General Service</b>												
14	\$ 2,550	\$ 5,099	\$ 5,099	\$ 5,099	\$ 5,099	\$ 5,099	\$ 5,099	\$ 5,099	\$ 5,099	\$ 5,099	\$ 5,099	\$ 5,099	\$ 2,550
15	3,235	10,154	12,039	10,493	9,103	8,414	10,481	10,598	8,855	9,336	8,729	8,915	5,186
16	(685)	(5,055)	(6,940)	(5,394)	(4,004)	(3,314)	(5,382)	(5,499)	(3,756)	(4,237)	(3,630)	(3,816)	(2,636)
17													
18	Interest:												
19	30	31	31	30	31	30	31	31	28	31	30	31	30
20	7.00%	7.00%	7.00%	7.00%	7.00%	7.00%	7.00%	7.00%	7.00%	7.00%	7.00%	7.00%	7.00%
21	(4)	(34)	(76)	(105)	(133)	(148)	(186)	(220)	(220)	(270)	(284)	(317)	(324)
22													
23	\$ (689)	\$ (5,778)	\$ (12,793)	\$ (18,292)	\$ (22,428)	\$ (25,891)	\$ (31,459)	\$ (37,177)	\$ (41,153)	\$ (45,660)	\$ (49,573)	\$ (53,707)	\$ (56,667)
24													
25													
26	<b>Large General Service and Industrial</b>												
27	\$ 4,114	\$ 8,229	\$ 8,229	\$ 8,229	\$ 8,229	\$ 8,229	\$ 8,229	\$ 8,229	\$ 8,229	\$ 8,229	\$ 8,229	\$ 8,229	\$ 4,114
28	2,844	12,924	13,654	13,678	13,361	12,568	13,346	12,903	12,435	12,409	11,231	12,117	7,408
29	1,270	(4,696)	(5,425)	(5,449)	(5,132)	(4,340)	(5,117)	(4,674)	(4,206)	(4,180)	(3,002)	(3,888)	(3,294)
30													
31	Interest:												
32	30	31	31	30	31	30	31	31	28	31	30	31	30
33	7.00%	7.00%	7.00%	7.00%	7.00%	7.00%	7.00%	7.00%	7.00%	7.00%	7.00%	7.00%	7.00%
34	7	(20)	(53)	(83)	(116)	(138)	(174)	(203)	(207)	(255)	(266)	(299)	(310)
35													
36	\$ 1,278	\$ (3,439)	\$ (8,917)	\$ (14,449)	\$ (19,697)	\$ (24,175)	\$ (29,466)	\$ (34,343)	\$ (38,757)	\$ (43,193)	\$ (46,461)	\$ (50,649)	\$ (54,253)
37													
38													
39	<b>Lighting</b>												
40	\$ 236	\$ 473	\$ 473	\$ 473	\$ 473	\$ 473	\$ 473	\$ 473	\$ 473	\$ 473	\$ 473	\$ 473	\$ 236
41	119	420	459	502	570	600	696	672	547	525	492	431	190
42	117	53	14	(29)	(98)	(127)	(223)	(199)	(74)	(52)	(19)	42	46
43													
44	Interest:												
45	30	31	31	30	31	30	31	31	28	31	30	31	30
46	7.00%	7.00%	7.00%	7.00%	7.00%	7.00%	7.00%	7.00%	7.00%	7.00%	7.00%	7.00%	7.00%
47	1	1	1	1	0	(0)	(2)	(3)	(3)	(4)	(4)	(4)	(3)
48													
49	\$ 118	\$ 172	\$ 187	\$ 160	\$ 62	\$ (65)	\$ (289)	\$ (491)	\$ (568)	\$ (624)	\$ (647)	\$ (609)	\$ (565)



**BLACK HILLS POWER**  
**COST OF SERVICE - TRANSMISSION FACILITIES**  
**Year Two Revenue Requirement Calculation**

Line No.	Description	Reference	South Dakota Jurisdiction
1	Operating Revenue Required		
2	Transmission Facilities Revenue		\$ 336,098
3			
4	Operating Expenses		
5	Depreciation	Schedule 5-5, line 4	83,334
6	Assessed Filing Fee	Estimate	5,345
7	Total Operating Expenses		<u>88,679</u>
8			
9	Other Operating Revenues	Schedule 5-10, line 4 * 12	63,516
10			
11	Operating Income Before Tax	(line 2 - line 7 + line 9)	310,935
12			
13	Federal Income Tax	Schedule 5-5, line 15	78,895
14			
15	Return (Operating Income)	Schedule 5-5, line 12 (line 11 - line 13)	<u>\$ 232,040</u>
16			
17	Rate of Return		<u>7.76%</u>
18			
19	Rate Base		
20	Plant in Service	Schedule 5-4, line 2	3,086,426
21	Less: Accumulated Depreciation	Schedule 5-4, line 5	68,608
22	Less: Accumulated Deferred Income Taxes	Schedule 5-4, line 15	27,615
23			
24	Total Rate Base	(line 20 - line 21 - line 22)	<u>\$ 2,990,203</u>



**BLACK HILLS POWER**  
**RATE BASE - TRANSMISSION FACILITIES**  
**Year Two Revenue Requirement Calculation**

Exhibit 5  
Page 5  
Schedule 5-4

Line No.	Description	(a) Plant in Service for Rate Base	(b) South Dakota Jurisdictional Allocation	(c) (a) * (b) South Dakota Plant in Service for Rate Base
1	Property, Plant, and Equipment			
2	Lookout to Sundance Hill 69 kV Rebuild	3,086,426	100.00%	3,086,426
3				
4				
5	Book Depreciation Reserve	Schedule 5-5 line 4 x 50% +		68,608
6		Schedule 5-9, line 5		
7				
8	Accumulated Deferred Taxes		<u>Year 1</u>	<u>Year 2</u>
9	Transmission Facilities - Plant in Service - South Dakota		3,086,426	1,028,809
10	MACRS Table - Depreciation Rate (20 year life)		<u>3.75%</u>	<u>7.219%</u>
11	South Dakota Tax Depreciation		115,741	74,270
12	South Dakota Book Depreciation		<u>83,334</u>	<u>27,778</u>
13	Timing Difference		32,407	46,492
14	Federal Income Tax Rate		<u>35.00%</u>	<u>35.00%</u>
15	South Dakota Deferred Tax		<u>11,343</u>	<u>16,272</u>
16				
17				
18	South Dakota Rate Base		(line 2 - line 5 - line 15)	<u>\$ 2,990,203</u>
19				



**BLACK HILLS POWER**  
**OPERATING EXPENSES AND TAXES - TRANSMISSION FACILITIES**  
**Year Two Revenue Requirement Calculation**

Line No.	Description	Reference	South Dakota		
1					
2					
3	Depreciation Expense		South Dakota Plant in Service	Depreciation Rate	Depreciation Expense
4	Lookout to Sundance Hill 69 kV Rebuild	Schedule 5-4 ln 2	3,086,426	2.70%	83,334
5					
6					
7	Federal Tax				
8	Rate Base - South Dakota	Schedule 5-4 line 18			2,990,203
9					
10	Interest Expense	calculated			85,520
11	Return on Equity	calculated			146,520
12	Return	line 11 + line 12			232,040
13					
14	Authorized Return - 7.76%	Docket EL14-026			7.76%
15	Federal Tax Expense - South Dakota	((line 11 x line 19) - line 11)			78,895
16					
17					
18	Assumptions				
19	Tax Multiplier - Federal Tax Rate at 35% - tax multiplier	(1/(1-.35))			1.5385
20					



**BLACK HILLS POWER**  
**REVENUE REQUIREMENT BY CUSTOMER CLASS - TRANSMISSION FACILITIES**  
**Year One Revenue Requirement Calculation**

Line No.	Description	Reference	South Dakota Forecast	
1				
2	Transmission Facilities Annual Revenue Requirement (June 1, 2014 through May 31, 2015)	Schedule 5-7 line 2	\$	297,256
3				
4	Production Capacity Allocators by Customer Class			
5	Residential	Section No. 3C, Sheet No. 16		34.00%
6	Small General Service	Section No. 3C, Sheet No. 16		34.33%
7	Large General Service and Industrial	Section No. 3C, Sheet No. 16		30.70%
8	Lighting	Section No. 3C, Sheet No. 16		0.97%
9				
10	Revenue Requirement by Customer Class			
11	Residential	line 2 x line 5	\$	101,067
12	Small General Service	line 2 x line 6	\$	102,048
13	Large General Service and Industrial	line 2 x line 7	\$	91,257
14	Lighting	line 2 x line 8	\$	2,883
				EL14-037 Actual
				EIA Balancing
				Account
				Revised Revenue Requirement by Customer Class
			\$	(45,031)
			\$	(40,858)
			\$	7,485
			\$	2,791
			\$	56,036
			\$	61,190
			\$	98,742
			\$	5,674



**BLACK HILLS POWER**  
**COST OF SERVICE - TRANSMISSION FACILITIES**  
**Year One Revenue Requirement Calculation**

Line No.	Description	Reference	South Dakota Jurisdiction
1	Operating Revenue Required		
2	Transmission Facilities Revenue		\$ 297,256
3			
4	Operating Expenses		
5	Depreciation	Schedule 5-9, line 6	68,041
5a	Assessed Filing Fee	Docket EL14-013	5,345
6	Property Taxes	Schedule 5-9, line 23	22,188
7	Total Operating Expenses		<u>95,574</u>
8			
9	Other Operating Revenues	Schedule 5-10, line 5	56,473
10			
11	Operating Income Before Tax	(line 2 - line 7 + line 9)	258,155
12			
13	Federal Income Tax	Schedule 5-9, line 17	61,748
14			
15	Return (Operating Income)	Schedule 5-9, line 14 (line 11 - line 13)	<u>\$ 196,407</u>
16			
17	Rate of Return		<u>7.93%</u>
18			
19	Rate Base		
20	Plant in Service	Schedule 5-8, line 6	2,520,041
21	Less: Accumulated Depreciation	Schedule 5-8, line 9	34,021
22	Less: Accumulated Deferred Income Taxes	Schedule 5-8, line 19	9,261
23			
24	Total Rate Base	(line 20 - line 21 - line 22)	<u>\$ 2,476,759</u>



**BLACK HILLS POWER**  
**RATE BASE - TRANSMISSION FACILITIES**  
**Year One Revenue Requirement Calculation**

Exhibit 5  
Page 9  
Schedule 5-8

Line No.	Description	(a) Plant in Service for Rate Base	(b) South Dakota Jurisdictional Allocation	(c) (a) * (b) South Dakota Plant in Service for Rate Base	(d) Date in Service	(e) Allocation Based on In-Service Date	(f) (d) * (e) South Dakota Allocation Based on In-Service Date
1	Property, Plant, and Equipment						
2	Custer to Hot Springs 69 kV Rebuild - Phase I	\$ 2,653,751	100.00%	\$ 2,653,751	3/17/2014	54.25% (1)	\$ 1,439,660
3	Custer to Hot Springs 69 kV Rebuild - Phase II	2,008,247	100.00%	2,008,247	9/16/2014	4.11% (1)	82,539
4	Lookout to Sundance Hill 69 kV Rebuild	3,086,426	100.00%	3,086,426	2/3/2015	32.33% (2)	997,842
5							
6	Total Plant in Service - Transmission Facilities	<u>\$ 7,748,424</u>		<u>7,748,424</u>			<u>2,520,041</u>
7							
8							
9	Book Depreciation Reserve				Schedule 5-9 line 6 x 50%		<u>34,021</u>
10							
11							
12	Accumulated Deferred Taxes						
13	Transmission Facilities - Plant in Service - South Dakota					line 6	2,520,041
14	MACRS Table - Depreciation Rate (20 year life)						3.75%
15	South Dakota Tax Depreciation					line 13 x line 14	94,502
16	South Dakota Book Depreciation					Schedule 5-9 line 6	68,041
17	Timing Difference					line 15 - line 16	26,460
18	Federal Income Tax Rate						35.00%
19	South Dakota Deferred Tax					line 17 x line 18	9,261
20							
21							
22	South Dakota Rate Base					(line 6 - line 9 - line 19)	<u>\$ 2,476,759</u>

25 Note (1) - Allocation % is for the time period from the in-service date through 9/30/14. The Company requested to shift cost recovery of the Custer to Hot Springs 69 kV  
26 line from the TFA rider to base rates in Docket EL14-026.  
27 Note (2) - Allocation is for the time period of 2/3/15 through 5/31/15.



**BLACK HILLS POWER**  
**OPERATING EXPENSES AND TAXES - TRANSMISSION FACILITIES**  
**Year One Revenue Requirement Calculation**

Line No.	Description	Reference	(Note 1)		South Dakota
			South Dakota Plant in Service	Depreciation Rate	Depreciation Expense
1					
2					
3	Depreciation Expense				
4	Custer to Hot Springs 69 kV Rebuild	Schedule 5-8, ln 2 + ln 3	1,522,199	2.70%	41,099
5	Lookout to Sundance Hill 69 kV Rebuild	Schedule 5-8, ln 4	997,842	2.70%	26,942
6	Depreciation Expense - South Dakota	line 4 + line 5			<u>68,041</u>
7					
8					
9	Federal Tax				
10	Rate Base - South Dakota	Schedule 5-8 line 22			2,476,759
11					
12	Interest Expense	calculated			81,733
13	Return on Equity	calculated			114,674
14	Return	line 12 + line 13			<u>196,407</u>
15					
16	Authorized Return - 7.93%	Docket EL12-061			7.93%
17	Federal Tax Expense - South Dakota	((line 13 x line 27) - line 13)			<u>61,748</u>
18					
19					
20	Property Taxes				
21	SD Plant in Service - Transmission Facilities	line 4			\$ 1,522,199
22	Effective Blended Tax Rate	Docket No. EL12-061			1.4576%
23	Property Tax - South Dakota	(line 21 x line 22)			<u>\$ 22,188</u>
24					
25					
26	Assumptions				
27	Tax Multiplier - Federal Tax Rate at 35% - tax multiplier	(1/(1-.35))			1.5385
28					
29					
30	Note (1) Depreciation rate is from the 2013 depreciation study that will be filed in the 2014 general rate case.				



**BLACK HILLS POWER**  
**OTHER OPERATING REVENUE - TRANSMISSION FACILITIES**  
**Year One Revenue Requirement Calculation**

<u>Line No.</u>	<u>Description</u>	<u>Monthly Joint Ownership Agreement Revenue</u>	<u>Number of Months</u>	<u>Total Revenue</u>
1	Rent from Electric Property			
2	Custer to Hot Springs 69 kV Rebuild - Phase I	\$ 4,551 (1)	7	31,857
3	Custer to Hot Springs 69 kV Rebuild - Phase II	3,444 (2)	1	3,444
4	Lookout to Sundance Hill 69 kV Rebuild	5,293 (3)	4	21,172
5	Total Rent from Electric Property			<u>56,473</u>

Note (1) The line was placed in service on March 17, 2014. Monthly facility payments will be received from March 2014 through September 2014, and then the asset and associated revenues will be rolled into base rates.

Note (2) The line was placed in service on September 16, 2014. Monthly facility payments will be received for September 2014, and then the asset and associated revenues will be rolled into base rates.

Note (3) The line was placed in service on February 3, 2015. Monthly facility payments will be received from February 2015 through May 2015.



**BLACK HILLS POWER**  
**RESIDENTIAL CUSTOMER IMPACT**  
**TFA Rate Change**

LINE NO.	CUSTOMER IMPACT	CURRENT RATES	PROPOSED TFA RATE	INCREASE OR (DECREASE)
1				
2	<b>Residential Service</b>			
3	<i>TRANSMISSION FACILITY ADJUSTMENT RATE</i>			
4	TFA Rate \$ / kWh	\$ 0.00023	\$ 0.00010	\$ (0.00013)
5				
6				
7				
8	Monthly Customer Charge	\$ 9.25		\$ 9.25
9	Energy Charge - Base Rate at average monthly kWh	\$ 0.09989 x	650 kWh	64.93
10	Base Costs	\$ 0.02270 x	650 kWh	14.76
11	Energy Cost Adjustment at average monthly kWh	\$ 0.00700 x	650 kWh	4.55
12	Transmission Facility at average monthly kWh	\$ 0.00023 x	650 kWh	0.15
13	Energy Efficiency at average monthly kWh	\$ 0.00020 x	650 kWh	0.13
14	Current Total Bill at monthly average			\$ 93.77
15	TFA Rate Change at monthly average kWh	\$ (0.00013) x	650 kWh	(0.08)
16	Proposed Total Residential Bill			\$ 93.69
17	Percent Change			-0.09%